Darwin Plus: Overseas Territories Environment and Climate Fund
Project Application Form

Submit by **2359 GMT Monday 29 August 2016**

Please read the Guidance before completing this form.
Information to be extracted to the database is highlighted blue. Blank cells may render your application ineligible

Basic Data

1. Project Title (max 10 words)	**Building foundations to monitor and conserve Falklands marine forest habitats**		
2. UK OT(s) involved	Falkland Islands	**Letter of support from OT government attached?**	Yes
3. Start Date:	October 2017		
4. End Date:	March 2019		
5. Duration of project (no longer than 36 months)	18 months		

Summary of Costs	**2017/18**	**2018/19**	**2019/20**	**Total**
6. Budget requested from Darwin	£33707	£60887	£5404	£99,999
7. Total value of matched funding	£29929	£71440	£5719	£107,088
8. Total Project Budget (all funders)	£63636	£132327	£11124	£207,086
9. Names of Co-funders				

10. Name, address and contact details of lead applicant organisation (responsible for delivering outputs, reporting and managing funds)*	Professor Juliet Brodie, Natural History Museum, Department of Life Sciences, Cromwell Road, London, SW7 5BD, UK

* Notification of results will be by email to the Project Leader named in Question 12

11. Type of organisation of Lead applicant. Place an x in the relevant box.													
OT GOVT		UK GOVT	x	UK NGO		Local NGO		International NGO		Commercial Company		Other (e.g. Academic)	

12. Partners in project. Please provide details of the partners in this project and provide a CV for the individuals listed. You may copy and paste this table if necessary

Details	Project Leader	Project Partner 1	Project Partner 2
Surname	**Brodie**	**Brickle**	
Forename(s)	**Juliet**	**Paul**	
Post held	**Research Leader, Phycology**	**Director**	
Institution (if different to above)		**South Atlantic Environmental Research Institute (SAERI), Stanley Cottage (North), Stanley, Falkland Islands**	
Department	**Life Sciences**		
Telephone/Skype			
Email			

13. Has your organisation been awarded Darwin Initiative funding before (for the purposes of this question, being a partner does not count**)? If yes, please provide details of the most recent awards (up to 6 examples).**

Reference No	Project Leader	Title
EIDPS042	Chris Lyal	Fellowship funds - Pierre du Plessis

14. If your answer to Q13 was No, provide details of 3 contracts previously held by your institution that demonstrate your credibility as an implementing organisation. These contracts should have been held in the last 5 years and be of a similar size to the grant requested in this application. (If your answer to Q13 was Yes, you may delete these boxes, but please leave Q14)

15. Key Project personnel

Please identify the key project personnel on this project, their role and what % of their time they will be working on the project. Please provide 1 page CVs for these staff, or a 1 page job description or Terms of Reference for roles yet to be filled. Please include more rows where necessary.

Name (First name, surname)	Role	Organisation	% time on project	1 page CV or job description attached?
Juliet Brodie	Project Leader	Natural History Museum (NHM)	21%	Yes
Paul Brickle	Project Partner	SAERI	3%	Yes
Alexandra Mystikou	Project Officer	NHM	100%	Yes
Jo Wilbraham	Algal curator	NHM	4%	Yes
Steve Russell	Molecular Laboratory Manager	NHM	2%	Yes

Project Details

16. Project Outcome Statement: Describe what the project aims to achieve and what will change as a result. (30 words max). You can copy and paste from Q26.

Provide tools to enable environmental management through habitat monitoring through filling a major gap in baseline knowledge of seaweed biodiversity, populating local information systems and providing training in species identification.

17. Background: (What is the current situation and the problem that the project will address? How will it address this problem? What key OT Government priorities and themes will it address? (200 words max)

Seaweeds are a vital natural resource for the Falklands. The kelp forests habitats are major contributors to primary production, support diverse seaweed and faunal assemblages, provide spawning grounds for the Falklands squid fishery, nurseries for fish and are a major habitat for higher predators, including red listed dolphins and whales. Threats include offshore oil exploration, fishing activities, invasive species and climate change. Potential consequences include changes in species composition, habitat loss and increased risk of invasive species spread.

