Applicant: **Baylis, Alastair**
Organisation: **South Atlantic Environmental Research Institute**
Funding Sought: **£39,222.00**
Funding Awarded: **£0.00**

DPLR3\1058

Understanding wildlife population connectivity and potential routes of disease transmission

The FI are home to >40% of the global Southern Giant Petrel (SGP) population. SGP play a key role in food webs as scavengers of wildlife and livestock, and influence disease transmission. However, the FI SGP population remains virtually unstudied. This scoping study will provide baseline data on FI SGP movements, enabling connectivity of the world's largest SGP population to be assessed, and provide insights into potential routes of disease transmission. It aids the development of a larger multispecies project.

PRIMARY APPLICANT DETAILS

Title	Dr
Name	Alastair
Surname	Baylis
Tel (Work)	[redacted]
Email (Work)	[redacted]
	[redacted]
Address	[redacted]
	[redacted]
	[redacted]
	[redacted]

DPLR3\1058

Understanding wildlife population connectivity and potential routes of disease transmission

Section 1 - Project Title & Contact Details

Q1. Project Title

Understanding wildlife population connectivity and potential routes of disease transmission

Q2. Please select whether you are applying as an organisation or as an individual **(Guidance section 3 and Guidance Glossary)**

⦿ Organisation

PRIMARY APPLICANT DETAILS

Title	Dr
Name	Alastair
Surname	Baylis
Tel (Work)	[redacted]
Email (Work)	[redacted]
Address	[redacted]

GMS ORGANISATION

Type	**Organisation**
Name	South Atlantic Environmental Research Institute
Phone (Work)	[redacted]
Email (Work)	[redacted]
Website (Work)	[redacted]
Address	[redacted]

Section 2 - Overseas Territory(ies)

Q3. Overseas Territory (Guidance section 1.3):

Which UK Overseas Territory(ies) will your project be working in? Please note that in case of a non-permanent resident population you need to demonstrate a clear, meaningful, long-term link to the territory.

☑ Falkland Islands (FI)

*** if you have indicated a territory group with an asterisk, please give detail on which territories you are working on here:**

No Response

In addition to the UKOT(s) you have indicated, will your project directly benefit any other UK OT(s) or country(ies)?

⦿ No

Section 3 - Project Partners

Q4. Project partners (Guidance section 3.2)

In this section, please give details of all the partners involved (including the Lead Partner) and provide a summary of their roles.

Project Leader name (Guidance section 3.1):	Alastair Baylis
Lead Partner name (if applying as an organisation; Guidance section 3.1):	South Atlantic Environmental Research Institute
Lead Partner Website (if applicable):	https://www.south-atlantic-research.org/
Is the Lead Partner based in a UKOT where the project is working (Guidance section 3.1)?	⦿ Yes
List other partners involved and where are they based:	Dr Rachael Orben, Oregon State University, Oregon, USA

Summary of roles and responsibilities of each partner in the project:	(Max 200 words) SAERI is an FI organization that has unparalleled expertise in seabird tracking within the FI, and continues to work closely with government and the rural community on a range of projects. SAERI is responsible for overall project management and delivery, including financials and fieldwork. SAERI also has the data management infrastructure, the IMS-GIS centre, which will capture and maintain the data generated by the project. OSU will support the Project Lead in designing and implementing the fieldwork, and data interpretation and dissemination. This will include communication of outputs to the general public. OSU will be actively involved in all aspects of the project, and will help guide and support project delivery.
I confirm that all listed partners are aware of this application and have indicated support:	Checked

Attach a Cover Letter for your application (Guidance section 4.2).

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Section 4 - Project Summary & Description

Q5. Project Summary (Guidance section 3.8)

Please provide a brief summary of your project. This may be used in communication activities and/or published online, if your application is successful.

The FI are home to >40% of the global Southern Giant Petrel (SGP) population. SGP play a key role in food webs as scavengers of wildlife and livestock, and influence disease transmission. However, the FI SGP population remains virtually unstudied. This scoping study will provide baseline data on FI SGP movements, enabling connectivity of the world's largest SGP population to be assessed, and provide insights into potential routes of disease transmission. It aids the development of a larger multispecies project.

