Applicant: **Baylis, Alastair** Organisation: **SOUTH ATLANTIC ENVIRONMENTAL RESEARCH INSTITUTE** Funding Sought: **£31,324.26** 

## DPLR1\1013

### Data driven solutions to land management and climate change adaptation

Objective: The overall project objective is to provide a toolbox that enables a data driven approach to FI land management and climate change adaptation and resilience.

Problem: FI terrestrial ecosystems are unique and sensitive to changes in land use and climate change. Recognizing these challenges, and given farming is the very fabric of FI community, a growing desire exists for data driven solutions to facilitate innovation and sustainable land management and climate change adaptation. However, the key barriers to data driven solutions in OTs include (i) the enduring challenge of government departments and NGOs working in silos, despite shared interest and shared mandates on national challenges, such as climate change resilience; and (ii) lack of resource. We will work toward solving these challenges through a locally driven project, which brings together existing data and data tools and harnesses technological solutions for land management and climate change adaptation. Specifically, this project will:

Work Package 1: Consolidate data and data tools that can support effective land management and climate change adaptation. To achieve this, we will bring together the wealth of existing data and data tools (e.g., peat depth maps, digital elevation models, satellite data), much of which was generated through Darwin Initiative projects (e.g., DPLUS083). We will also work closely with our project partner to make accessible the wealth of existing data within the Falkland Islands Government (FIG) Department of Agriculture (DoA) that is currently underutilized. Any newly discovered data will be made available through the existing FI data portal and webGIS.

### Work Package 2:

Demonstrate through a literature review how individual data sets and tools (identified in Work Package 1) relate to land management and climate change adaptation (e.g., vegetation maps, soil moisture, erosion risk maps, ponds).

(ii) Review how data and tools can be made available to stakeholders (beyond webGIS e.g., coordination of information into digital platform that connects stakeholders to solve challenges)

(iii) Identify a range of land management and climate change adaptation projects that could be implemented using the existing data

(iv) Identify any key data gaps

Work Package 3: Finally, we will hold a workshop with stakeholders (landowners, FIG, public, NGOs) to disseminate the project findings (data availability and accessibility), and to identify and prioritize projects that will progress sustainable land management and climate change adaptation and resilience (these are projects that could be undertaken with little or no costs). The latter will include projects identified in Work Package 2. The workshop will also identify essential follow-on work that requires future funding, but that will shape and build capacity in FI sustainable land management and climate change adaptation.

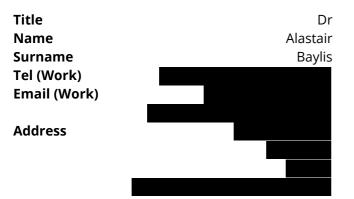
### Success and how it will be measured

By providing data and tools, we will facilitate change in land management and opportunities for climate change adaptation. Success will be measured via the outputs from our three work packages. Specifically, success in Work Package 1 will be measured through the creation of metadata records and the development of a

#### Darwin Plus Local Round 1

WebGIS page (central platform to access data), which will represent successfully bringing together existing data and data tools. Work Package 2 success will be evidenced by a report, which will cover (i) data, data tools and (any) data gaps, (ii) review data access and potential options (e.g., digital platform) and (iii) list potential land management and climate change adaption projects. Finally, the success of Work Package 3 will be measured by attendance at the workshop and a workshop report. Project legacy includes a data toolbox and plan of action prioritizing projects that progress sustainable land management and climate change adaptation – including projects addressing key challenges that require future funding.

### PRIMARY APPLICANT DETAILS



## DPLR1\1013

Data driven solutions to land management and climate change adaptation

## Section 1 - Project Title & Contact Details

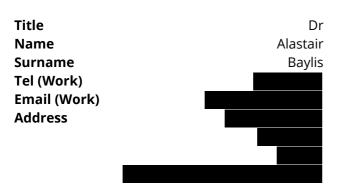
## Q1. Project Title

Data driven solutions to land management and climate change adaptation

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

 $\odot$  Organisation

### PRIMARY APPLICANT DETAILS



### **GMS ORGANISATION**

Туре	Organisation
Name	SOUTH ATLANTIC ENVIRONMENTAL
	RESEARCH INSTITUTE
Phone (W	ork)
Email (Wo	ork)
Address	

## 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):	SAERI
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 (Guidance section 3.2):	Dr Katrina Durham Department of Agriculture (DoA), Falkland Islands Government (FIG)

Summary of roles and	SAERI (lead) is a local FI organization that has unparalleled expertise in IMS-GIS and data management. SAERI will be responsible for financials, data collation and data management, and any webGIS platforms created. SAERI will help manage the project and will be responsible for overall delivery.						
responsibilities of each partner in the project:	FIG DoA (project partner) will be responsible for assisting with project management and delivery, and communicating the project and objectives with land owners. Specifically, DoA will use their existing communication channels with farmers (farm visits, newsletters etc) to communicate the project and disseminate project progress and findings.						
l 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.