Despite this, Falkland's seaweeds are not well inventoried or studied**.** Yet this baseline knowledge is crucial, underpinning all biodiversity action and a critical knowledge gap for the Falkland's Biodiversity Framework.

By providing baseline data, available locally in SAERI's data repository, offering identification and monitoring training, this project contributes to developing data systems, conservation policies and management plans (including baseline survey and subsequent monitoring). Seaweed biodiversity knowledge, including recognising key habitats, endemics and non-natives, will enable effective monitoring. This in turn will enable better management and conservation of the seaweed resource. Results will inform conservation, protection or management of the UKOTS marine environment and further the UK Government's Blue Belt manifesto commitment. Identifying non-natives will contribute to dealing with invasive alien species.

18. Methodology: Describe the methods and approach you will use to achieve your intended outcomes and impact. Provide information on how you will undertake the work (materials and methods) and how you will manage the work (roles and responsibilities, project management tools etc). Give details of any innovative techniques or methods. (500 words max)

This project has been developed in collaboration with Paul Brickle, Director of SAERI, Falkland Islands and the Natural History Museum (NHM).

The project is informed by the *Falkland Islands Biodiversity Framework 2016-2030* which underpins all Falklands biodiversity action. Seaweeds are singled out as 'not well inventoried or studied'. The project approach also acknowledges the *High Priority* issue 'Invasive species and biosecurity', and the *Cross Cutting Challenges* 'Lack of Awareness' and 'Uncertainty or lack of information'.

Recent seaweed studies (see Mystikou cv) and assessment of NHM collections, indicate that Falklands seaweed biodiversity is much greater than thought. Approximately 250 species are currently listed but between 300-350 species is predicted. Some groups, notably red seaweeds, are virtually unstudied; coralline algae, vital species for recruitment of many commercially important species, are not studied at all. This compounds any workable knowledge of seaweed diversity for the Falklands.

A programme of state-of-the-art species identification, databasing, strategic survey and habitat

documentation, training and awareness raising will be undertaken. Over 1.5 years the project will:

–Make collections to fill gaps in the Falklands collections. This will be achieved by conducting a seaweed collecting trip throughout the islands. Collecting will focus on the intertidal because contemporary collections (Mystikou) are mainly from the subtidal.

–Database all seaweed specimens. Make data available via SAERI's data repository (http://www.south-atlantic-research.org/ims-gis). Build on databasing studies on Falklands NHM seaweed collections (2011: Prof. Margaret Clayton –letter of support; 2016: Dr Mystikou).

–Identify species using molecular approaches and analyse the data to determine proportion of e.g. endemics (currently estimated as 20%), non-natives, and species that have survived in the Falklands from the last glaciation.

–Document species distributions/habitats through GIS maps. Utilise Falklands quadrat photography resource to assist in documenting habitats. Assess range and diversity of habitats, and determine their importance in relation to biodiversity conservation and functional groups.

–Develop an illustrated guide to the common seaweeds of the Falklands.

–Develop a seaweed herbarium on the Falklands that would act both as a repository of temporal and spatial information, a local reference for identification and a potential source of DNA for future studies; train a volunteer curator in maintaining and developing this resource.

–Engage and train people in seaweed identification and monitoring; work with interested Falklanders to develop a citizen science project of their own (cf. JB's http://www.bigseaweedsearch.org/).

–Publish at least 3 academic journal articles, including an inventory (check-list) of Falklands seaweeds.

The Falklands supports a number of commercially important species dependent on the seaweed habitats. Seaweeds provide ecosystem services: kelp forests dampen then effects of the waves preventing coastal erosion, and provide nurseries and support for commercially important species. This project will add to the sustainability of these species in terms of management, including wild harvesting/aquaculture. Surveys will highlight areas for conservation protection/zoning. Areas of high seaweed biodiversity will be identified. High seaweed biological diversity = increased faunal diversity.

