Applicant: **Howell, Kerry**
Organisation: **University of Plymouth**
Funding Sought: **£375,153.00**

DPR12S2\1019

Building baseline knowledge of mesophotic ecosystems in Ascension Island MPA

Ascension Island Government aspires to deliver ecosystem-scale, evidence-based management. However, the biodiversity and physical environment beyond diver depths (>99% of the MPA) is poorly understood, compromising efforts to effectively manage fisheries, quantify carbon sequestration and assess threats. This project aims to provide baseline knowledge of mesophotic ecosystems (30-300 m), thus improving their conservation, including incorporation of predicted climate-change induced shifts in their distribution into management plans. The emphasis on training will also build on-island capacity for long-term monitoring and management.

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DPR12S2\1019

Building baseline knowledge of mesophotic ecosystems in Ascension Island MPA

Section 1 - Contact Details

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GMS ORGANISATION

Type	Organisation
Name	University of Plymouth
Phone (Work)	[redacted]
Email (Other)	[redacted]
Address	[redacted]

Section 2 - Title & Summary

Q3. Title:

Building baseline knowledge of mesophotic ecosystems in Ascension Island MPA

What was your Stage 1 reference number? e.g. DPR12S1\1123

DPR12S1\1026

Please attach a cover letter as a PDF document.

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Q4. Summary of project

Please provide a brief non-technical summary of your project: the problem/need it is trying to address, its aims, and the key activities you plan on undertaking.

Successful Darwin Plus Main projects must demonstrate substantial measurable outcomes in at least one of the themes of Darwin Plus either by the end of the project's implementation or via evidenced mechanisms for post-project delivery.

Preference will be given to discrete projects implementing existing identified environmental solutions on the ground.

The broad themes of Darwin Plus Main are:

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

Ascension Island Government aspires to deliver ecosystem-scale, evidence-based management. However, the biodiversity and physical environment beyond diver depths (>99% of the MPA) is poorly understood, compromising efforts to effectively manage fisheries, quantify carbon sequestration and assess threats. This

project aims to provide baseline knowledge of mesophotic ecosystems (30-300 m), thus improving their conservation, including incorporation of predicted climate-change induced shifts in their distribution into management plans. The emphasis on training will also build on-island capacity for long-term monitoring and management.

Section 3 - UKOT(s), Dates & Budget Summary

Q5. UKOT(s)

Which UK Overseas Territory(ies) will your project be working in?

☑ St Helena, Ascension and Tristan da Cunha*

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

Ascension Island

In addition to the UKOTs you have indicated, will your project directly benefit any other Territories or country(ies)?

⦿ Yes

If so, list here.

Focus of work: UKOTs	Ascension Island	**Other Territories/ country(ies):**	Turks & Caicos Islands, St Helena, Gibraltar

Q6. Project dates

Start date:	**End date:**	**Duration (e.g. 2 years, 3 months):**
01 April 2024	31 March 2026	2 years

Q7. Budget summary

Year:	2024/25	2025/26	2026/27	Total request
Amount:	[redacted]	[redacted]	[redacted]	£ [redacted]

Q8. Do you have matched funding arrangements?

⦿ Yes

Please ensure you clearly outline your matched funding arrangement in the budget.

Q9. If you have a significant amount of unconfirmed matched funding, please clarify how you will fund the project if you don't manage to secure this?

No Response

Q10. Have you received, applied for or plan to apply for any other UK Government funding for the proposed project or similar?

⦿ Yes

If yes, please give details.

UoP is also a partner on BAIT, a Darwin Capacity and Capability project focused on developing on-island capacity for long-term monitoring of deep-water ecosystems around Cabo Verde.

Section 4 - Problem statement

Q11. Problem the project is trying to address

Please describe the problem your project is trying to address in the UKOTs, relating to at least one of the themes of Darwin Plus:

For example, what are the specific threats to the environment that the project will attempt to address? Why are they relevant, for whom? How did you identify the need for your project? Please cite the evidence you are using to support your assessment of the problem.

The AIG is committed to making its MPA an international exemplar of evidence-based ocean management. The AIG Conservation and Fisheries Directorate (AIGCFD) has built the capability to monitor and manage its marine biodiversity at shallow depths, but it lacks the capability to survey and monitor its deeper marine communities and their oceanographic environments.

The current focus of survey effort on the upper 30 m is driven by the practicality of sampling rather than any biologically meaningful demarcation. Survey and monitoring beyond diver depths has been challenging in the past due to the need for expensive equipment and a perceived need for large research vessels. However, developments in marine technology mean these barriers have now been removed. The mesophotic environment constitutes a critical building block of the marine ecosystem and sustains the lower trophic levels that support the more visible fish communities. Important phases in the life cycles of fish species exploited in local fisheries are thought to occur at greater depths. However, the lack of detailed knowledge of habitat and species distribution beyond 30 m depth limit the accuracy of stock assessments and efficacy of management interventions. Without the knowledge of the extent and composition of species beyond the 30 m depth limit, any management plans are fundamentally flawed, particularly in the face of an evolving climate. Poor knowledge of mesophotic communities is identified as a major management limitation, and a high priority for research in both the Ascension Island MPA (AIMPA) Management Plan [1] and associated Monitoring, Evaluation and Research Strategy [2].

Modelling and limited towed camera surveys conducted during the Blue Belt-sponsored Discovery Cruise in

November 2022 indicate the presence of deep-water coral and other carbon-sequestering communities within Ascension's mesophotic zone [3, 4]. These have not been mapped or studied, meaning their contribution to climate change mitigation cannot be measured and their vulnerability to climate change impacts cannot be monitored. Without this information, AIG is unable to conduct accurate blue carbon assessments and develop appropriate climate change adaptation strategies; both of which feature in the AIMPA Management Plan [1] and associated Monitoring, Evaluation and Research Strategy [2].

Working in collaboration with the AIGCFD, this project will: 1) deliver baseline oceanographic and biological data on the mesophotic ecosystems of the AIMPA, 2) build capacity for on-island long-term monitoring of the MPA, 3) serve as a model that can be ported to other UKOTs.

Note: bibliography provided in additional evidence.

Section 5 - Environmental Conventions, Treaties and Agreements

Q12. Environmental Conventions, Treaties and Agreements

Please detail how your project will contribute to the aims of the national and/or international agreement(s) your project is targeting. What key UKOT Government priorities and themes will it address and how? You should also consider local, territory specific agreements and action plans here. Letters of support from UKOT Government partners/stakeholders should also make clear reference to the agreements/action plans your project is contributing towards.

National
- Ascension MPA Management Plan [1]
- Monitoring, Evaluation and Research Strategy [2]
- Ascension Island National Biodiversity Strategy and Action Plan [3]

The effective management of the AIMPA is the highest conservation priority for the AIG and a UK Government priority through the Blue Belt Programme. An important principle of the Ascension National Biodiversity Strategy and Action Plan (2023) is that decisions will be based on the best available information. In reality there are large gaps in knowledge about Ascension's biodiversity and research effort needs to be focused on those gaps that are limiting effective management, including mesophotic and deep sea ecosystems. The data from this project will contribute to closing these data gaps and consequently employing more effective management strategies. The MPA Management Plan and associated Monitoring, Evaluation and Research Strategy also identify mesophotic ecosystems as a high priority for research as it is essential to understand Ascension's marine biodiversity and assess deep sea ecosystems to better evaluate the benefits they may provide to fisheries, carbon sequestration and natural capital. This project directly addresses this priority.

International
The project will facilitate the UK in achieving its commitments under the Convention on Biological Diversity, specifically the goal to achieve effective conservation and management of at least 30% of the world's oceans by 2030.

Through collection of baseline data, enhancement of our understanding of MCEs and the species they support around Ascension, and the consequent improvement to management practices, the project directly speaks to targets 1, 3, 5 and 8 under the 'reducing threats to biodiversity' section. Additionally, the project's links to supporting sustainable fisheries and blue carbon assessments address targets 9 and 11 within the 'meeting people's needs through sustainable use and benefit-sharing' section. Finally, through strong links with AIGCFD policy team, a tailored outreach programme, and the long-term monitoring activities that will serve as the project's legacy, targets 14, 16, 20 and 21 under the 'tools and solutions for implementation and mainstreaming' are all supported.