FI terrestrial ecosystems are unique and sensitive to changes in land use and climate change. Data driven solutions are essential to progress sustainable land management and climate change adaptation. However, key barriers to data driven solutions include organizations and departments working in silos (information exchange) and lack of resource. We will address these issues by creating a toolbox that collates existing data and data tools, and demonstrating how these tools can be applied to land management and climate change adaptation.

## Q6. Description (Guidance section 2.1)

### 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?

Objective: The overall project objective is to provide a toolbox that enables a data driven approach to FI land management and climate change adaptation and resilience.

Problem: FI terrestrial ecosystems are unique and sensitive to changes in land use and climate change. Recognizing these challenges, and given farming is the very fabric of FI community, a growing desire exists for data driven solutions to facilitate innovation and sustainable land management and climate change adaptation. However, the key barriers to data driven solutions in OTs include (i) the enduring challenge of government departments and NGOs working in silos, despite shared interest and shared mandates on national challenges, such as climate change resilience; and (ii) lack of resource. We will work toward solving these challenges through a locally driven project, which brings together existing data and data tools and harnesses technological solutions for land management and climate change adaptation. Specifically, this project will:

Work Package 1: Consolidate data and data tools that can support effective land management and climate change adaptation. To achieve this, we will bring together the wealth of existing data and data tools (e.g., peat depth maps, digital elevation models, satellite data), much of which was generated through Darwin Initiative projects (e.g., DPLUS083). We will also work closely with our project partner to make accessible the wealth of existing data within the Falkland Islands Government (FIG) Department of Agriculture (DoA) that is currently underutilized. Any newly discovered data will be made available through the existing FI data portal and webGIS.

Work Package 2:

(i) Demonstrate through a literature review how individual data sets and tools (identified in Work Package 1) relate to land management and climate change adaptation (e.g., vegetation maps, soil moisture, erosion risk maps, ponds).

(ii) Review how data and tools can be made available to stakeholders (beyond webGIS e.g., coordination of information into digital platform that connects stakeholders to solve challenges)

(iii) Identify a range of land management and climate change adaptation projects that could be implemented using the existing data

(iv) Identify any key data gaps

Work Package 3: Finally, we will hold a workshop with stakeholders (landowners, FIG, public, NGOs) to disseminate the project findings (data availability and accessibility), and to identify and prioritize projects that will progress sustainable land management and climate change adaptation and resilience (these are projects that could be undertaken with little or no costs). The latter will include projects identified in Work Package 2. The workshop will also identify essential follow-on work that requires future funding, but that will shape and build capacity in FI sustainable land management and climate change adaptation.

### Success and how it will be measured

By providing data and tools, we will facilitate change in land management and opportunities for climate change adaptation. Success will be measured via the outputs from our three work packages. Specifically, success in Work Package 1 will be measured through the creation of metadata records and the development of a WebGIS page (central platform to access data), which will represent successfully bringing together existing data and data tools. Work Package 2 success will be evidenced by a report, which will cover (i) data, data tools and (any) data gaps, (ii) review data access and potential options (e.g., digital platform) and (iii) list potential land management and climate change adaption projects. Finally, the success of Work Package 3 will be measured by attendance at the workshop and a workshop report.

Project legacy includes a data toolbox and plan of action prioritizing projects that progress sustainable land management and climate change adaptation – including projects addressing key challenges that require future funding.

## (Optional) Please upload any additional and supporting materials or files (such as maps of project sites, etc) below. Maximum of 5 pages:

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 <u>at least one of the</u> <u>themes</u> of Darwin Plus, either by the end of the project or soon after through a credible plan.

Please tick which theme(s) of Darwin Plus your project underpins:

Checked	Biodiversity: improving and conserving biodiversity, and slowing or reversing biodiversity loss and degradation;
Checked	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.

Through developing a data toolbox (WP 1 & 2), through informing stakeholders about data and availability, and by prioritizing future work (WP 3), our project will build capacity within land use management and facilitate opportunities for climate change adaptation, resilience and mitigation. Therefore, our project directly contributes to all Darwin Local key themes, given all of themes listed would be measurably improved by a data driven approach. The project will be run by Falkland Islanders, for Falkland Islanders, building substantial local capacity and expertise. Project legacy includes stakeholder access to a data toolbox and prioritizing essential follow-on work.

## Section 6 - Project Timeline

## Q8. Project timeline (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 Implementation Timetable Template (which can be downloaded below) 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). <u>Please note that your project will need to be completed by 31 March 2024.</u>

Start date:	End date:	Duration (e.g. 3 months):					
01 April 2023	31 March 2024	12 months					

## Please upload the completed Darwin Plus Local Project Implementation Timetable template with your proposed project activities below.