Team NHM: Alexandra Mystikou: Project Officer; Jo Wilbraham: Algal curator; Steve Russell: Molecular Laboratory Manager. **SAERI:** Paul Brickle: Project Partner

19. How does this project:
a) Deliver against the priority issues identified in the assessment criteria
b) Demonstrate technical excellence in its delivery
c) Demonstrate a clear pathway to impact in the OT(s)
(500 words max)

a) Deliver against priority issues

Improving the conservation, protection or management of the marine environment around the UK OTs (in particular, projects contributing to the UK Government's Blue Belt manifesto commitment)

The project will provide data on the important seaweed habitats (e.g. areas of high diversity which support high faunal assemblages, species of commercial importance, numbers/distribution of endemics) that will contribute to the evidence base for the creation of designated conservation zones, including Marine Conservation Zones (MCZs), Marine Protected Areas (MPAs), Special Areas of Conservation (SACs) that make up the Blue Belt.

The Falklands seaweed collections (NHM herbarium), a unique resource with >4000 specimens, 1840s-present, will contribute to Red List assessment, providing information on their conservation status that

will contribute to making decisions about conserving diversity.

Dealing with invasive alien species

Identification and distribution of non-native seaweeds will be valuable information in monitoring their impact/spread and if appropriate, their control.

Developing data systems on biodiversity to help develop policies and management plans (including baseline survey and subsequent monitoring)

The inventory will provide an essential tool for subsequent monitoring of the seaweed resource and organisms it supports that are critical for fisheries and conservation of higher predators. This will also contribute to *Promoting sustainable fisheries.* The inventory will also be a tangible entity designed to aid in environmental assessments associated with hydrocarbon activity.

The project will deliver against the Cross Cutting Challenge 'Uncertainty or lack of information' by undertaking research to fill the knowledge gaps.

b) Demonstrate technical excellence

The project team are a group of highly trained specialists. The PL is an internationally acknowledged seaweed specialist. She has fieldwork experience in many parts of the world, including the North Atlantic, South-east Pacific and Atlantic southern ocean. She was pioneering in the use of molecular techniques for seaweed identification. She brings experience in environmental decision making and conservation tool development, and has worked for the UK government on development of MPAs. She also has considerable expertise in development of identification tools and citizen science projects.

Fieldwork survey will be undertaken by the PL with Mystikou who has specialist knowledge of the Falkland Islands' seaweed habitats. Local support will be provided by Brickle with invaluable knowledge of the islanders and marine environment. Collections management and digitisation will be supported by Wilbraham, a specialist algal curator. Molecular work will be supported by Russell who has developed specialist knowledge of working with a wide range of seaweed material over many years.

Data will be held locally in the SAERI database and also available at the NHM. Collections will be maintained in the algal herbarium at the NHM. Knowledge transfer will take place through training.

c) Demonstrate a clear pathway to impact

Once a seaweed biodiversity baseline is locally available for the Falklands local people can be trained in identification. The Islands can utilise this tool for monitoring and to inform policy and management decisions. This project is straightforward in approach and could be applicable to other UKOTs where seaweed biodiversity knowledge is sparse.

20. 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. (250 words max)

Members of the Falklands Island Government and local community will be the key stakeholders. They will also make up the members of a Steering Group for the project in consultation with Paul Brickle at the project start.

The PL has had discussions with Paul Brickle over 2-3 years in the development of this project. The work will contribute to the ongoing development of SAERI and feed in to other projects including

Biodiversity Action Planning in the Falkland Islands.

The PL has discussed the project with Dr David Blockley, Marine Ecologist heading the Falklands 'Gap Project' (see letter of support). That research addresses priority gaps in understanding ecosystem function for developing the Falklands hydrocarbon industry. It aims to create and analyse data needed to underpin strategies to better inform and monitor potential impacts of the hydrocarbon industry on the marine environment. It is reliant on expertise that resides in the NHM for seaweeds. Data from Mystikou's work is contributing to the on-line catalogue (http://falklands.myspecies.info/).

Stakeholders will be kept informed via a project website which will contain milestones and targets, along with current project documents and analyses.

The Falklands has a fledgling seaweed herbarium which will provide a basis for development of this resource. The local community will be encouraged to join in and develop their own island herbaria as this way they will be able to contribute to monitoring seaweed communities. They will be supported in this by offering training in identification of species to scientists and interested locals.

21. Institutional Capacity: Describe the implementing organisation's capacity (and that of partner organisations where relevant) to deliver the project.
(500 words max)

The Natural History Museum: The NHM is a leading international authority on the natural world with excellence in curation, research and public engagement. The extraordinary collections, with >70 million specimens, provide a unique basis for scientific discovery and an immensely powerful tool to understand the natural world. The museum houses one of the largest seaweed collections in the world with the greatest geographical reach.