Furthermore, the Ascension Island MPA sits in one of the most poorly studied regions of the world ocean, the Central Atlantic. The data collected under this project will contribute to efforts under the UN Ocean Decade and Sustainable Development Goal (SDG) 14 (Life Below Water). SDG5 (Gender Equality) is also supported through the gender-balanced project team, a consideration that will continue to propagate through the selection of on-island and knowledge exchange trainees.

Section 6 - Method, Project Stakeholders, Gender, Change Expected, Pathway to Change & Exit Strategy

Q13. Methodology

Describe the methods and approach you will use to achieve your intended Outcome and contribute towards your Impact. Provide information on:

- **how you reflected on and incorporated evidence and lessons learnt from past and present similar activities and projects in the design of this project.**
- **the specific approach you are using, supported by evidence that it will be effective, and justifying why you expect it will be successful in this context.**
- **how you will undertake the work (activities, materials and methods).**
- **how the main activities will be and where these will take place.**
- **how you will manage the work (governance, roles and responsibilities, project management tools, risks etc.).**

Relevant experience
The Ascension Island MPA (AIMPA) management plan identified an important data gap in knowledge of mesophotic ecosystems. Through comparable funded research undertaken by KH, PH and AB in BIOT, Seychelles, Maldives and Cabo Verde, we have developed a low-cost draft camera system and demonstrated use of both vessel-mounted and moored oceanographic instrumentation, all deployed from very small boats, to monitor the physical and benthic biological mesophotic ecosystem. These UoP projects have also demonstrated the value of coupling biology with oceanography in a thorough baseline ecosystem assessment, leading to tangible management changes to promote conservation. TS has led/partnered several Darwin-funded projects on Ascension Island. These projects include bathymetry mapping of the MPA (DPLUS142), biodiversity monitoring through eDNA metabarcoding (DPLUS165) and understanding movements and distribution of migratory predators (DPLUS161).

Approach and activities
The aims of this project are to 1) deliver baseline oceanographic and biological data on the mesophotic ecosystems in AIMPA, 2) build capacity for on-island long-term monitoring of the MPA, and 3) serve as a model that can be ported to other UKOTs.

To deliver Aim 1: Existing AIGCFD-UoP conducted research suggests different oceanographic conditions prevail on the east and west sides of the island (Fig 1, additional evidence). Therefore, survey will be stratified by side-of-island in a replicated design, covering two seasons with fieldwork deployments using an AIG vessel. Transects will be stratified by depth and habitat type, determined from existing high-resolution multibeam (including DPLUS142). Oceanographic moorings containing current meters, temperature and water property sensors will be deployed along transects to resolve the dynamics controlling thermocline depth and behaviour that exerts the dominant influence on mesophotic ecosystems. Investment in initial baseline surveys using highly-specialised oceanographic equipment (UoP in-kind loaned) allows high-resolution characterisation of mechanisms that control the evolution of the thermal regime. Going forward, this can be monitored through proxies, such as temperature variability, using AIG-owned equipment. Hydrophone recordings will also be made

at each transect to identify presence and abundance of rockhind grouper. Drift camera deployments will be made along transects and resulting video analysed to characterise the benthic biological community. Both high-resolution DELFT 3D oceanographic models configured for the immediate environment surrounding Ascension Island and global model output that resolves the general circulation will be analysed to contextualise interpretation of the in-situ oceanographic data. Hydrophone recordings will be analysed using machine-learning tools developed by AIGCFD. Multivariate statistical analysis, and habitat suitability modelling, will be used to map the distribution of mesophotic species and habitats (including blue carbon ecosystems and grouper-habitat relationships) using combined biological and oceanographic datasets.

To deliver Aim 2: Training in mesophotic survey (from design/equipment deployment through data management/analysis) will be given to four AIGCFD team members. Training will be delivered by UoP partners with successful track records in designing and delivering training. Camera equipment and temperature sensors will remain on-island after the project ends. The project officer will design and deliver a community engagement and outreach programme targeting the on-island population, showcasing the importance of mesophotic biodiversity. This will centre around maps and visual aids derived from the surveys. In addition to school visits, community meetings and a media strategy, the project officer will work with the MPA Youth Committee to develop a citizen science project whereby residents are encouraged to assist in annotation and enumeration of animals in image/video datasets.

To deliver Aim 3: Alongside AIGCFD team members, three knowledge exchange fellows (KEFs) from other UKOTs (St Helena, Turks & Caicos, Gibraltar), will travel to Ascension Island and participate in training during the second fieldwork campaign. With the KEFs, we will consider how the methodology may be applied to their respective UKOTs, allowing the project team to better understand how to design a project that can be ported to varying locations and remain successful.

Roles and responsibilities
KH will manage the project via monthly meetings on-line. The biological component will be co-managed by KH and TS, and the oceanographic component by PH. Field activities will be co-designed by all members and coordinated by the project officer. Image annotation will be undertaken by the project officer and AB. Oceanographic data analysis will be undertaken by PH and UoP technical support. Multivariate analysis, modelling and mapping will be carried out by AB. All partners will contribute to scientific publications. The project officer, line-managed by CM, will develop outreach materials, to disseminate the project findings at local and international levels. Along with TS, they will also set the findings into a locally relevant management context.

Q14. Project Stakeholders

Who are the stakeholders for this project and how have they been consulted (include local or host government support/engagement where relevant)? Briefly describe what support they will provide and how the project will engage with them

The key project stakeholder is AIGCFD who are a partner in the project and co-leading the biological component. KH sits on the Ascension MPA Advisory Board and is well-versed in the MPA management goals of AIG.

This project proposal has been developed on the island by AIGCFD and has the full support of the wider Ascension Island Government. Other important stakeholders for this project are policy makers on Ascension Island, including the elected Council, Administrator and Governor of St Helena. It is they who can prioritise and allocate resources to address management changes that may be recommended as a result of this project.

The Ascension Island community will be involved throughout the project. Volunteers will assist with the data analysis through the citizen science program. They will be an important audience for the project outputs since it is the island community who will gain most from understanding Ascension's mesophotic ecosystems and how they influence the island. Local fishers including the Ascension Fisher's Association and small retail fishing

business will benefit from better understanding the distribution and diversity of mesophotic fish species and their habitat as it will help to inform stock assessments. Public meetings, school assemblies, the use of Ascension social media pages and the local press and radio will be used to promote the project and share its results.

Q15. Gender equality and social inclusion

All applicants must consider whether and how their project will contribute to promoting equality between persons of different gender and social characteristics. Explain your understanding of how individuals may be excluded from equal participation within the context of your project, and how you seek to address this. You should consider how your project will proactively contribute to ensuring individuals achieve equitable outcomes and how you will engage participants in a meaningful way.

Within the context of this project, exclusion around gender, geographic origin, and career stage may be relevant. On gender, the project lead is female, and the team is slightly female biased. While equity of genders would be preferable, it is hoped that the slight female bias will help promote gender balance in the sciences in future through demonstrating that biodiversity observation and monitoring is open to all.

To ensure gender equality, we have disaggregated the training indicator (output 1.1) by gender.

The project is a collaboration between UK and Ascension Island researchers. While the project includes members from both nations we will also seek to include nationals from other UKOTs in the project, including the three knowledge exchange fellows. This will help to both promote geographic representation and knowledge exchange between UKOTs. We have included costs for three knowledge exchange visits and will ensure that these are drawn from a diverse pool of gender and career stage. The project includes persons from a diverse range of career stages, from senior scientists to early career researchers. Within the project we will establish formal mentorship of early career researchers (ECR) with later career stage persons through assigning ECRs a mentor. This will support knowledge transfer between stages and build future research capability.

Q16. Change expected

Detail the expected changes this work will deliver. You should identify what will change and who will benefit a) in the short-term (i.e. during the life of the project) and b) in the long-term (after the project has ended). Please describe the changes for the environment and, where relevant, for people in the OTs, and how they are linked.

When talking about how people will benefit, please remember to give details of who will benefit, differences in benefits by gender or other layers of diversity within stakeholders, and the number of beneficiaries expected. The number of communities is insufficient detail – number of households should be the largest unit used.