Q6a. Description (Guidance section 2.1 and 6)

Please provide a description of your project, including:

- **the overall objective**
- **the current situation and the problem the project is trying to address**
- **what success will look like and how you will measure it**

Please be as specific as possible when describing the project, using quantified data and evidence where available. You may wish to consider: what are the specific threats to the environment that the project will attempt to address, and what should we know about these threats? What does your successful project look like? And how will you demonstrate whether and how your project has been successful?

The overall objective:
To understand the connectivity of the world's largest population of Southern Giant Petrels (SGP) – both within the FI and between FI, South America and the Southern Ocean - and their potential role in disease transmission as key scavengers of both wildlife and livestock.

The current situation and the problem the project is trying to address:
(1) UKOT data deficiency
FI is a biodiversity hotspot, renowned for its globally significant wildlife populations. Yet, it remains a scientific frontier, with many wildlife species virtually unstudied. For example, the FI is home to the largest breeding population of SGP in the world, which accounts for over 40% of the global population. SGP play a crucial role in food webs as key scavengers, are perceived to be one of the main threats to livestock, interact with FI fisheries, and are likely to play an important role in disease transmission, including Highly Pathogenic Avian Influenza (HPAI). However, the FI SGP population remains virtually unstudied.

This scoping study will be the first study of its kind, providing baseline data on the movements of FI SGP. This data is significant, because tracking the movements of seabirds at-sea, enables us to understand how individuals, colonies and populations use our coastal waters and risks faced. We view SGP as a disease sentinel – scavenging both wildlife and livestock – but we have a very poor understanding of individual movements distributions.

(2) Methods to inform a larger study
Crucially, this scoping study will enable us to test methods to capture this inherently shy species. We will primarily bait SGP at sea, but within close proximity to land. Our budget enables both approaches and trials. We will also test attachment methods. These include sutures and tape – both of which are standard procedures used on procellariforms. As part of our scoping study, we will also collate any available SGP tracking data from other breeding locations in the South Atlantic to get a regional overview of connectivity. This scoping study will inform our planned larger project, that will explore connectivity of predator/scavenger bird populations (both within the FI and between FI, South America and Southern Ocean breeding colonies) and potential role in disease transmission.

What success will look like and how you will measure it:
Success will be measured through:
(1) Successful field season (deployment of 10 satellite tags), testing two different attachment methods.
(2) Report that provides an overview of methods, data analyses, and insights into connectivity.
(3) Public presentation that introduces the project initial findings, and planned future work.
(4) Draft of a main funding application, based on the findings of the scoping project.

The data collected will ultimately improve evidence-based management, will facilitate ecosystem-based management, and increases the amount and quality of information available to researchers and decision makers for a key scavenger that is unstudied. Information on movement connectivity will be integral for regional risk assessment, disease surveillance and modelling efforts.

Q6b. Long-term sustainability (Guidance section 2.1 and 6)

Please describe the long-term benefits of the project and the change it will bring about. How will the outcomes of the project be sustained after the funding is finished?

Our Darwin Local project is a scoping project. Sustainability will be through the development of a future project. During the life of the Darwin Local project, we will develop methods and techniques to inform a larger planned project. The planned project will aim to understand wildlife connectivity within the FI, and between the FI, South America and Southern Ocean and have an emphasis on poorly studied, but key scavenging birds (including skuas, Giant Petrels, Johnny Rooks), that interact with both livestock and wildlife, and are likely to play an important role in disease transmission.

The scoping project is also timely. With the recent outbreak of Highly Pathogenic Avian Influenza (HPAI), understanding SGP population connectivity will help to identify possible spatial pathways facilitating disease transmission. Information on movement connectivity will be integral for regional risk assessment, disease surveillance and modelling efforts.

Project data will be stored and maintained through the FI IMS-GIS data centre. Tracking data from marine predators has multiple applications and can be used to inform Marine Spatial Planning including the FI Marine Managed Areas and enable more rigorous environmental risk assessments, for example.

(Optional) Please upload any additional and supporting materials or files (such as maps of project sites, etc) below. Maximum of 5 sides of A4, and is combined as a single PDF:

No Response

Section 5 - Project Outcome(s)

Q7. Project Outcome(s) (Guidance section 1.2)

Successful Darwin Plus Local projects must demonstrate measurable outcomes in at least one of the themes of Darwin Plus with a clear focus on biodiversity and the natural environment, either by the end of the project or soon after through a credible plan.