The NHM is a world leader in the digitisation of collections. It is committed to making collections available to global audiences and constantly integrating new techniques and technologies to optimise digitisation and visualisation. Supported by a Digital Collections Programme, it will provide expertise, and technology support.

The NHM's library is the world's richest and most comprehensive resource for current and historical natural history literature and is dedicated to supporting research and curation staff.

South Atlantic Environmental Research Institute: SAERI is a Falkland Islands Government (FIG) initiative. SAERI aspires to be a world renowned, well branded environmental research institute. SAERI has the infrastructure and capacity to conduct environmental research throughout the South Atlantic from the equator to the ice in Antarctica.

PL: Juliet Brodie will be responsible for overseeing the project. She brings extensive capacity as a leading seaweed researcher with 30 years' experience. She has worked on the seaweed floras of many areas of the world and is a specialist in the taxonomy and phylogenetics of red algae. She has initiated and led many projects: e.g. *Important Plant Areas for the Algae*, used for UK Marine Conservation Zones (MCZ) decision making; *Provisional Red List for UK seaweeds*, http://www.nhm.ac.uk/research-curation/life-sciences/genomics-microbial-diversity/research/algae-research/biodiversity-conservation/red-data-list/index.html; *Using herbarium specimens to track the arrival and spread of non-native seaweeds*; Seaweed Collections Online (http://seaweeds.myspecies.info/); The Big Seaweed Search http://www.nhm.ac.uk/take-part/citizen-science/big-seaweed-search.html, a UK 'citizen science' initiative. Her experience as a Government Scientific Advisory Member for creation of MCZs in the UK also provides valuable experience.

PP: Paul Brickle, SAERI's Director, through his leadership in the Falklands, will be pivotal to the project's success. He will advise on the composition of the Falklands steering group composition and coordinate relevant personnel for population of SAERI's database and provide advice and local assistance for survey and outreach work. Dr Brickle is an established marine scientist with many years' experience managing and co-ordinating multi institutional research projects.

PO: Alexandra Mystikou will manage the project. She was awarded her PhD in 2016 for her work on the biodiversity of the Falkland Islands macroalgae and brings with her knowledge of the seaweeds of the archipelago, collections made during her project, molecular taxonomic skills and experience working on the NHM collections.

Algal Curator: Jo Wilbraham, the dedicated algal curator at the NHM, will support the project in collections data basing and management. She is a specialist in the digitisation of collections data and works with the PL to develop the seaweed collections.

Molecular Laboratory Manager: Steve Russell will support the molecular work of the project. He has many years' experience working with seaweeds and has worked closely with the PL at the NHM.

APPLICANTS SEEKING £100,000 OR OVER CAN PROCEED TO QUESTION 26

22. Expected Outputs

Output (*what will be achieved e.g. capacity building, action plan produced, alien species controlled)*	Indicators of success *(how we will know if its been achieved e.g. number of people trained/ trees planted)*	Status before project/baseline data *(what is the situation before the project starts?)*	Source of information *(where will you obtain the information to demonstrate if the indicator has been achieved?)*
1. Major advance in baseline knowledge of seaweed biodiversity and distribution in shallow marine waters.	Database populated and freely available. Data used as a tool in effective seaweed monitoring. Project used to address Islands' Development and Conservation Plans. Temporal and spatial seaweed data used for conservation assessment, e.g. Red List. NHM collections enhanced and data locally and globally available.	Current critical knowledge gap for seaweeds which are not well inventoried or studied. Seaweeds not included in Falklands Development and Conservation Plans. No assessment of conservation status of seaweed species.	Number of database site hits will be monitored. Seaweed inventory (check-list) published. Species distribution maps available. Raw data available.
2. Capacity for effective seaweed monitoring based on up to date data on seaweed habitats, biodiversity and species distribution.	Seaweed biodiversity documented, including, new species, endemics, non-natives and key habitats. Results used in policy documentation towards implementation of a Blue Belt via e.g. MPAs and MCZs. Conservation of Falklands' seaweeds	Extent of seaweed biodiversity unknown; no up to date inventory. High biodiversity priority. No MPAs. Identification and distribution of non-native seaweed species unknown.	Falklands Government and other stakeholder reports on seaweed monitoring. Documented in implementation of Falkland Islands Biodiversity Framework. New species descriptions published. Citation of publications in the scientific literature