Through an improved understanding of Ascension Island's mesophotic marine biodiversity including species identities and distribution, AIGCFD will have the capability to manage and monitor important mesophotic habitats within the Ascension MPA. Baseline surveys within this project will provide the best available data with which to confidently inform biodiversity conservation policy including MPA management plans and threat assessments, not only for Ascension Island MPA but also within the wider context of the undersampled Central Atlantic. It will also provide AIG with the ability to incorporate mesophotic habitat usage into full-lifecycle stock assessment methods for exploited groundfish species (e.g. rockhind grouper) and a wider study of shark movement and behaviour around Ascension (DPLUS165).

Vulnerable Marine Ecosystems (VMEs) will be properly considered in development impact assessments through the provision of accurate mapping and characterisation. Their contribution to blue carbon assessments and

ecosystem functioning will be quantified and appropriately valued.

Camera equipment and temperature sensors will remain on-island at the end of the project to ensure AIGCFD have both the knowledge (through the training programme) and the means to monitor mesophotic and deep-water habitats over the longer-term. This will facilitate better understanding of the connectivity between mesophotic and shallow-water ecosystems, enabling improved assessment of climate change impacts and ecosystem resilience through an enhanced understanding of the potential for range shifts and behavioural adaptation in vulnerable species.

Through the engagement and outreach programme, the on-island community will gain a better understanding and higher appreciation of the marine environment that surrounds them. In turn, this will promote healthy discussions surrounding sustainable management of natural resources.

The deeper relationship forged between UoP and Ascension will facilitate long-term support and guidance in oceanographic and biodiversity data interpretation and translation into policy and management planning. As this is an environment that will inevitably be found at all UKOTs, this project will develop a portable methodology to map the mesophotic environment and monitor the oceanographic regime that exerts a primary influence on the benthic species distribution and abundance. The methodology by necessity must be adapted to small boats whilst still providing the required data from deep environments and can be scaled across the Blue Belt network and wider UKOT family.

Direct beneficiaries of the project total approximately 80 people including the 4 members of AIGCFD and the knowledge exchange fellows from other UKOTs (3) who will receive mesophotic survey training. Indirect beneficiaries are largely represented by the on-island community, including the MPA Youth Committee (12), local fishers who will benefit from sustainable stock management and the 60 school children between the ages of 4 and 17.

Q17. Pathway to change

Please outline your project's expected pathway to change. This should be an overview of the overall project logic and outline <u>why and how</u> you expect your Outputs to contribute towards your overall Outcome and, in the longer term, your expected Impact.

1. Data generated by the baseline surveys will allow identification and characterisation of key abiotic drivers of benthic species diversity. Together, data will be analysed and used to formalise the relationship between biology and oceanography; build state-of-the-art distribution maps and models of mesophotic species and habitat distribution within the Ascension Island MPA; and broadly map Ascension's blue carbon habitat.

2. Newly-acquired knowledge and resultant outputs (e.g. high-resolution models) will be given to AIGCFD for integration within their GIS and data management systems. With expert technical support from the UoP team, they will integrate the survey outputs into MPA management planning including stock assessments for fished species, shark behaviour and blue carbon accounting. This will form the basis of evidence-based management recommendations for the marine protected area.

3. Resulting from the initial training and equipment provided within this project, capacity and capability will be built within AIGCFD to establish mesophotic surveys as part of routine MPA monitoring to allow ongoing threat assessment and monitoring.

Q18. Sustainable benefits

How will the project reach a sustainable point and continue to deliver benefits post-funding? Will the activities require funding and support from other sources, or will they be mainstreamed in to "business as usual"? How will the required knowledge and skills remain available to sustain the benefits? If relevant, how will your approach be scaled? How will you ensure your data and evidence will be accessible to others?

Through our training of four AIGCFD team members in mesophotic survey, we will build the capacity and capability to establish mesophotic surveys as part of routine MPA monitoring (i.e. mainstreamed into "business as usual"). We have selected to train four members to reduce the risk of losing knowledge due to staff turnover, thus ensuring skills remain available.

The inclusion of three knowledge exchange fellows in the training programme, and crucially their guidance in developing a project that can easily be ported to other UKOTs, will facilitate scaling of this project. As indicated in our stage 1 cover letter, we anticipate this project as the first of many, potentially all to be linked through a future Darwin Strategic Fund application incorporating the wider UKOT family.

All data in both the raw and processed form will be made available to AIGCFD. Further to this, findings linking the biology to the oceanography and the state-of-the-art habitat suitability models will be published in peer-reviewed journals with open access licenses. Where AIGCFD agree, data and code used in these analyses will be stored in an open access repository. As well as the scientific and policy audiences, information about the mesophotic communities within the Ascension Island MPA will be made publicly available through our community engagement and outreach programme. Outputs will include species/habitat factsheets, as well as an ongoing citizen science mini-project to engage the on-island community in mesophotic study and conservation. By targeting the next generation through the 'hearts and minds approach', we hope to foster a sense of ownership from the local community towards their mesophotic ecosystems, ultimately increasing community-backed, proactive conservation initiatives.

If necessary, please provide supporting documentation e.g. maps, diagrams, references etc., as a PDF using the File Upload below:

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Section 7 - Risk Management

Q19. Risk Management

Please outline the 6 key risks to achievement of your Project Outcome and how these risks will be managed and mitigated, referring to the Risk Guidance. This should include at least one Fiduciary, one Safeguarding, and one Delivery Chain Risk.

Risk Description	Impact	Prob.	Inherent Risk	Mitigation	Residual Risk

Fiduciary (Financial) Funds not used for intended purposes.	Major	Rare	Moderate	UoP will monitor and manage all funds and detail spends in an annual financial project audit. To ensure all project partners are aware of their financial commitments and expected revenue, we have produced a detailed budget plan that all agree on.	Minor
Safeguarding Any occurrence whereby safety and/or welfare of anyone (AIGCFD/KEF trainees, UoP trainers or the general public) is compromised (including harassment, abuse and sexual exploitation).	Major	Rare	Moderate	Key principles of good ethical practice from the Darwin Guidance will be adhered to by all. Training will cover safe-working, including how to appropriately interact with others. Before training, clear instruction of what to do in the event of an incident will be given (how/who to report to etc.).	Minor
Delivery Chain Factors outside the project's control restricting access to Ascension Island by non-island partners.	Moderate	Unlikely	Moderate	Training will be provided in both field campaigns to reduce the risk of non-delivery if one year is cancelled. In the event of cancellation, UoP will focus time on developing remote guidance (i.e. video tutorials). Computer-based training (e.g. data analysis) will be hybridised if some participants cannot access Ascension.	Minor

				UoP team bring significant expertise to these surveys and have an excellent track record in similar situations.	
Risk 4 Equipment is lost or irreparably damaged during the project.	Major	Rare	Moderate	Training will adopt a 'demonstration first' approach before trainees control equipment. Survey design will be informed using pre-existing bathymetric maps to limit the chance of unexpected features resulting in equipment loss.	Minor
Risk 5 Project partners do not stay in current role in organisations.	Minor	Unlikely	Minor	Any personnel brought in to replace project partners will be fully briefed on the project and their responsibilities within it.	Minor
Risk 6 On-island capacity not developed enough to maintain autonomous monitoring programme.	Major	Rare	Moderate	Two field seasons provide an element of repetition which reinforces learnt skills. Four members of AIGCFD will be trained so that there is redundancy if team member(s) leave their roles.	Minor

Q20. Project sensitivities

Please indicate whether there are sensitivities associated with this project that need to be considered if details are published (detailed species location data that would increase threats, political sensitivities, prosecutions for illegal activities, security of staff etc.). Please note your response to this question won't influence the outcome of your application.

⦿ No

Section 8 - Workplan

Q21. Workplan

Provide a project workplan that shows the key milestones in project activities. Complete the Word template as appropriate to describe the intended workplan for your project.

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Section 9 - Monitoring and Evaluation (M&E)

Q21. Monitoring and evaluation (M&E) plan

Describe how the progress of the project will be monitored and evaluated, making reference to who is responsible for the project's M&E.

Darwin Plus projects will need to be adaptive and you should detail how the monitoring and evaluation will feed into the delivery of the project including its management. M&E is expected to be built into the project and not an 'add' on. It is as important to measure for negative impacts as it is for positive impact. Additionally, please indicate an approximate budget and level of effort (person days) to be spent on M&E (see Finance Guidance).