Please confirm that your project has a clear focus on biodiversity and the natural environment.

Checked	**Biodiversity: improving and conserving biodiversity, and slowing or reversing biodiversity loss and degradation;**
Unchecked	**Climate change: responding to, mitigating and adapting to climate change and its effects on the natural environment and local communities;**
Checked	**Environmental quality: improving the condition and protection of the natural environment**
Checked	**Capability and capacity building: enhancing the capacity within OTs, including through community engagement and awareness, to support the environment in the short- and long-term.**

Please justify your selection. Please use quantitative information where possible here.

Biodiversity: 0ur project will provide baseline data on the world's largest population of Southern Giant Petrels (SGP) by deploying 10 satellite tags to study their movements. Environmental Quality: This new data will improve the quality and quantity of environmental information available, not only for SGP, but ongoing FIG led initiatives, such as Marine Managed Areas. Capability: The project will be run by Falkland Islanders, for Falkland Islanders,

drawing upon local expertise, and will help to structure essential follow-on work that further understand wildlife connectivity and its role in disease transmission.

Section 6 - Workplan

Q8. Workplan (Guidance section 2.2)

Please provide anticipated dates for the start and end of your planned project here. Please use the Darwin Plus Local Project Workplan (available at: Darwin Plus website) to provide a list of the individual activities you have planned for this project, a brief description of what each activity entails, and the months in which the activities will be carried out. If the project involves only one activity (e.g. a purchase), please still provide project start and end dates (noting estimated times for procurement). Please note that your project must start after 1 April 2024 and be completed by 31 March 2025.

Start date:	End date:	Duration (e.g. 3 months):
01 April 2024	31 March 2025	1 year

Please upload the completed Darwin Plus Local Project Workplan with your proposed project activities here

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Section 7 - Costs

Q9. Costs (Guidance section 2.2 and please read the Finance Guidance)

Please provide a breakdown of costs to be funded through Darwin Plus Local (in GBP).

Are you seeking any matched funding for this project?

⦿ No

Budget line	Explanation	Cost in GBP
Staff costs:	The lead applicant, Dr Alastair Baylis will implement and deliver the project, including reporting ([redacted]. Our finance team (led by Teresa Bowers) will provide finance support [redacted] We have also allocated a small amount of funding to support the involvement of our Oregon State University project partners ([redacted]. This is important as they have expertise in suturing - one attachment method.	[redacted]

Consultancy costs:	NA	£0.00
Overhead costs:	This will cover 35 % overheads for both SAERI (and OSU – necessary to support staff in project delivery.	
Travel & subsistence costs:	An international flight and two nights accommodation in Santiago for our Oregon State University partner. Note that this will be purchased through a local FI company.	
Operating costs:	Fieldwork and consumables (- provides the flexibility to trial capture methods and includes boat charter. Argos time - 4 months required to access data from tags.	
Capital equipment:	NA	£0.00
Other Costs	Monitoring and evaluation (Satellite tags (incl. shipping) x 10 (- the project is dependent on satellite tags because we will not be able to recover devices.	
Total:		

This section provides more information on the budget to help evaluators understand how you will use the funds you are requesting. You do not need to list all costs, but please list and detail costs of more than £1,000 per item below, under the appropriate budget line.

Details of staff costs over £1,000 (if relevant)

The lead applicant, Dr Alastair Baylis will implement and deliver the project, including reporting (.
Our finance team (led by Teresa Bowers) will provide finance support

We have also allocated a small amount of funding to support the involvement of our Oregon State University project partners . The involvement of OSU (Dr Racheal Orben) is important as they have expertise in suturing - one attachment method.

Details of overhead costs over £1,000 (if relevant):

Overhead costs were levied at 35%. Overhead costs are necessary and helps cover office space, internet, computer, and use of vehicles.

Details of travel and subsistence costs over £1,000 (if relevant):

We will cover the cost of travel for our Oregon State University based project partner ( ). This is based on actual costs from similar flights and includes an overnight hotel in Santiago.

Details of operating costs over £1,000 (if relevant):

Fieldwork and consumables (- provides the flexibility to trial capture methods and boat charter.
Argos time - 4 months (- required to access data from tags. The cost is based on actual Argos costs.

