

PDRA in Marine Mammal Ecology – Maternity Cover Job Description

1. Job Details

Job Title:	PDRA in Marine Mammal Ecology – Maternity Cover	Department:	Science
Line Manager:	PI/Senior Lecturer and Bioacoustician	Grade:	Grade 5 £32,546.00 - £33,482.00 per annum
Full Time/Part Time:	Full Time – 37hrs per week	Duration of Appointment:	12 months

2. Job Purpose

- This project is supported by PEACEPLUS, a programme managed by the Special EU Programmes Body (SEUPB).
- Analyse passive acoustic and visual marine mammal and seabird data, develop and test new bioacoustics analysis tools and statistical frameworks, including species distribution modelling.
- Conduct fieldwork, including equipment setup and maintenance, for visual and acoustic marine mammal surveys as required by SAMS Research and Enterprise (e.g., towed array surveys, static and drifting passive acoustics).
- Help secure and deliver commercial contracts, including tender preparation, data processing and analysis, quality assurance, and report writing.
- Provide marine environmental consultancy as part of the SAMS Enterprise team, with a focus on marine mammals, within commercial sectors such as marine fisheries, offshore renewables and aquaculture.
- Involvement in marketing and conferences, and assistance in developing new research/business opportunities within SAMS Research and Enterprise.

3. Main Responsibilities

<i>Main Responsibilities</i>	Approx. % of time
Research:	
<ul style="list-style-type: none"> • Prepare equipment for and undertake fieldwork. Responsibilities here include, but are not limited to, preparing passive acoustic moorings, drifting and towed hydrophone arrays. Fieldwork activities will include deployment and recovery of acoustic moorings, conducting visual and acoustic surveys using towed or drifting arrays, as well as marine mammal photo-ID surveys. • Support SAMS Marine Mammals Research Team with equipment maintenance, data storage and long-term data curation. • Use programming (e.g., R, Python, MATLAB), GIS skills and statistical modelling proficiency (e.g., habitat and species distribution modelling and/or population impact modelling) for complex data analyses in support of multi-disciplinary research projects. • Model species distribution and habitat preferences using passive acoustic and/or visual data to support Marine Protected Area (MPA) monitoring and species conservation. • Plan and write scientific reports, papers and policy briefs. 	68
Enterprise/Consultancy:	
<ul style="list-style-type: none"> • Apply understanding of impacts on marine mammals, for example from fisheries, aquaculture and underwater noise (e.g., from shipping or the marine energy sector) in the context of Environmental Impact Assessments (EIA) and Habitat Regulations Assessment (HRA) processes. • Demonstrate and further develop knowledge of the ongoing national and international regulatory and technical developments with regards to PAM, MPAs, underwater noise and fisheries management. • Support SAMS Marine Mammals Research Team in the tendering process for commercial projects, and deliver advice and research outputs to developers, consultancies and government agencies relating to the various life stages of offshore developments. • Comply with quality management in the SAMS delivery team to ensure compliance with ISO9001 standard. 	32
Be pro-active in the application of SAMS Health & Safety Procedures	Ongoing

Key Experience and Skills

Qualification and knowledge base:

- PhD with focus on marine mammals, bioacoustics and/or species distribution modelling (essential).
- Ability to analyse complex temporal and spatial, visual/acoustic datasets (essential).
- Evidence of scientific publications and experience sharing knowledge in reports, workshops and at conferences (essential).
- Technical knowledge and expertise in assessing impacts to marine megafauna from industrial sectors such as marine energy, fisheries or aquaculture (essential).
- Technical knowledge and demonstrated practical experience undertaking EIA/HRA impact assessments (desirable).

Technical delivery:

- Contribute to delivery of research and consultancy work as part of the SAMS Marine Mammal Research and Enterprise Team.
- Technically deliver consultancy and research projects within area of expertise.
- Remain current with regulatory requirements regarding species protection, industry needs, and academic progress to develop and deliver high-quality projects (essential).
- Write high-quality scientific papers and reports for research projects and commercial customers (essential).
- Expertise in acoustic data analysis for marine mammals (e.g., PAMGuard, C-POD/F-POD.exe) and underwater sound (e.g., PAMGuide, MATLAB, MANTA) (essential).
- Expertise using standard programming languages (e.g., R, Python, MATLAB) and GIS software (e.g., QGIS) (essential).
- Statistical analysis experience for various data types and long-term data sets (essential).
- Experience with species distribution/habitat and population impact modelling (e.g. GAMs, BRTs, iPCoD, DEPONS etc.; desirable).
- Expertise in acoustic data analysis using other acoustic analysis software (e.g., Raven, AviSoft) (desirable).
- Experience with analysis of photo-ID data (desirable).
- Experience with data quality control and data validation processes (desirable).

Field work:

- Experience in offshore vessel-based survey organisation, execution and management (particularly relating to deployment and retrieval of PAM equipment; essential).
- Experience operating and maintaining passive acoustic monitoring equipment (e.g., Soundtraps, RTSYS EA-SDA14 & Sylence, C-/F-PODs; essential).

- Experience with mooring design and acoustic mooring preparation, including use of acoustic release mechanisms (desirable).
- ENG1 and PST certificates (or equivalent/higher; desirable).

Planning and Organising:

- Good knowledge, experience and practice of project management to successfully deliver technically complex commercial contracts and projects (essential).
- The ability to progress and deliver multiple research and commercial projects concurrently (essential).
- Demonstrated previous experience of successful project delivery and the ability to apply that experience in research and commercial projects (essential).
- Good understanding and application of project management principles, including the different components required to ensure successful delivery (e.g., some knowledge of costing/estimating, finance and time management; desirable).

Decision-Making:

- Manage own workload to quality and timescales of projects (essential).
- Collaboratively develop and deliver scientifically robust analyses using appropriate methodologies, considering latest legislative requirements and recent scientific progress (essential).
- Be proactive in terms of prioritisation of projects and resources, given that the role requires concurrent progress and delivery of multiple projects (essential).
- Respond effectively to problems during project lifetimes (e.g., weather delays, resource unavailability, external supplier issues; essential).

Key Contacts/Relationships:

- SAMS staff and external project partners for a successful delivery of the project.
- Develop or maintain professional connections with representatives from UK/Scottish Government, UK Statutory Nature Conservation Bodies, industry representatives, and other stakeholders such as Non-Governmental Organisations (NGOs), community groups, etc. (essential).
- Work closely with SAMS Enterprise to deliver work to the customer's needs and satisfaction, identify and generate new leads and opportunities resulting in new project contracts (essential).