

ST HELENA GOVERNMENT TERMS OF REFERENCE

Darwin Pelagic Ecosystem Project Officer

Date:

1. Background

1.1 The island of St Helena is an internally self-governing Overseas Territory of the United Kingdom located in the South Atlantic approximately 4,000 miles from the UK. The Government comprises a Governor (who is appointed by the Crown) an Executive Council, which has the general control and direction of Government, and a Legislative Council. The Governor retains responsibility for internal security, external affairs, defence, the public service, finance and shipping.

1.2 The island's population is around 4,500 and it has a typical small island economy with a high import dependency, a narrow economic base, a large public sector (around 790 staff), and significant outward labour migration. St Helena receives UK Government financial assistance to support recurrent and capital expenditure as part of their obligation to ensure that the reasonable needs of the population are met.

1.3 The overall vision of the St Helena Government (SHG) is
"Strengthened community and family life through vibrant economic growth, with opportunities for all to participate, within a framework of effective government and law."

1.4 To support this vision there are three National Goals:

- A vibrant economy providing opportunities for all to participate
- Strong community and family life
- Effective management of the environment

1.5 In November 2011 Her Majesty's Government agreed to fund an airport. Construction is complete and the airport has been certified, but there has been a delay in terms of the airport becoming operational and regular flights are therefore not yet available.

1.6 SHG is embedding a change programme that will enable the Public Service to improve its delivery of the government's developmental objectives. Achievement of the Goals and Strategic Objectives will require sound management and transformation of the public sector to make it a professional, modern, and flexible organisation able to initiate and respond to change. Central to this programme has been the re-structuring of Government functions and directorates. There are currently five directorates reporting to the Chief Secretary who is the head of the Service; Education, Health, Safeguarding, Environment & Natural Resources and Corporate Services. The Police Service reports to the Governor.

1.7 The Environment and Natural Resources Directorate consists of the property and Housing Division, the Agriculture and Natural Resource Division, the Environmental Management Division, Planning and Development Control, the Government Garage and Support Services. Together the directorate is responsible for most physical development and management issues within the public sector on the island. Central to our work is the

economic development of the island, building on its unique natural and cultural heritage, and providing for the future needs of its citizens. We seek to put St Helena at the forefront of sustainable economic development, by focussing on investing in the people and environment which the economy serves. We are working to improve the prerequisites for tourism, strengthen natural and cultural heritage, increase food and energy security, develop infrastructure and housing, improve environmental governance and equip the island to embrace its future.

1.8 The island, together with two major seamounts in the 200 nm maritime zone, provides oases in an otherwise oligotrophic region. These oases attract globally important mega fauna, such as whale sharks, humpback whales and migratory tunas, whilst the island itself is home to a range of breeding seabirds.

To date research has been undertaken on the whale sharks, seabirds and tunas, but little has been done to investigate the pelagic ecosystem that supports them or understand the role of the island and seamounts in enhancing productivity.

The Island supports a commercially valuable pelagic tuna fishery both inshore and offshore, and an inshore recreational fishery. Local capacity has been built in fisheries science within St. Helena Government (SHG) but need continued support at this stage to continue to sustainably manage the Island's fisheries resources. A Darwin funded project entitled "Sustainable development and management of St Helena's fisheries and marine tourism" which commenced in April 2014 has addressed some of these issues however there is a need for specialist support. The project was delivered through a partnership between SHG, Ascension Island Government (AIG) and fisheries scientists at the Falklands-based South Atlantic Environment Research Institute (SAERI).

1.9 As part of the blue-belt initiative, St Helena is has declared a Category VI Sustainable use MPA in the entire maritime zone from September 2016. A key-part of ensuring sustainability is to understand the pelagic ecosystem and how seasonal or long-term changes in that system will impact the abundance and distribution of the whale sharks and fish on which the economy of the island depends. A Darwin Plus funded project (DPLUS070) entitled "Oceanographic influences on the St Helena pelagic ecosystem" is due to commence in July 2017 to satisfy this data gap.