Details of capital equipment costs over £1,000 (if relevant):

NA

Details of consultancy costs over £1,000 (if relevant):

NA

Details of other costs over £1,000 (if relevant)

Tags (incl. shipping) x[redacted]) - the project is dependent on satellite tags because we will not be able to recover devices. The cost is based on quotes from Telonics.

If your project budget was prepared in another currency and converted to GBP, please provide the exchange rate, its source, and the date it was accessed:

Other currency:	Exchange rate:	Source of this exchange rate:	Date exchange rate accessed:
No Response	*No Response*	*No Response*	*No Response*

Darwin Plus Local has been created to build capacity and contribute to local economies in-territory.

What % of the total will be spent in the OTs?	82

If less than 80% of the total project spend is to be spent within the OT(s), please explain why.

Satellite tags x 10[redacted] - the project is dependent on satellite tags because we will not be able to recover devices. There are no local companies that produce satellite tags.
Argos time - 4 months ([redacted]) - required to access data from tags.
Involvement of OSU partner that has expertise in suturing ([redacted]

Section 8 - Local and National Priorities

Q10. Local and national priorities

Please explain how this project aligns with local and national priorities? You may wish to consider the project in the context of national environmental laws, objectives, strategies, territory specific agreements, action plans or policies.

● This project will make an important contribution towards FIG meeting CBD objectives, in particular Kuming-Montreal Global Biodiversity Framework targets. The project will also make important contribution towards FIG commitments to the Agreement of the Conservation of Albatross and Petrels (ACAP; specifically, Article II; Article III, d, g, h; Article VI and elements of Annex 2 – the Action Plan).

● This project addresses FI Biodiversity Frame work (2016-2030) priority areas, particularly coastal, shelf and marine species and ecosystems. The project covers priority species and actions identified in the FI ACAP Implementation Plan – specifically SGP and actions calling for fine-scale analyses of foraging distribution (A6.2.2), identification of foraging hotspots and use information to inform management decisions, including in relation to identification of MPAs in FI waters (A6.2.6) and ensuring a coordinated and collaborative approach to tracking work on FI (A6.2.4/6.2.5). It will help FIG to meet commitments under the FI Environment Charter, including 7 (safeguard native species, habitats) and 10 (study and celebrate environmental heritage as a future treasure).

Will the project take place on Government owned land or water or involve biocontrol, invasive alien species control or eradication?

⦿ Yes

Please attach evidence that you have Government support for this project i.e. a Letter of Support. Applications which indicate that they do not take place on Government land or water, but which propose work that appears to the reviewers would be difficult/impossible to carry out without working on government land or waters may be ineligible if no Letter of Support is provided.

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Section 9 - Project Risks

Q11. Project Risks

Please demonstrate your consideration of any risks involved in this project and how you intend to manage them. Please note the importance of health and safety and environmental risk assessment in the design of your project. If there is any possibility that your project may have negative impacts on the environment or human health, it is important that you provide a comprehensive analysis of potential environmental and human health risks, and the prevention measures you will take to ensure the work does not cause harm.

Depending on your project, you may wish to consider:

- **Biosecurity risks – particularly for projects involving external equipment.**
- **Safeguarding risks – particularly for projects involving vulnerable groups such as children, older people or people with disabilities.**

Risk	Mitigation
HPAI (Highly Pathogenic Avian Influenza) outbreaks might temporarily restrict research activities or pose a risk to human health.	We will adjust the timing and location of bird capture efforts, adhering to any FIG-imposed restrictions.
No Response	*No Response*
No Response	*No Response*

Do you require more fields?

⦿ No

Section 10 - Terms & Conditions

Q12. Terms and conditions (Guidance section 3.10)

By applying for Darwin Plus Local you are adhering in full to the grant Terms and Conditions in full (available at: Darwin Plus website **and as referenced in the Guidance at section 3.10). For information, the Terms and Conditions include requirements for all applicants to (amongst other requirements as per the full Terms and Conditions):**

- **Uphold a zero tolerance for inaction approach to tackling sexual exploitation, abuse, and harassment.**
- **Where appropriate, make all reasonable and adequate efforts to address gender inequality and other power imbalances.**
- **Notify all cases of fraud and theft (whether proven or suspected) relating to the project to the Grant Administrator as soon as they identified.**

Please indicate you have read, and understood, and will adhere to the Terms and Conditions.