Project component leads (biology: KH and TS; oceanography: PH) will be responsible for the development and maintenance of a detailed workplan for the whole project team. As lead partner, 25% of KH's time on the project will be spent on M&E (this includes undertaking the financial audit).

Each partner will be responsible for monitoring their advances and evaluating their progress against the workplan activities and SMART indicators of success. Partners will provide an update on these at online monthly meetings where M&E will be discussed as standard – this also provides an opportunity for any concerns to be raised. If any activities are behind schedule, these meetings provide a platform for discussion on how to adjust activities within the project timeframe to ensure all aims are achieved.

Each project partner will dedicate 1 day to M&E per month, as well as 2 days per Ascension Island visit.

Total project budget for M&E (£) **(this may include Staff and Travel and Subsistence Costs)**	[redacted]
Total project budget for M&E (%)	8
Number of days planned for M&E	146

Section 10 - Logical Framework

Q23. Logical Framework (logframe)

Darwin Plus projects will be required to monitor and report against their progress towards their Outputs and Outcome. This section sets out the expected Outputs and Outcome of your project, how you will measure progress against these and how we can verify this.

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Impact:

AIGCFD will have the capability to manage and monitor important mesophotic habitats within the Ascension MPA, and use evidence to promote improved mesophotic ecosystems conservation through increased management efficacy.

Outcome:

The distribution of marine species and habitats, and associated oceanographic conditions, of Ascension Island are better understood and form the basis of evidence-based management recommendations for the marine protected area.

Project Outputs

Output 1:

Improved on-island capacity for mesophotic marine biodiversity research. On-island partners are confident in all aspects of the process (maintenance of equipment, fieldwork, data and analysis and archiving).

Output 2:

The distribution of mesophotic benthic species and habitats at Ascension Island are understood.

Output 3:

Ecological/environmental drivers of mesophotic species and habitat distribution are understood.

Output 4:

Survey results are used to produce management recommendations incorporated into MPA decision making tools.

Output 5:

Raised on-island community awareness of mesophotic marine ecosystems and their importance.

Do you require more Output fields?

It is advised to have fewer than 6 Outputs since this level of detail can be provided at the Activity level.

◉ Yes

Output 6:

Knowledge exchanged with other UKOTs.

Output 7:

No Response

Output 8:

No Response

Activities

Each activity is numbered according to the Output that it will contribute towards, for example, 1.1, 1.2, 1.3 are contributing to Output 1.

1.1 Develop training protocols and resources for fieldwork and data analysis
1.2 Identify in-person fieldwork trainees (AIGCFD team members and knowledge exchange fellows)
1.3 Deliver training courses to on-island participants and knowledge exchange fellows
1.4 Combine above resources and lessons learnt from this project into best-practice protocol for surveying mesophotic communities

2.1 Design survey strategy to maximise knowledge acquired during baseline surveys
2.2 Undertake baseline biological surveys of mesophotic habitats around Ascension Island
2.3 Characterise and map the species and communities comprising mesophotic habitats around Ascension Island

3.1 Undertake baseline oceanographic surveys of mesophotic habitats around Ascension Island
3.2 Characterise and map the dominant oceanographic regime around Ascension Island
3.3 Investigate the role of oceanography in, and identify key forces driving, species distribution around Ascension Island
3.4 Develop state-of-the-art habitat suitability models for mesophotic habitats around Ascension Island

4.1 Integrate species distribution maps (including modelled distributions) and other key layers into AIGCFD GIS
4.2 Carry out new stock assessments and update inshore fisheries strategies for commercial species observed to use mesophotic habitats using habitat/species maps
4.3 Re-assess threats to the MPA based on vulnerability to change of key forces driving species distribution around Ascension Island
4.4 Update MPA management plan based on results of new stock and MPA threat assessments
4.5 Combine habitat maps from activity 2.3 with models from activity 3.4 with deep-water (>200 m) research to broadly map blue carbon in the Ascension Island MPA
4.6 Advise additions to AIG's MPA research strategy relating to blue carbon assets

5.1 Design community engagement strategy based around sharing imagery and video from surveys
5.2 Develop outreach resources (e.g. marine species fact sheets) using newly-collected imagery
5.3 Visit on-island school to run workshops, incorporating marine biodiversity and conservation into the curriculum
5.4 Develop citizen-science mini-project with MPA Youth Committee to involve on-island community in analysis and sorting of image and video data

6.1 Introduce project to knowledge exchange fellows
6.2 Through discussion, identify how best to develop the project further so that it can be successfully ported to other OTs
6.3 Work with knowledge exchange fellows to draft project funding proposal to port project to other OTs

Section 11 - Budget and Funding

Q24. Budget

Please complete the appropriate Excel spreadsheet which provides the Budget for this application and ensure the Summary page is fully completed. Some of the questions earlier and below refer to the information in this spreadsheet.

DPR12S2-1019_Budget_SUBMITTED
01/10/2023
15:19:54
xlsx 71.2 KB

Q25. Alignment with other funding and activities

This question aims to help us understand how familiar you are with other work in the geographic/thematic area, and how this proposed project will build on or align with this to avoid any risks of duplicating or conflicting activities.

Q25a. Is this new work or does it build on existing/past activities (delivered by anyone and funded through any source)?

⦿ Development of existing work

Please provide details:

Limited towed camera surveys conducted during the Blue Belt-sponsored Discovery Cruise in November 2022 indicate the presence of deep-water coral and other carbon-sequestering communities within Ascension's mesophotic zone and deeper [5]. Additionally, modelling studies [4] and habitat characterisation [6] suggest the presence of diverse mesophotic communities within the Ascension Island MPA.

This project builds on the successes of an ongoing Darwin Initiative Capability & Capacity project entitled 'Building local capacity to protect national marine biodiversity (BAIT)'. KH and AB are partners on BAIT and led the development of the camera system that will be used in this project. Comparing baseline data from Ascension and Cabo Verde (BAIT's focus) will nicely contextualise both islands/archipelagos in a regional setting - this is critical from a management perspective given the extremely data-limited nature of the Central Atlantic [7].

This project will provide AIG with the ability to incorporate mesophotic habitat usage into full-lifecycle stock assessment methods for exploited groundfish species (e.g. rockhind grouper) and a wider study of shark movement and behaviour around Ascension (DPLUS165).

Note: bibliography provided in additional evidence.

Q25b. Are you aware of any current or future plans for work in the geographic/thematic area to the proposed project?

⦿ Yes

If yes, please give details explaining similarities and differences, and explaining how your work will be additional, avoiding duplicating and conflicting activities and what attempts have been/will be made to co-operate with and share lessons learnt for mutual benefit.

Geographic
Ascension Island MPA is the focus of two current Darwin-funded projects, both of which end in 2024. These are DPLUS142 focused on bathymetry and substrate mapping of nearshore habitats, and DPLUS161 exploring the drivers and solutions for an emerging human-wildlife conflict at Ascension Island.

Thematic
UoP is also a partner on BAIT, a Darwin Capacity and Capability project focused on developing on-island capacity for long-term monitoring of deep-water ecosystems around Cabo Verde.

As indicated in our stage 1 cover letter, we anticipate this project as the first of many, potentially all to be linked through a future Darwin Strategic Fund application incorporating the wider UKOT family.

DPLUS140 is a current Darwin-funded project focusing on surveying seabed habitats down to 2000 m in the Cayman Islands. We have reached out to the lead partner to discuss how to incorporate their experience in this project to ensure success.

Q26. Balance of budget spend

Defra are keen to see as much Darwin Plus funding as possible directly benefiting UKOT communities and economies. While it is appreciated that this is not always possible every effort should be made for funds to remain in-Territory.

Explain the thinking behind your budget in terms of where Darwin Plus funds will be spent. What benefits will the Territory/ies see from your budget? What level of the award do you expect will be spent locally? Please explain the decisions behind any Darwin Plus funding that will not be spent locally and how those costs are important for the project.