This project will establish a basic understanding of the seasonal operation of pelagic ecosystem that underpins St Helena's fisheries and tourism industries and evaluate how oceanography influences that system. The Project Officer will work closely with the project team, to ensure the successful delivery of the Darwin project. In particular the Project Officer will lead on the plankton sampling and oceanographic data collection, lead on the sample analysis and assist in the seabird fieldwork. The Project Officer will work with the Project Leader to ensure sound governance of the project in terms of human resources, financial and administrative management; provide logistical and procurement support for the project; and promote the project both on island and overseas. The Project Officer will also undertake data analysis and report writing under the guidance of senior scientists affiliated with the project.

1.10 The project will be delivered through a partnership with the St Helena Government (SHG), British Antarctic Survey (BAS) and South Atlantic Environmental Research Institute (SAERI).

St Helena Government Environmental and Natural Resources Directorate (ENRD) is responsible for environmental management for St Helena Government. The ENRD is divided into two divisions and the Marine Section form part of the Environmental

Management Division. Marine Section staff has been involved in previous Darwin Plus projects, including DPLUS039 and the earlier project to “Mapping St Helena’s biodiversity to create a Marine Management Plan”.

This section leads through creation and implementation of policy and regulation, and provides advice, underpinned by clear, transparent, evidence-based research.

BAS is one of the six research centres of the Natural Environment Research Council and is the leading UK institute for research into polar environments. With a staff of over 500 and a budget of over £50 million per annum, it is one of the foremost international practitioners in this field. Currently BAS science is organised into six research programmes within the strategic framework, Polar Science for Planet Earth. The Ecosystems programme involves 40 staff members and was built on expertise and experience developed over several decades. At the highest level, the programme is designed to deliver integrated, inter-disciplinary research, monitoring and survey. By focusing on critical science problems, including the abilities of species and ecosystems to adapt to long-term change, and the impacts of climate variability and harvesting, the programme seeks to improve our understanding of fundamental environmental issues. In addition, the science provides important inputs for national and international policy makers.

SAERI is a Falkland Islands initiative. It 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 Antarctic. SAERI’s director is an established marine scientist with many years’ experience managing and co-ordinating multi institutional research projects. SAERI has expertise in marine biodiversity, fisheries, GIS and geospatial statistics, marine spatial planning and the evaluation of ecosystems services. It also has a wide network of collaborating intuitions from which to draw expertise.

2. Key Objectives

- 2.1 Establish a basic understanding of the seasonal operation of pelagic ecosystem that underpins St Helena’s fisheries and tourism industries and evaluate how oceanography influences that system.
- 2.2 To build capacity, with ENRD staff trained in oceanographic data collection methods, plankton sampling and data analysis.
- 2.3 To undertake characterisation of seasonal patterns in physical and biological oceanography and the role of the island / seamounts in enhancing productivity.
- 2.4 To undertake characterisation of seasonal patterns in zooplankton abundance and biodiversity
- 2.5 To establish seasonal abundance, life history and feeding ecology of bait fish
- 2.6 To develop and establish a long-term oceanographic and plankton monitoring programme

- 2.7 To establish and analyse foraging ecology of two seabird species with oceanographic data
- 2.8 To establish a Database linked to GIS for collation of oceanographic and biodiversity data.
- 2.9 To prepare a summary of seasonal patterns in the St Helena pelagic ecosystem to inform review of Marine Management Plan and MPA.

3. Scope of Work and Main Tasks

3.1 The overall objective of the post of the Darwin Pelagic Ecosystem Project Officer is to support the marine conservation function of SHG in the undertaking of a number of important tasks in relation to the project, including:

3.2. To lead and actively participate in all project work areas through three main components:

- i) Field work/Data collection
 - Coordinate delivery of project activities
 - Organising the collection and collation of oceanographic data
 - Processing oceanographic data
 - Organising the plankton sampling programme
 - Analysis and identification of plankton samples
- ii) Communications
 - Promote the project both on St Helena and overseas: coordinate project communications and publicity (press releases, radio); contribute articles to ENRD quarterly newsletter; create and update project pages on website; provide talks and presentations on project; respond to enquiries relating to the project
 - Disseminate project results, including final report
- iii) Project Management
 - Maintain detailed project work plan
 - Engage key local stakeholders and build strong partnerships
 - Ensure all funder requirements are met (including timely reporting)
 - Ensure that project data is processed and made available
 - Provide admin support to project steering group