	and habitats enhanced. Research papers on biodiversity and biogeography of Falklands' seaweeds produced.		and in research related to the Antarctic Convergence.
3. Capacity developed in seaweed identification and monitoring; awareness raised of the seaweed resource and its value.	Identification guide to common seaweeds published. Local reference herbarium of seaweeds. Local scientists and interested locals including summer camp children trained through workshops and activities in basic seaweed identification during second visit of project. Citizen science project developed to record distribution and abundance of c. 10-15 key species.	Lack of resources for study of seaweeds. Seaweed herbarium initiated but no reference herbarium based on up to date knowledge of seaweed biodiversity on the Islands. No real capacity in seaweed identification or tools to aid identification. No citizen science seaweed project.	Feedback from locals. Press releases and media reporting. Availability and uptake of identification guide of common seaweeds. Number of returns from citizen science project.

23. Expected change: How will each of the outputs contribute to the overall outcome of the project? (100 words max)

The baseline survey will fill a critical knowledge gap for the Falklands and provide a tool to develop a seaweed monitoring programme. Making data locally available will ensure it is readily accessible for decision making by the Falklands Government. Building capacity in seaweed identification and monitoring will provide the Falkland scientists with the tools to become independent in seaweed work. Raising awareness of the importance of seaweeds amongst the local people will enable them to understand and contribute to the conservation of this previous resource and thus contribute to the *Falkland Islands Biodiversity Framework*.

24. Main Activities	
Output 1	Activities or tasks to be done to deliver the outputs. Include activities on open access information sharing and collaboration with other OTs **Major advance in baseline knowledge of seaweed biodiversity and distribution in shallow marine waters**
1.1	Set up Steering Group in the Falklands and establish monitoring and evaluation programme.
1.2	Database historical and contemporary seaweed collections and make locally available in the Falklands.
1.3	Undertake field expedition to make a comprehensive intertidal seaweed collection and record seaweed habitats.
1.4	Extract DNA for molecular work; incorporate collections into Falklands and NHM herbaria.

1.5	Offer meetings with local scientists and other interested parties to discuss future training and awareness raising activities.
Output 2	**Capacity for effective seaweed monitoring based on up to date seaweed biodiversity and distribution.**
2.1	Carry out taxonomic study of the Falkland seaweeds using molecular techniques and analysis.
2.2	Analyse biodiversity data and document number of species; identify and describe new species, determine numbers and distribution of endemics and non-native species; review Falklands' seaweed biodiversity and compare with related areas in the Southern Ocean.
2.3	Produce species distribution and habitat maps.
2.4	Produce an inventory of red, green and brown seaweeds of the Falklands.
2.5	Publish at least 3 peer reviewed papers and articles.
Output 3	**Capacity developed in seaweed identification and monitoring; awareness raised of the seaweed resource and its value.**
3.1	Agree a list of common seaweed species and produce an illustrated identification guide to them.
3.2	PL to undertake second visit to the Falklands to provide training and awareness raising activities.
3.3	Work with local volunteers on the development of the seaweed herbarium on the Falklands.
3.4	Organise and run training events with local scientists.
3.5	Organise and run awareness training events with interested locals.
3.6	Develop a citizen science project with the locals.

25. Risks

It is important that you and your partners consider all potential risks to the project and how these risks could be mitigated. Please identify risks you have considered, the potential impact on the project and explain how you can mitigate against them. Risks may include working in a volatile region, staff retention, lack of engagement with local communities or Governments. You should always consider the risk of fraud, error or bribery.