Checked

Supporting documents list (please have these ready to attach with application)

- **Cover Letter of no more than two A4 pages. (Guidance section: 4.2 has information on what this cover letter should include).**
- **If the project takes place on public land or water or is addressing invasive alien species, a Letter of support from OT Government.**
- **Project Workplan in the template provided for Darwin Plus Local (available at: Darwin Plus website).**
- **Map and additional information (optional) maximum five additional pages.**

If your application is successful

If your project application is successful, the Fund Administrator (NIRAS) will ask you to provide some financial evidence for due diligence checks before you receive your project grant. (Please see section 3.3 of the Darwin Plus Local Finance Guidance). Please be ready to provide this evidence promptly.

- **Financial evidence for organisations: Year-end financial statements, the latest management accounts or audited accounts (if you have these).**
- **Financial evidence for individuals: Proof of identity such as a passport, ID card or driving licence and solvency (such as bank statements) and a police check.**

Section 11 - Certification

Certification

I certify that, to the best of my knowledge and belief, the statements made in this application are true and the information provided is correct.

Checked

I have the authority to submit an application on behalf of my organisation.

Checked

Name:	Alastair Baylis
Position in the organisation: (if applicable)	Deputy-Director Science
Signature (please upload e-signature)	Certification DLocalR3 28/11/2023 19:28:24 pdf 131.3 KB

Date:	28 November 2023

Section 12 - Submission Checklist

Checklist for submission

	Check
I have read the Guidance **documents, including the "Darwin Plus Local Guidance" and the "Darwin Plus Local Finance Guidance".**	Checked
If my proposed project takes place on public lands or water or is addressing alien invasive species, I have uploaded a Letter of Support from Government.	Checked
I have uploaded a cover letter that details the information requested in the guidance (Guidance section 4.2 has information on what this cover letter should include).	Checked
I have read, and can meet, the current Terms and Conditions **for this fund.**	Checked
I have provided actual start and end dates **for my project that fit this Round.**	Checked
I have provided my summary budget based on UK government financial years **i.e. 1 April – 31 March and in GBP in the application form.**	Checked
I have uploaded my project workplan using the specific template **provided.**	Checked
I have uploaded all supplementary documents if I have any.	Checked
(If copying and pasting into Flexi-Grant) I have checked that all my responses have been successfully copied into the online application form.	Checked
The application has been signed by a suitably authorised individual **(clear electronic or scanned signatures are acceptable).**	Checked
I have checked the Darwin Plus website **immediately prior to submission to ensure there are no late updates.**	Checked
I have read and understood the Privacy Notice on the Darwin Plus website**.**	Checked

We would like to keep in touch!

Please check this box if you would be happy for the lead applicant (Flexi-Grant Account Holder) and project leader (if different) to be added to our mailing list. Through our mailing list we share updates on upcoming and current application rounds under Darwin Plus. We also provide occasional updates on other UK Government activities related to biodiversity conservation and share project news. You are free to unsubscribe at any time.

Checked

Data protection and use of personal data

Information supplied in the application form, including personal data, will be used by Defra as set out in the **Privacy Notice**, available from the Forms and Guidance Portal.

This **Privacy Notice must be provided to all individuals** whose personal data is supplied in the application form. Some information may be used when publicising Darwin Plus including project details (usually title, lead partner, project leader, location, and total grant value).

Darwin Plus Local

Provide a **Workplan** that shows the key milestones in project activities. Complete the following table as appropriate to describe the intended workplan for your project. Round 3 is for a **maximum of 12 months** with activities starting from 1 April 2024. All activities must be completed by 31 March 2025.

Please add/remove columns to reflect the length of your project. For each activity (add/remove rows as appropriate) indicate the number of months it will last, and shade only the months in which an activity will be carried out. The workplan can span multiple pages if necessary.

Activity #	Description (max 25 words)	No. of months	UK Financial Year 2024/25											
			Calendar Year 2024									Calendar Year 2025		
			Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
1	Order satellite tags	0.25												
2	Deploy satellite tags, testing different attachment methods	4												
3	Compile and analyse data	3												
4	Prepare a report	2.5												
5	Public presentation/talk	0.25												