4. Qualifications and experience

4.1 The Darwin Pelagic Ecosystem Project Officer is expected to demonstrate the following qualifications experience and skills:

4.1 Essential

Attributes	Essential
1. Relevant Experience	<ul style="list-style-type: none"> • 3 years post-graduate experience working in marine or fisheries ecology or equivalent.

	<ul style="list-style-type: none"> • A proven track record and ability to lead and deliver work programmes. • A sound knowledge of oceanographic systems and influences. • Practical skill in marine science sample collection. • Experience of living and working on conservation issues in remote communities and/or on small islands would be an advantage. • Experience in mentoring.
2. Education and Training	<ul style="list-style-type: none"> • A BSc in marine biology or related subject. • An MSc in a fisheries or marine ecology related subject. • At least 3 years post-graduate experience working in marine ecology (preferably pelagic species). • A high level of computer literacy with a sound knowledge of statistics and data management.
3. Personal Skills Competencies	<ul style="list-style-type: none"> • Good communication and interpersonal skills. • Good negotiating and influencing skills. • Ability to plan own work schedule and delegate tasks as appropriate, to ensure deadlines are met • Fully competent in computer skills including MS Word, Outlook, Project, Excel & Access and specialist software as applicable • Good analytical skills • Excellent verbal and written communication with an ability to convey complex concepts to a variety of audiences, including government officials, international scientists, fishing industry leaders and the general public • An ability to engage with fishermen and the wider local community with tact and a professional un-biased approach

4. Special Knowledge and Skills	<ul style="list-style-type: none"> • In-depth knowledge in use of marine data collection apparatus. • Ability to work collaboratively with other parties and mentor colleagues

4.2 Desirable

Attributes	Desirable
1. Relevant Experience	<ul style="list-style-type: none"> • Experience working in a fisheries or zoological laboratory, with a broad range of associated practical skills, including the processing and identification of plankton • GIS experience (preferably QGIS) and strong geo-statistical skills • Practical experience at sea in the collection of marine data.
2. Education and Training	<ul style="list-style-type: none"> • Evidence of continuing professional development
3. Personal Skills Competencies	<ul style="list-style-type: none"> • Ability to pass on knowledge and skills to others through working together and on the job training • Practical approach to problem solving
4. Special Knowledge and Skills	<ul style="list-style-type: none"> • Flexibility to ensure targets are met within the constraints of a remote location and project constraints • A sensitive and supportive approach to managing small island community dynamics • Teaching and training skills

5. Competencies

- 5.1 Under the SHG Competency framework, the post holder is required to have the competencies as outlined in the attached annex.

6. Outputs, and Timing

- 6.1 The Darwin Pelagic Ecosystem Project Officer will provide quarterly reports on progress against key outputs of the project and an End of Project Report to the Darwin Project Leader.
- 6.2 Project implementation timetable (Annex 2) shows the key milestones in project activities and timeframes highlighted are those activities relating to the Fisheries Science Officer.

7. Duration of Contract and Reporting Arrangements

- 7.1 The individual will commence work by the beginning of July 2017 or as soon as practically possible thereafter and the contract is for a period of 24 months or until the completion of the project in July 2019.
- 7.2 The Darwin Pelagic Ecosystem Project Officer will be responsible to the Darwin Project Leader throughout the period of contract. However, in carrying out this role, the post holder will liaise closely with the Senior Fisheries Officer, Head of ANRD and Director of ENRD.
- 7.3 The post-holder will have day-to-day staff management responsibilities of project staff.