The first two aims of this project are to deliver baseline oceanographic and biological data on the mesophotic ecosystems of the Ascension Island MPA, and secondly to build capacity for on-island long-term monitoring of these ecosystems within the MPA. The University of Plymouth team brings a unique set of skills in mesophotic survey and subsequent mapping/modelling that does not exist within the AIGCFD, hence why they are the lead partner. Both aims require the UoP team to travel to Ascension to collect the baseline data and deliver training, hence why much of the grant is allocated to UK-Ascension travel. Whilst UoP-allocated funds sum approximately 80% of the total applied for here, when access to the oceanographic equipment provided by UoP is considered, this represents only 36% of the total project value.

Q27. Value for Money

Please describe why you consider your application to be good value for money including justification of why the measures you will adopt will secure value for money.

Building capacity for a long-term mesophotic survey programme is an excellent value for money strategy - with further surveys comes more information acquired resulting in continually improving management strategies.

Our hand-deployable camera and oceanography equipment allows collection of mesophotic data without the need for expensive research vessels. Previously, hundreds of thousands of pounds would have been required to get an ocean-going research vessel to such an isolated location.

Incorporating KEF's experience in the design of a project that can be ported to other UKOTs reduces the costs of running projects in the future given there is less chance of failure. Reduced cost of future projects will give UKOTs access to a range of funding streams to implement their own mesophotic survey programmes.

The University of Plymouth (UoP) will grant the project access to oceanographic equipment with a value of £456,500, and thus the value for money of the data acquired during this project is extremely good. Understanding the oceanography is the basis of all subsequent research, and necessitates access to ADCPs, turbulence profilers and temperature/depth sensors. These represent a significant resource cost which is not being charged to this grant. Without this, a similar project would be seeking >2x the current project cost.

To ensure good value for money, we have limited the number of staff on the project. This is evidenced by the UoP technical support post running for three months in Y1 and one in Y2 to support fieldwork and analysis, rather than continuously.

Q28. Capital items

If you plan to purchase capital items with Darwin Plus funding, please indicate what you anticipate will happen to the items following project end. If you are requesting more than 10% capital costs, please provide your justification here.

N/A - no capital expenditure

Section 12 - Safeguarding and Ethics

Q29. Safeguarding

All projects funded under the Biodiversity Challenge Funds must ensure proactive action is taken to promote the welfare and protect all individuals involved in the project (staff, implementing partners, the public and beneficiaries) involved in the project from harm. In order to provide assurance of this, projects are required to have specific procedures and policies in place.

Please upload the following required policies:

- **Safeguarding Policy:** including a statement of commitment to safeguarding and a zero tolerance statement on bullying, harassment and sexual exploitation and abuse.
- **Whistleblowing Policy:** which details a clear process for dealing with concerns raised and protects whistle blowers from reprisals.
- **Code of Conduct:** which sets out clear expectations of behaviours – inside and outside the workplace – for all involved in the project and makes clear what will happen in the event of non-compliance or breach of these standards.

If any of these policies are integrated into a broader policy document or handbook, please upload just the relevant or equivalent sub-sections to the above policies, with (unofficial) English translations where needed.

Please outline how (a) beneficiaries, the public, implementing partners, and staff are made aware of your safeguarding commitment and how to confidentially raise a concern, (b) safeguarding issues are investigated, recorded and what disciplinary procedures are in place when allegations and complaints are upheld, (c) you will ensure project partners uphold these policies.

If your approach is currently limited or in the early stages of development, please clearly set out your plans address this.

UoP safeguarding policies and practices, the whistleblowing policy and the code of conduct will be introduced during the initial project kick-off meeting so that all partners are aware of these - all partners will be asked to read and agree to the policies. Prior to the mesophotic survey training, all attendees (trainees and trainers) will be verbally made aware of the safeguarding commitments that everyone is expected to adhere to including how to appropriately interact with others and what to do if they feel a breach of this policy has taken place. Investigating alleged breaches and resulting disciplinary actions will be carried out as per the UoP safeguarding policy.

Q30. Ethics

Outline your approach to meeting the key principles of good ethical practice, as outlined in the guidance.

Legal and ethical: AIGCFD have confirmed the project will receive the required permit to undertake research in the AIMPA - permits promote ethical obligations, knowledge transfer, responsible access and benefit sharing best practices.

UKOT leadership: TS is the Director of Conservation and Fisheries and co-leads the biological component of the project. She has an excellent track record of leading projects and teams on Ascension Island.

Traditional knowledge: We will host stakeholder meetings to understand how the on-island community considers mesophotic habitats. This will build a traditional knowledge base in which to contextualise scientific findings. We particularly hope fishers engage with this as it is likely that their traditional knowledge of which species use different mesophotic habitats will prove extremely insightful.

Health and safety: This will be protected for all project staff through a) adherence to safeguarding policies, b) thorough risk assessments of all physical work, and c) clear guidelines and steps to follow should any member of the project struggle with any aspect of the work.

Credibility of evidence: All research staff will follow the UoP research governance, integrity and ethics policies (https://www.plymouth.ac.uk/research/governance); scientific results will be published in peer-reviewed journals with open access licences.

Section 13 - Project Staff

Q31. Project staff

Please identify the core staff (identified in the budget), their role and what % of their time they will be working on the project.

Name (First name, Surname)	Role	% time on project	1 page CV or job description attached?
Kerry, Howell	**Project Leader**	20	Checked
Philip, Hosegood	Oceanographic Lead	40	Checked
Tiffany, Simpson	Biological Co-Lead	5	Checked
Amelia, Bridges	Research Fellow	60	Checked

Do you require more fields?

◉ Yes

Name (First name, Surname)	Role	% time on project	1 page CV or job description attached?

Cuen, Muller	Line Manager	15	Unchecked
No Response	Project Officer	100	Checked
No Response	Technical Support	17	Checked
No Response	*No Response*	0	Unchecked
No Response	*No Response*	0	Unchecked
No Response	*No Response*	0	Unchecked
No Response	*No Response*	0	Unchecked
No Response	*No Response*	0	Unchecked

Please provide 1 page CVs (or job description if yet to be recruited) for the project staff listed above as a combined PDF.

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20:13:04
pdf 493.36 KB

Have you attached all project staff CVs and job descriptions?

⦿ No

If you cannot provide a CV or job description, please explain why not.

CVs/job descriptions have been provided for all members excluding Cuen Muller. Cuen is joining AIGCFD as the Marine Team Leader in October 2023 and one of his roles will be line management and oversight of the marine team members. He is not yet working for AIGCFD so we did not feel we could approach him for a CV. Providing the CV he applied to AIGCFD with would be a breach of GDPR.

Section 14 - Project Partners

Q32. Project partners

Please list all the Project Partners (including the Lead Partner who will administer the grant and coordinate delivery of the project), clearly setting out their roles and responsibilities in the project including the extent of their engagement so far.

This section should demonstrate the capability and capacity of the Project Partners to successfully deliver the project. Please provide Letters of Support for all project partners or explain why this has not been included.

Lead partner name:	University of Plymouth
Is the Lead Partner based in a UKOT where the project is working?	⦿ No

Please explain why this project is led from outside the UKOT	It would not be suitable for AIGCFD to lead given they do not currently possess the capacity or capability to undertake mesophotic ecosystem surveys. The team of researchers from UoP brings a unique set of skills in mesophotic survey, subsequent mapping/modelling and delivering training to build capacity.
Why is this organisation the Lead Partner, and what value to they bring to the project? (including roles, responsibilities and capabilities and capacity):	Value, capabilities and capacity The UoP team brings world-leading expertise in mesophotic surveys having undertaken similar work in several other SIDS/territories (BIOT, Seychelles, Maldives, Gibraltar and Cabo Verde). They also bring expertise in how to develop capacity and capability for such surveys in locations with steep-sided features like oceanic islands and seamounts. Roles and responsibilities KH will manage the project via monthly meetings on-line and co-lead the biological component. The oceanographic component will be managed by PH who will also lead the oceanographic data analysis with some UoP technical support. AB will oversee the biological image annotation and lead on developing species/habitat distribution maps and models. Field activities and scientific publications will be co-designed/written by all members.
Allocated budget (proportion or value):	[redacted]
Representation on the Project Board (or other management structure)	⦿ Yes
Have you included a Letter of Support from the Lead Partner?	⦿ Yes

Do you have partners involved in the Project?