Description of the risk	Likelihood the event will happen (H/M/L)	Impact of the event on the project (H/M/L)	Steps the project will take to reduce or manage the risk
Staff unavailable	L	M	Identify potential substitutes.
Weather prevents completion of fieldwork	L	M	Undertake fieldwork at most suitable time of year; where possible have contingency shores.
Species biodiversity work problematic for certain seaweed groups	L/M	L	Focus on key groups. Work with algal curator and molecular support to troubleshoot.
Limited engagement in training	L	M	Get local support to promote awareness; undertake pilot trial with small group

APPLICANTS SEEKING LESS THAN £100,000 ARE NOT REQUIRED TO COMPLETE THE LOGICAL FRAMEWORK AT QUESTION 26 HOWEVER YOU MAY FIND IT A USEFUL EXERCISE TO HELP YOU STRENGTHEN YOUR PROJECT

26. LOGICAL FRAMEWORK

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

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Impact: (Max 30 words)			
Outcome: (Max 30 words)	0.1 0.2 etc	0.1 0.2 etc	
Outputs: **1**.	1.1 1.2 etc	1.1 1.2 etc	
2.			
3.			
4.			
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) 1.1 1.2 1.3 etc			

27. Sustainability: How will the project ensure benefits are sustained after the project has come to a close? If the project requires ongoing maintenance or monitoring, who will do this? (200 words max)

The project will leave the legacy of the database of digitised collections and an up-to-date inventory that will be available for use in the long term via the web and in print.

The data will continue to be locally available physically and digitally. Collections will be maintained and accessible at the NHM, whose core duty is to protect, develop and provide access to the collections. The museum is committed to maintaining the digital collections and is investing in systems and infrastructure to ensure future preservation.

The work will be ongoing beyond the lifetime of the project in that any new collections that are deposited in the NHM or Falklands Herbaria will be databased and their information made available.

Data will be used for monitoring, and for conservation and management policy for the Falklands Islands and provide evidence towards Blue Belt development around the Islands.

There will be increased stakeholder awareness through the legacy of identification guides and training, and the local herbarium will continue to develop.

There will be scope to seek funding for postgraduate and postdoctoral researchers to follow up on specific areas of research identified during the course of the project.

28. Open access: All outputs from Darwin Plus projects should be made available on-line and free to users whenever possible. Please outline how you will achieve this. (200 words max)

All the outputs from this project will be freely available on-line.

Data will be deposited in SAERI's on-line repository for the UKOTs in the South Atlantic region (http://www.south-atlantic-research.org/ims.gis)

All information associated with the databased specimens will be freely available at the searchable on-line NHM Data Portal (http://data.nhm.ac.uk).

All publications will be available as open access. Identification guides and any related material will be available via the NHM and SAERI websites. The PL's web pages will also host this material (http://www.nhm.ac.uk/our-science/departments-and-staff/staff-directory/juliet-brodie.html).

Molecular sequence data will be deposited in GenBank (http://www.ncbi.nlm.nih.gov/genbank/), a collection of all publicly available DNA sequences.

Seaweed taxonomic and nomenclatural information will be available via AlgaeBase (http://www.algaebase.org/), a database of information on algae.

Seaweed information will also be available in the Falklands Gap Project on-line catalogue (http://falklands.myspecies.info/).

29. Monitoring & Evaluation:
Describe, referring to the Indicators above, how the progress of the project will be monitored and evaluated, making reference to who is responsible for the project's M&E. Darwin Initiative projects are expected 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.

(Max 500 words)

Overall M&E

The project will be overseen by a Steering Group of stakeholders in the Falklands. The PL will be responsible for overall M&E. She will work with the PP and the Steering Group to establish milestones and targets, during the project inception, including metrics for performance which will be used to assess the project against intended objectives on a monthly basis. An online management system will assist in achieving milestones and targets, and be where current project documents and analyses are placed.

There will be a formal M&E meeting between the PL and PO once a month at which all aspects and progress of the project will be covered and modifications made as appropriate. Other members of the team will attend as needed. The PL will review the budget with the NHM administrative assistant once a month and present it as part of the monthly formal meeting.

There will be a formal meeting between the PL, PO, PP and Falklands Steering Group to review progress on a quarterly basis.

There will be on-going informal M&E between all members of the team throughout the project.

A summary of the monthly meeting will be circulated to the team once a month. More detailed project reports including financial reports will be circulated to the team on a quarterly basis.

Specific actions

Databasing targets: the PO will report to the PL once a week on the number of specimens databased. Anticipated problems include time to locate specimens and slower rate of progress due to problematic material. Volunteer assistance will be brought in if required to maintain the schedule.