Professional Development

- (ii) Required Professional Competency standards met

Planning and delivery of work

- (iv) Ensures appropriate resources and levels of capability to deliver to plan.
Promotes and enforces appropriate organisational rules and procedures
Leads by example in managing business relationships

Analysis and use of information

- (iv) Interprets complex written information.
Able to assess the validity, relevance and limitations of different sources of evidence.
Generates a range of options and appraises them based on evidence available.

Decision making

- (iv) Thinks through the implications of decisions.
Breaks down highly complex information into workable components for others.
Draws together disparate information to resolve problems.
Facilitates others to generate and solve problems.
Empowers others to take creative decisions to meet organisational needs.
Considers internal and external influences in complex decision making and problem solving.
Solves problems that have significant long-term implications for the organisation.

Working with others

- (iv) Manages relationships with key stakeholders by utilising a high level of understanding of own and other's behaviours
Develops relationships with key stakeholders.
Influences key stakeholders on issues relevant to the organisation.
Creates an environment which will enable delivery of shared policy outcomes

Communication

- (iv) Varies language and content to ensure understanding of audience.
Facilitates understanding by explanation and example.
Highlights key points for summary from detailed and complex documents

Influencing and persuading

- (iv) Ensures strategies to support a diverse workforce are implemented.
Recognises and anticipates the needs of senior managers and government officials.
Presents unpopular messages confidently.
Varies style of communication to have maximum impact on audience
Influences to maintain a balance between individual motives and directorate/departmental requirements

Integrates logic and emotion to construct and convey complex arguments in a face to face situation

Dealing with change

- (iv) Encourages employees to embrace and contribute to change
 - Presents the business need for change and can focus others on the positive aspects
 - Enables others to implement change
 - Anticipates obstacles to change

Continuous improvement

- (iv) Keeps up to date with developments that affect SHG and anticipates what may affect it in the future
 - Creates an environment which allows people to improve the way they work.
 - Creates an environment where employees and colleagues work to improve. the way things are done.

Managing resources

- (iv) Ensures appropriate resources and levels of capability to deliver to plan
 - Uses management information to monitor/control resources
 - Supports initiatives for new and more efficient use of resources
 - Gains respect and credibility from team members through effective delegation, coaching and development.

Annex 2

Project implementation timetable that shows the key milestones in project activities and intended workplan for your project (starting July 2017)

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	samples and fish stomach contents.													
3.3.	Zooplankton samples will be identified and quantified to look at seasonal and spatial patterns.													
3.4.	Zooplankton analysed in relation to oceanographic data and report and paper prepared.													
Output 4 Bait fish ecology														
4.1.	Bait-fish sampling programme established with 200 fish sampled per month.													
4.2.	Stomach contents identified using knowledge gained from plankton sampling and using plankton guide.													
4.3.	Inter-specific, seasonal and ontogenetic patterns in the diet investigated and linked to food availability.													
4.4.	Report and paper prepared on bait-fish ecology.													
Output 5														
5.1	Oceanographic and plankton sampling programme reviewed to determine appropriate long-term monitoring programme.													
5.2	Long-term monitoring programme designed and established.													
Output 6 Foraging Ecology of breeding MSP and BRNs established and analysed														
6.1	Deployment and retrieval of GPS loggers onto breeding storm petrels and brown noddies on Egg Island.													
6.2	Collection and identification of regurgitates. Composition and abundance of dominant prey species identified.													
6.3	Comparison of foraging ecology to oceanographic parameters (sea surface temperature, chlorophyll levels,													

	planktonic biomass)												
6.4	Write-up and publication of findings of foraging ecology in authoritative scientific journal												
Output 7	Database and GIS												
7.1	Database and GIS system established to support all project data.												
7.2	Database and GIS made publicly available on completion of project.												
7.3	Data submitted to appropriate recipients (e.g. BODC, NHM).												
Output 8	Data integration and summary report												
8.1	Summary of seasonal patterns in the St Helena pelagic ecosystem prepared to inform review of Marine Management Plan and MPA and paper for publication.												
8.2	Plain English pamphlets and presentations prepared to inform St Helena stakeholders, public, schoolchildren and visitors about the importance of the marine system to the island.												