⦿ Yes

1. Partner Name:	Ascension Island Government Conservation and Fisheries Directorate (AIGCFD)
Website address:	https://www.ascension.gov.ac/conservation/about-conservation

What value does this Partner bring to the project? (including roles, responsibilities and capabilities and capacity):	Value, capabilities and capacity AIGCFD initiated discussion around and have co-developed this application and bring a wealth of experience working on/around Ascension Island, an extremely remote location. The marine team comprises trained marine ecologists with unique knowledge of local species and habitats in shallower waters, many of which we anticipate to also use the mesophotic environment. Additionally, AIGCFD have a suitable vessel for the proposed project and a successful track record of completing Darwin projects. Roles and responsibilities TS will be responsible for overseeing the on-island work and will co-lead the biological component. The project officer will coordinate the field activities and undertake the biological image annotation. They will also be responsible for leading design, development and implementation of the community engagement and outreach aspects. TS and the project officer will set the findings into a locally relevant management context. CM will line-manage and assist the project officer. Field activities and scientific publications will be co-designed/written by all members.
UKOT-based/other Partner	⦿ UKOT-based
Allocated budget (proportion or value):	[redacted]
Representation on the Project Board (or other management structure)	⦿ Yes
Have you included a Letter of Support from this organisation?	⦿ Yes

2. Partner Name:	N/A
Website address:	*No Response*
What value does this Partner bring to the project? (including roles, responsibilities and capabilities and capacity):	*No Response*
UKOT-based/other Partner	⦿ Other
Allocated budget (proportion or value):	£0.00
Representation on the Project Board (or other management structure)	○ Yes ○ No

Have you included a Letter of Support from this organisation?	○ Yes ○ No

3. Partner Name:	N/A
Website address:	*No Response*
What value does this Partner bring to the project? (including roles, responsibilities and capabilities and capacity):	*No Response*
UKOT-based/other Partner	£0.00
Allocated budget (proportion or value):	⦿ Other
Representation on the Project Board (or other management structure)	○ Yes ○ No
Have you included a Letter of Support from this organisation?	○ Yes ○ No

4. Partner Name:	N/A
Website address:	*No Response*
What value does this Partner bring to the project? (including roles, responsibilities and capabilities and capacity):	*No Response*
UKOT-based/other Partner	⦿ Other
Allocated budget (proportion or value):	£0.00
Representation on the Project Board (or other management structure)	○ Yes ○ No
Have you included a Letter of Support from this organisation?	○ Yes ○ No

5. Partner Name:	N/A
Website address:	*No Response*

What value does this Partner bring to the project? (including roles, responsibilities and capabilities and capacity):	*No Response*
UKOT-based/other Partner	⦿ Other
Allocated budget (proportion or value):	£0.00
Representation on the Project Board (or other management structure)	◯ Yes ◯ No
Have you included a Letter of Support from this organisation?	◯ Yes ◯ No

6. Partner Name:	N/A
Website address:	*No Response*
What value does this Partner bring to the project? (including roles, responsibilities and capabilities and capacity):	*No Response*
UKOT-based/other Partner	⦿ Other
Allocated budget (proportion or value):	£0.00
Representation on the Project Board (or other management structure)	◯ Yes ◯ No
Have you included a Letter of Support from this organisation?	◯ Yes ◯ No

Please provide a combined PDF of all letters of support.

DPR12S2-1019_Letters_of_Support_SUBMITTED
30/09/2023
21:06:00
pdf 226.14 KB

Section 15 - Lead Partner Capability and Capacity

Q33. Lead Partner Capability and Capacity

Has your organisation been awarded Biodiversity Challenge Funds (Darwin Plus, Darwin Initiative or Illegal Wildlife Trade Challenge Fund) funding before?

⦿ No

If no, please provide the below information on the lead partner.

What year was your organisation established/ incorporated/ registered?	01 January 1992
What is the legal status of your organisation?	⦿ University
How is your organisation currently funded?	Public sector funding

Describe briefly the aims, activities and achievements of your organisation. Large organisations please note that this should describe your unit or department.

Aims	Research in the Marine Biology and Ecology Research Centre (MBERC) has and aims to continue to contribute substantially to the understanding of how marine biodiversity is responding to environmental change and informs management decisions at regional, national and international levels.
Activities	MBERC is structured around three research groups and addresses key themes: (i) the influences of environmental change, fisheries and pollution on marine biodiversity (ii) the use of large-scale temporal and spatial data for understanding and management of marine biodiversity (iii) the development and application of new approaches for biological assessment.
Achievements	- Ranked 4th globally for United Nations' SDG number 14: life below water (THE Impact Rankings 2022) - More than 75% of our research ranked either World-Leading or Internationally Excellent in REF2021 - 3-time winner of Queen's Anniversary Prize for Higher and Further Education, for marine microplastics pollution research (2019)

Provide detail of 3 contracts/projects held by the Lead Partner that demonstrate your credibility as an organisation and provide track record relevant to the project proposed.

These contracts/awards should have been held in the last 5 years and be of a similar size to the grant requested in your application.

Contract/Project 1 Title	Centre for doctoral training in sustainable management of UK marine resources (SuMMeR)

Contract Value/Project budget (include currency)	[redacted]
Duration (e.g. 2 years 3 months)	6 years
Role of organisation in project	University of Plymouth lead this grant and bring together 6 hosting partner institutions and 4 collaborative partners who are all world leaders in marine research and postgraduate training, along with 45 associated partners from the research, industry, government and third sectors from across the UK.
Brief summary of the aims, objectives and outcomes of the project	The Centre for doctoral training in sustainable management of UK marine resources (SuMMeR CDT) provides PhD training towards building the next generation of transdisciplinary researchers, solution providers and practitioners needed to support government and non-government sectors. Researchers will graduate with an understanding that the UK's coasts and seas are key to economic development, food and energy security, and the physical health and mental wellbeing of those in coastal areas. They will address 21st century challenges including climate change, biodiversity loss, environmental degradation, socio-economic deprivation, increased use of marine space, and the needs for environmental improvement for mitigation, adaptation and conservation.
Client/independent reference contact details (Name, e-mail)	NERC, researchgrants@nerc.ukri.org

Contract/Project 2 Title	Intergenerational co-creation of novel technologies to reconnect digitally excluded people with community & cultural landscapes in coastal economies
Contract Value/Project budget (include currency)	[redacted]
Duration (e.g. 2 years, 3 months)	2 years and 6 months
Role of organisation in project	University of Plymouth are leading this interdisciplinary project, delivered by our Centre for Health Technology which aims to improve digital inclusion for both groups and help them to connect to their communities and digital activity.
Brief summary of the aims, objectives and outcomes of the project	The project will work with 20 partner organisations, recruit 80 older (50+) people and 40 younger (16-20) people who will work with researchers to co-develop novel technologies helping participants to connect to community and cultural landscape in the region. We will set up a social enterprise which will work with our partner organisations and participants to demonstrate the technologies to regional and national audiences of 300-400. This social enterprise will carry forward the development, sale (either to individuals or to organisations) at low price, implementation of the technologies and continued engagement of young people in this digital development.

Client/independent reference contact details (Name, e-mail)	EPSRC, grants@epsrc.ukri.org

Contract/Project 3 Title	Multi-scale oceanographic numerical modelling in support of regional marine science throughout the tropical Indian Ocean, Bertarelli Foundation
Contract Value/Project budget (include currency)	[redacted]
Duration (e.g. 2 years, 3 months)	4 years
Role of organisation in project	University of Plymouth are leading the project, partnering with the University of Cape Town's numerical modelling teams. The partnership established within this project will see the sharing of modelling approaches, manifested as the use of the basin-scale conditions as boundary conditions for initialising the regional models.
Brief summary of the aims, objectives and outcomes of the project	We are developing a multi-scale numerical modelling approach to identify the dynamical oceanographic processes and resulting flow fields responsible for shaping the regional ecosystem throughout BIOT and the wider Indian Ocean. Identifying biophysical 'hotspots' and trajectories of particles including larvae, enabling the design of surveys to detect the enhancement in biological activity and informing observational studies from partners. The output, accompanied by an analysis of the remote sensing products, will be shared through a data-sharing portal, enabling a direct assessment of the locations most susceptible to biomass concentration at multiple trophic levels and thereby demanding enhanced policing and monitoring.
Client/independent reference contact details (Name, e-mail)	Bertarelli Foundation, secretary@bertarelli.edu

Have you provided the requested signed audited/independently examined accounts?