Survey work: during Falklands fieldwork, there will be daily monitoring of the weather and shore conditions to ensure safety. Preparation and care of the specimens collected will be monitored on a daily basis.

Seaweed biodiversity work: progress on the identification work will be evaluated at the formal monthly meetings. It is anticipated that it some seaweed species/groups will present challenges. For example, diversity will be more extensive than morphological observations suggest, or require troubleshooting to obtain molecular data in the time available. This will be monitored and direction modified accordingly. In addition to aims of this project, the work will be incredibly valuable in identifying those seaweed groups that will need additional specialist research projects (including Masters/doctoral level) which will be developed for future separate research projects.

Capacity work: identification guides will be trialled on the Falklands and modified accordingly. Following training and awareness raising events will be evaluated via feedback questionnaires at the time and further modifications made as appropriate.

Number of days planned for M&E	9
Total project budget for M&E	£2717.56
Percentage of total project budget set aside for M&E	1.3%

30. Financial controls: Please demonstrate your capacity to manage the level of funds you are requesting. (Who is responsible for managing the funds? What experience do they have? What arrangements are in place for auditing expenditure?)
NHM The NHM is responsible for managing a budget of > £70 million per annum, comprising Government Grant-in-Aid and externally generated funds from both corporate and grant-giving sectors. The responsibility of managing the funds rests with the Director of Finance, Neil Greenwood. The NHM has an independent audit committee who are responsible for oversight of the financial procedures of the NHM. Full audited accounts are available on the website at http://www.nhm.ac.uk/about-us/corporate-information/museum-accounts/index.html Day-to-day administration of the grant will be the responsibility of the Research and Consulting Office (RCO) a team of nine people headed by Vanessa Pike.

Please complete the separate Excel spreadsheet which provides the Budget for this application. Some of the questions earlier and below refer to the information in this spreadsheet. If you are requesting over £100,000 from Darwin Plus, you must complete the full spreadsheet.

31. Value for Money Please explain how you worked out your budget and how you will provide value for money through managing a cost effective and efficient project. You should also discuss any significant assumptions you have made when working out your budget. (200 words max)
The project will provide data for the *Falkland Islands Biodiversity Framework*. It actually does the work to address a frequently listed gap of biodiversity tasks and will provide the data for monitoring action. The sum requested will provide sufficient funds and seaweed specialist expertise to undertake this work. Neither the funding nor the specialist expertise are currently available in the Falklands. In terms of the budget, the project will pay for a full-time Project Officer. The other major costs relate to airfares to the Falklands for fieldwork in year 1 and awareness raising/training in year 2. These costs have been worked out based on actual costs incurred during previous projects. The extensive matched funding we have secured highlights exceptional value for money. The time of the PL, PP, curator, molecular manager and Falklands local advisor will all be given in kind. The budget also represents value for money: work already undertaken and funded through other sources will contribute to the project. These include extraction of DNA from Mystikou's recently-collected seaweed samples, biodiversity studies, and databasing of Falklands seaweed collections at the NHM, have all been.

32. 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

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

	Activity	No. of months	Year 1				Year 2				Year 3			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1	**Baseline knowledge of seaweed biodiversity and distribution in shallow marine waters**													
1.1	Set up Steering Group in the Falklands and establish monitoring and evaluation programme.	0.25				x								
1.2	Databasing seaweed collections.	2				x								
1.3	Undertake field expedition.	1					x							
1.4	Extract DNA and incorporate collections into herbaria.	3				x	x	x						
1.5	Arrange meetings with local scientists and locals.	during 1.3				x								
Output 2	**Capacity for effective seaweed monitoring based on up to date seaweed biodiversity and distribution**													
2.1	Carry out biodiversity study of the Falkland seaweeds using molecular techniques and analysis.	3				x	x	x	x	x				
2.2	Analyse biodiversity data and document number of species, new species, levels of endemism, non-native species and review relationships with seaweed floras in the Southern Ocean.	3						x	x	x				
2.3	Produce species distribution/habitat maps.	1					x			x	x			
2.4	Produce inventory of red, green and brown seaweeds of the Falklands	1				x	x	x	x	x	x			