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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? (Please note that this is optional and there is no requirement to seek matched funding for Darwin Plus Local projects).

⊙ Yes

### How much matched funding are you seeking and where from?

Given the DoA priorities related to the land-water interface within the agricultural sector, the Director of Natural Resources has confirmed in matched funding. This will be used for 3 months of salary (total 9 months), in addition to costs associated with GIS officer travel and relocation. Although this clearly demonstrates value for money and local support for the project, it is important to emphasize this project is not feasible without Darwin Local funding.

Budget line

Explanation

Cost in GBP

Staff costs:	We will employ a GIS officer (specialist) for 9 months to run the project. Funding from Darwin Local will cover 6 months salary ( ), while funding from FIG will cover a further 3 months of salary (in addition to supporting relocation costs). Please see matched funding listed above, and in the letter of support from the Falkland Islands Government.	
	Staff cost also covers the lead applicants time (Alastair Baylis) who will recruit for the project, support project implementation and management, and project reporting ( ) and supports time associated with managing project finances by our finance officer ( ).	
Overhead costs:	This will cover 30 % overheads – necessary to support local staff, provide internet access, laptop, desk space, use of vehicles and data storage.	
Travel & subsistence costs:	This will be covered through matched funding from FIG	
Operating costs:	NA	
Capital equipment:	NA	
Consultancy costs:	NA	
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)

GIS officer (TBC), employed for 9 months to deliver the three work packages. Staff cost also covers the lead applicants time (Alastair Baylis) who will recruit for the project, support project implementation and management, and project reporting.

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

Overhead costs were levied at 30%. Overhead costs are necessary so that we can provide internet, computer, use of vehicles, and the use of office space for the GIS officer.

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

While we will advertise locally, we expect that a suitably qualified candidate will be based overseas. Travel and subsistence costs is covered via matched funding.

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

No Response

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

No Response

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

No Response

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

No Response

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?

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

No Response

### **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.

Climate change is already impacting the FI. For example, a change in the frequency of rainfall events is causing our soils to dry, which has implications for land use practices, sustainable farming, and climate change adaptation and resilience. Fundamental to tackling the most pressing environmental challenges faced by the FI, is the need for a toolbox that enables stakeholders to identify, respond and adapt to challenges. Although the data and technology solutions exist to enable us to respond to these challenges, the coordination of information and a platform that connects stakeholders to solve challenges, does not.

By coordinating information and preparing a plan of action, this project will directly support The Falkland Islands Environment Strategy 2021-2040 - a new comprehensive national environment strategy. The project directly supports:

• create an agricultural action plan and an agricultural advice framework, which will reflect the ecological principles in the Environment Strategy

- · develop an action plan to manage land and water
- assess successes of previous restoration efforts to build better knowledge for future efforts

### Will the project take place on Government owned land or water?

⊙ Yes

Please attach evidence that you have Government support i.e. Letter of Support.

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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. 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
Not enough suitable applicants for the role	We have allocated a minimum of 3 months for recruitment (we will start advertising as soon as we are able to do so). Our budget allows for us to advertise both locally and internationally.
Good attendance at the final meeting/workshop – This meeting of experts will be to examine the project's findings and deliverables.	Relevant partners and stakeholders will be engaged early in the project to ensure support and buy-in.
Knowledge sharing - Engagement with wider expert group / access to information.	Relevant partners and stakeholders will be engaged early in the project to ensure support and buy-in.

### 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: <u>https://dplus.darwininitiative.org.uk/apply</u> 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

**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)	SAERI			
Signature (please upload e-signature)	<ul> <li>逸 Xerox Scan (43)</li> <li>曲 14/02/2023</li> <li>③ 14:46:45</li> <li>☑ pdf 10.53 KB</li> </ul>			
Date:	14 February 2023			

### **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, 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 the project.	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 implementation timetable using the specific template provided.	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.

Unchecked

### 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 <u>Forms and Guidance Portal</u>.

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).

## Project Title: Data driven solutions to land management and climate change adaptation

### **Darwin Plus Local**

Provide a **Project Implementation Timetable** that shows the key milestones in project activities. Complete the following table as appropriate to describe the intended workplan for your project. Projects are based on UK Financial Years (**1 April – 31 March** - therefore starts April 2023).

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.

		No. of UK Financial Year 2023/24												
Activity #	Description (max 25 words)	months		Calendar Year 2023				Calendar Year 2024						
			Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
1	Recruitment of a GIS Officer	3												
2	Work Package 1: Consolidate existing data and data tools (e.g., map layers) that can support land management and climate change adaptation.	3.5												
3	Work Package 2: Review how data sets and tools identified in Activity #2 can be applied and identify potential projects and key data gaps.	3.5												
4	Work package 3: Hold a workshop with stakeholders to identify and prioritize projects that will progress land management and climate change adaptation.	1												
5	Project reporting to Darwin	1												