⦿ Yes

Section 16 - Certification

Certification

On behalf of the

Company

of

University of Plymouth

I apply for a grant of

£375,153.00

I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful.

(This form should be signed by an individual authorised by the applicant institution to submit applications and sign contracts on their behalf.)

- **I enclose CVs for key project personnel, a cover letter, letters of support, a budget, logframe, Safeguarding and associated policies, and project workplan.**
- **Our last two sets of signed audited/independently verified accounts and annual report (covering three years) are also enclosed.**

Checked

Name	Amelia Bridges
Position in the organisation	Research Fellow
Signature (please upload e-signature)	Signature 30/09/2023 21:12:20 jpg 589.31 KB
Date	01 October 2023

Please attach the requested signed audited/independently examined accounts.

Financial_Statements_year_ended_31_July_2021
03/10/2023
10:38:45
pdf 4.61 MB

Financial_Statements_year_ended_31_July_2020
03/10/2023
10:38:45
pdf 3.17 MB

Financial_Statements_year_ended_31_July_2022
03/10/2023
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pdf 2.09 MB

DPR12S2-1019_Lead_Partner_Finances_SUBMITTED
30/09/2023
21:11:31
pdf 1.33 MB

Please upload the Lead Partner's Safeguarding Policy as a PDF

DPR12S2-1019_Combined_Safeguarding_Whilstleblowing_Code_of_Conduct_SUBMITTED
30/09/2023
21:20:26
pdf 696.47 KB

Section 17 - Submission Checklist

Checklist for submission

	Check
I have read the Guidance**, including the "Guidance Notes for Applicants", "Monitoring Evaluation and Learning Guidance", "Standard Indicator Guidance", "Risk Guidance", and "Finance Guidance".**	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 budget based on UK government financial years **i.e. 1 April – 31 March and in GBP.**	Checked
I have checked that our budget is complete, **correctly adds up and I have included the correct final total at the start of the application.**	Checked
The application been signed by a suitably authorised individual **(clear electronic or scanned signatures are acceptable).**	Checked
I have attached the below documents to my application: • **a** cover letter from the Lead Partner**, outlining how any feedback received at Stage 1 has been addressed where relevant and referencing any potential conflicts of interest, as a single PDF.**	Checked
• **my** completed logframe **as a PDF using the template provided and using "Monitoring Evaluation and Learning Guidance" and "Standard Indicator Guidance".**	Checked
• **my budget (which meets the requirements above) using the template provided.**	Checked
• **a signed copy of the last 2 annual report and accounts for the Lead Partner, or provided an explanation if not.**	Checked
• **my completed workplan as a PDF using the template provided**	Checked
• **a copy of the Lead Partner's Safeguarding Policy, Whistleblowing Policy and Code of Conduct (Question 28).**	Checked
• **1 page CV or job description for each of the Project Staff identified at Question 30, including the Project Leader, or provided an explanation of why not, combined into a single PDF.**	Checked
• **a letter of support from the Lead Partner and partner(s) identified at Question 31 and relevant OT Governments, or an explanation of why not, combined into a single PDF.**	Checked
My additional supporting evidence is in line with the requested evidence, amounts to a maximum of 5 sides of A4, and is combined as a single PDF.	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
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 the Darwin Initiative and our sister grant scheme, the IWT Challenge Fund. We also provide occasional updates on other UK Government activities related to biodiversity conservation and share our quarterly project newsletter. 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 the Darwin Initiative including project details (usually title, lead partner, project leader, location, and total grant value).

Project Title: Building baseline knowledge of mesophotic ecosystems in Ascension Island MPA

	Activity	No. of months	Year 1 (24/25)				Year 2 (25/26)			
			Q1 Apr, May, Jun	Q2 Jul, Aug, Sept	Q3 Oct, Nov, Dec	Q4 Jan, Feb, Mar	Q1 Apr, May, Jun	Q2 Jul, Aug, Sept	Q3 Oct, Nov, Dec	Q4 Jan, Feb, Mar
Output 1	Improved on-island capacity for mesophotic marine biodiversity research. On-island partners are confident in all aspects of the process (maintenance of equipment, fieldwork, data and analysis and archiving).									
1.1	Develop training protocols and resources for fieldwork and data analysis.	2								
1.2	Identify in-person fieldwork trainees (AIGCFD team members and knowledge exchange fellows).	2								
1.3	Deliver training courses to on-island participants and knowledge exchange fellows.	2								
1.4	Combine above resources and lessons learnt from this project into best-practice protocol for surveying mesophotic communities	4								
Output 2	The distribution of mesophotic benthic species and habitats at Ascension Island is understood.									
2.1	Design survey strategy to maximise knowledge acquired during baseline surveys.	2								
2.2	Undertake baseline biological surveys of mesophotic habitats around Ascension Island.	2								
2.3	Characterise and map the species and communities comprising mesophotic habitats around Ascension Island.	12								
Output 3	Ecological/environmental drivers of species and habitat distribution are understood.									
3.1	Undertake baseline oceanographic surveys of mesophotic habitats around Ascension Island.	2								
3.2	Characterise and map the dominant oceanographic regime around Ascension Island.	10								

Project Title: Building baseline knowledge of mesophotic ecosystems in Ascension Island MPA

	Activity	No. of months	Year 1 (24/25)				Year 2 (25/26)			
			Q1 Apr, May, Jun	Q2 Jul, Aug, Sept	Q3 Oct, Nov, Dec	Q4 Jan, Feb, Mar	Q1 Apr, May, Jun	Q2 Jul, Aug, Sept	Q3 Oct, Nov, Dec	Q4 Jan, Feb, Mar
3.3	Investigate the role of oceanography in, and identify key forces driving, species distribution around Ascension Island.	6			■	■		■	■	
3.4	Develop state-of-the-art habitat suitability models for mesophotic habitats around Ascension.	7				■	■		■	
Output 4	Survey results are used to produce management recommendations incorporated into MPA decision making tools.									
4.1	Integrate species distribution maps (including modelled distributions) and other key layers into AIGCFD GIS.	3					■			■
4.2	Carry out new stock assessments and update inshore fisheries strategies for commercial species observed to use mesophotic habitats using habitat/species maps.	5						■	■	■
4.3	Re-assess threats to the MPA based on vulnerability to change of key forces driving species distribution around Ascension Island .	5						■	■	■
4.4	Update MPA management plan based on results of new stock and MPA threat assessments.	3								■
4.5	Combine habitat maps from activity 2.3 with models from activity 3.4 with deep-water (>200 m) research to broadly map blue carbon in the Ascension Island MPA.	7					■	■	■	
4.6	Advise additions to AIG's MPA research strategy relating to blue carbon assets.	3								■
Output 5	Raised on-island community awareness of mesophotic marine ecosystems and their importance.									
5.1	Design community engagement strategy based around sharing imagery and video from surveys.	6	■	■						

Project Title: Building baseline knowledge of mesophotic ecosystems in Ascension Island MPA

	Activity	No. of months	Year 1 (24/25)				Year 2 (25/26)			
			Q1 Apr, May, Jun	Q2 Jul, Aug, Sept	Q3 Oct, Nov, Dec	Q4 Jan, Feb, Mar	Q1 Apr, May, Jun	Q2 Jul, Aug, Sept	Q3 Oct, Nov, Dec	Q4 Jan, Feb, Mar
5.2	Develop outreach resources (e.g. marine species fact sheets) using newly-collected imagery.	6	■	■						
5.3	Visit on-island school to run workshops, incorporating marine biodiversity and conservation into the curriculum.	2			■				■	
5.4	Develop citizen-science mini-project with MPA Youth Committee to involve on-island community in analysis and sorting of image and video data.	8		■	■	■	■			
Output 6	Knowledge exchanged with other UKOTs.									
6.1	Introduce project to knowledge exchange fellows.	1	■							
6.2	Through discussion, identify how best to develop the project further so that it can be successfully ported to other OTs.	5		■	■					
6.3	Work with knowledge exchange fellows to draft project funding proposal to port project to other OTs.	6			■	■	■			