2.5	Publish at least 3 peer reviewed papers and articles.	1.25						x	x	x	x			
Output 3	**Awareness raised of the seaweed resource and its value, and capacity developed for identification and monitoring**													
3.1	Determine species to be included and produce identification guide of common species.	1						x						
3.2	Second visit to Falklands (PL) to raise awareness and capacity	1						x			x			
	Work with local volunteers on the development of the seaweed herbarium on the Falklands.	during 3.2						x			x			
3.3	Organise and run training events with local scientists.	during 3.2						x			x			
3.4	Organise and run awareness training events with interested locals.	during 3.2						x			x			
3.5	Develop a citizen science project with the locals.	0.5 and during 3.2							x	x	x			

CERTIFICATION

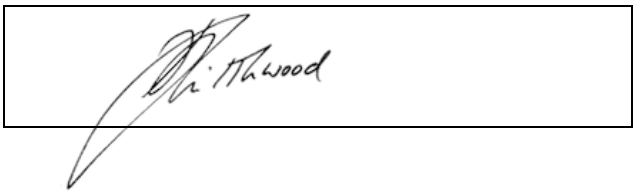
On behalf of the trustees of The Natural History Museum

I apply for a grant of £99999 in respect of **all expenditure** to be incurred during the lifetime of this project based on the activities and dates specified in the above application.

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 lead institution to submit applications and sign contracts on their behalf.)*

- I enclose CVs for key project personnel and letters of support.
- I enclose the most recent 2 years of signed and audited/independently verified accounts.

Name (block capitals)	DAVID TIMOTHY JAN LITTLEWOOD
Position in the organisation	Head, Department of Life Sciences

Signed PDF		**Date:**	27 August 2016

If this section is incomplete the entire application will be rejected. You must provide a real (not typed) signature. You may include a pdf of the signature page for security reasons if you wish. Please write PDF in the signature section above if you do so.

Application Checklist for submission

	Check
Have you **read the Guidance?**	Yes
Have you read the current **Terms and Conditions** for this fund?	Yes
Have you **checked the Darwin Plus website** immediately prior to submission to ensure there are no late updates?	Yes
Have you provided **actual start and end dates** for your project?	Yes
Have you provided your **budget based on UK government financial years** i.e. 1 April – 31 March and in GBP?	Yes
Have you checked that your **budget is complete**, correctly adds up and that you have included the correct final total on the top page of the application?	Yes
Has your application been **signed by a suitably authorised individual**? (clear electronic or scanned signatures are acceptable in the email)	Yes
Have you included a **1 page CV for all the key project personnel**?	Yes
Have you included a **letter of support from the applicant organisation, main partner(s) organisations and the relevant OT Government**?	Yes
Have you included a **copy of the last 2 years' annual report and accounts** for the lead organisation?	Yes

Once you have answered the questions above, please submit the application, not later than midnight **2359 GMT Monday 29 August 2016** to Darwin-Applications@ltsi.co.uk using the first few words of the project title **as the subject of your email**. If you are e-mailing supporting documentation separately please include in the subject line an indication of the number of e-mails you are sending (e.g. whether the e-mail is 1 of 2, 2 of 3 etc). You are not required to send a hard copy.

DATA PROTECTION ACT 1998: Applicants for grant funding must agree to any disclosure or exchange of information supplied on the application form (including the content of a declaration or undertaking) which the Department considers necessary for the administration, evaluation, monitoring and publicising of Darwin Plus. Application form data will also be held by contractors dealing with Darwin Plus monitoring and evaluation. It is the responsibility of applicants to ensure that personal data can be supplied to the Department for the uses described in this paragraph. A completed application form will be taken as an agreement by the applicant and the grant/award recipient also to the following:- putting certain details (i.e. name, contact details and location of project work) on the Darwin Initiative and Defra/FCO/DFID websites (details relating to financial awards will not be put on the websites if requested in writing by the grant/award recipient); using personal data for the Darwin Initiative postal circulation list; and sending data to Governor's Offices outside the UK, including posts outside the European Economic Area. Confidential information relating to the project or its results and any personal data may be released on request, including under the Environmental Information Regulations, the code of Practice on Access to Government Information and the Freedom of Information Act 2000.