Project Title: Building baseline knowledge of mesophotic ecosystems in Ascension Island MPA

Project Summary	SMART Indicators	Means of Verification	Important Assumptions
Impact: AIGCFD will have the capability to manage and monitor important mesophotic habitats within the Ascension MPA. (Max 30 words)			
Outcome: (Max 30 words) The distribution of marine species and habitats, and associated oceanographic conditions, of Ascension Island are better understood and form the basis of evidence-based management recommendations for the marine protected area.	0.1 Mesophotic ecosystems around Ascension Island are mapped and characterised according to species diversity and distribution by Y2Q3. 0.2 Project data are incorporated into MPA stock assessments, threat assessments, management plans and GIS mapping tool used in MPA management decision making by Y2Q4.	0.1 Publication of maps on open access platforms. Screenshot of species record database. 0.2 Copy of updated documents (stock assessments, inshore fisheries strategies, threat assessment, research strategy and management plan). Screenshot of GIS mapping tool.	Long term monitoring can be implemented. Management of the MPA continues.
Outputs: **1**. Improved on-island capacity for mesophotic marine biodiversity research. On-island partners are confident in all aspects of the process (maintenance of equipment, fieldwork, data and analysis and archiving).	1.1 Four members of the AIG Conservation Team (50/50 male/female split if staffing allows) receive training in the use and maintenance of field equipment and design of survey methods by Y2Q1 **[DPLUS-A01]**. 1.2 Four members of the AIG Conservation Team receive training in image processing and data analysis by Y2Q1 **[DPLUS-A01]**.	1.1 Record of training session attendance by 2 male and 2 female AIGCFD team members (if staffing allows). Self-assessment of skills pre and post training. 1.2 Record of training session attendance. Self-assessment of skills pre and post training. 1.3 Copy of protocol.	Funding is available for long term monitoring of the Ascension Island MPA. Equipment is not lost or irreparably damaged during the project.

	1.3 A best-practice protocol for surveying mesophotic communities developed by Y2Q2 **[DPLUS-C01]**. 1.4 AIG Conservation Team has the capacity to conduct mesophotic monitoring survey independently following established protocol by Y2Q3 **[DPLUS-A03]**.	1.4 Record of results from AIG-led survey.	
2. The distribution of mesophotic benthic species and habitats at Ascension Island is understood.	2.1 Detailed habitat/species maps are developed of mesophotic communities by Y2Q3. 2.2 Habitat units within mesophotic ecosystems are defined by Y2Q3.	2.1 Publication of maps on open access platforms. 2.2 Publication of report/paper describing habitat units with example images.	The field work element of the project is successful. There is sufficient data to provide definitions for units.
3. Ecological/environmental drivers of species and habitat distribution are understood.	3.1 Species and habitats relationship with environmental drivers are formalised within a modelling framework by Y2Q3. 3.2 Oceanographic environment affecting mesophotic ecosystems is described by Y2Q3.	3.1 Publication of report/paper quantifying the significance of different environmental drivers in terms of variance explained or similar metrics. 3.2 Publication of report/paper on the oceanographic conditions of Ascension Island.	Environmental data available to the study or collected during the study can explain some aspects of species and habitat distributions.
4. Survey results are used to produce management recommendations incorporated into MPA decision making tools	4.1 Outline possible climate-change induced shifts in distribution of target fish species in updated MPA stock assessments ($\geq$ 3) and inshore fisheries strategies (using	4.1 Copy of updated MPA stock assessments and mapping tool. 4.2 Copy of updated threat assessment.	Survey results show clear patterns that can be translated into management recommendations and decision-making tools.

	habitat/species maps and oceanographic mapping from output 2/3) by Y2Q4 **[DPLUS-B02, DPLUS-C02]**. 4.2 Incorporate knowledge of environmental and oceanographic drivers (output 2/3) into an improved MPA threat assessment by Y2Q4 **[DPLUS-B01]**. 4.3 Habitat/species maps from mesophotic zone (output 2) combined with deep-water work to broadly map blue carbon assets of MPA and inform research strategy. 4.4 Use baseline ecological knowledge (output 2/3) to update MPA management plan (including recommendations) to ensure sustainable management of the 140km^2 of the MPA that falls between 30 and 300 m by Y2Q4 **[DPLUS-B01, DPLUS-D01]**.	4.3 Broad-scale maps of blue carbon assets & research strategy. 4.4 Copy of management recommendations and updated management plans.	
5. Raised on-island community awareness of mesophotic marine ecosystems and their importance	5.1 At least 40 people have improved knowledge of mesophotic ecosystems following attendance at public and stakeholder meetings by Y2Q4.	5.1 Number of local stakeholders attending the public meeting. Structured formal feedback from Attendees.	People will attend a public meeting about the project. People will engage with a citizen science initiative.

	5.2 A minimum of 5 species/habitat factsheets created and distributed on Ascension website, local newspaper and by social media by Y2Q3. 5.3 A minimum of 3 school visits by the project officer to run sessions on marine biodiversity, why it's important and how to conserve it by Y2Q4. 5.3 Co-development of an ongoing citizen science mini-project with MPA Youth Committee focused on engaging people with images and video (e.g. annotation) by Y2Q2 **[DPLUS-B05]**.	5.2 Document downloads/numbers printed. 5.3 Record of school sessions. 5.4 Copy of citizen science mini-project protocol and records of engagement.	
6. Knowledge exchanged with other UKOTs.	6.1 Successful knowledge exchange events include at least 3 people from 3 other OTs by Y2Q4. 6.2 Co-developed plans to replicate the project in at least 1 other UKOT produced by Y2Q4.	6.1 Feedback reports from UKOT representatives attending the event. 6.2 Draft project funding proposal.	There are persons interested in participating in a cross OT event and future project proposal. There are suitable funding streams to submit a proposal to.

Project Title: Building baseline knowledge of mesophotic ecosystems in Ascension Island MPA

Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1. Each activity should start on a new line and be no more than approximately 25 words.)

1.1 Develop training protocols and resources for fieldwork and data analysis
1.2 Identify in-person fieldwork trainees (AIGCFD team members and knowledge exchange fellows)
1.3 Deliver training courses to on-island participants and knowledge exchange fellows
1.4 Combine above resources and lessons learnt from this project into best-practice protocol for surveying mesophotic communities

2.1 Design survey strategy to maximise knowledge acquired during baseline surveys
2.2 Undertake baseline biological surveys of mesophotic habitats around Ascension Island
2.3 Characterise and map the species and communities comprising mesophotic habitats around Ascension Island

3.1 Undertake baseline oceanographic surveys of mesophotic habitats around Ascension Island
3.2 Characterise and map the dominant oceanographic regime around Ascension Island
3.3 Investigate the role of oceanography in, and identify key forces driving, species distribution around Ascension Island
3.4 Develop state-of-the-art habitat suitability models for mesophotic habitats around Ascension Island

4.1 Integrate species distribution maps (including modelled distributions) and other key layers into AIGCFD GIS
4.2 Carry out new stock assessments and update inshore fisheries strategies for commercial species observed to use mesophotic habitats using habitat/species maps
4.3 Re-assess threats to the MPA based on vulnerability to change of key forces driving species distribution around Ascension Island
4.4 Update MPA management plan based on results of new stock and MPA threat assessments
4.5 Combine habitat maps from activity 2.3 with models from activity 3.4 with deep-water (>200 m) research to broadly map blue carbon in the Ascension Island MPA
4.6 Advise additions to AIG's MPA research strategy relating to blue carbon assets

5.1 Design community engagement strategy based around sharing imagery and video from surveys
5.2 Develop outreach resources (e.g. marine species fact sheets) using newly-collected imagery
5.3 Visit on-island school to run workshops, incorporating marine biodiversity and conservation into the curriculum
5.4 Develop citizen-science mini-project with MPA Youth Committee to involve on-island community in analysis and sorting of image and video data

6.1 Introduce project to knowledge exchange fellows
6.2 Through discussion, identify how best to develop the project further so that it can be successfully ported to other OTs
6.3 Work with knowledge exchange fellows to draft project funding proposal to port project to other OTs