

Scientific Officer

Department: Infrastructure, Housing and Environment

Division: Natural Environment

Reports to: Scientific Manger / Senior Scientific Officer

JE Reference: IHE1037

Grade: 8

Job purpose

Being responsible for:

- **Laboratory Supervision and Monitoring**, undertaking daily supervision of operations at the Government of Jersey multi-disciplinary scientific Biosecurity Laboratory (accredited to UKAS ISO standards) which delivers analytical and advisory functions in agrichemicals, agronomy, biosecurity, entomology, pathology and soil and water science; also providing an Island-wide biosecurity monitoring service, using trapping and surveillance systems for a wide range of regulated pests, diseases and vectors of human pathogens and providing an Island-wide soil sampling service, monitoring attributes such as soil health, nutrient status and quality. OR
- **Biosecurity Projects**, providing comprehensive and effective technical and operational project support related to ecosystem services, biosecurity and invasive species programmes arising from Government strategic aims and strategies such as the Biosecurity Strategy, designed to bring about a coordinated response to Biosecurity in Jersey. AND

Working with and supporting the Head of Biosecurity, Scientific Mangers and Senior Scientific Officers, as appropriate, to deliver strategy in the specialist areas of Plant Health, Biosecurity and Invasive Species, reducing the risk and impact of regulated and non-native organisms to land based industries, the natural environment and the health and wellbeing of the public of Jersey.

Job specific outcomes

Provide a comprehensive operational support service as part of the delivery of Biosecurity services and strategic initiatives:

- **Laboratory Supervision and Monitoring**
 - Act as the customer interface for the Laboratory, receiving and acknowledging customer enquiries and requests in person or via other means, whilst supporting the service function with the provision of a professional and courteous service to all users; the Biosecurity laboratory provides services to a wide range of users including Land Management, Marine Resources, the States Vet, land-based industries, Jersey Water etc.

- Manage the flow and type of work in the laboratory at any given time, ensuring space, equipment and conditions are adequate for the work at hand, including being responsible for the delivery of a sample reception, packaging and dispatch service for external analyses of a wide range of samples, observing Standard Operating Procedures when shipping live biological or hazardous material.
 - Provide assistance to the Head of Biosecurity in the case of an outbreak of a regulated organism in the form of laboratory services and transport, logistics, administrative, surveillance or other duties.
 - Be solely responsible for the management and delivery of a soil sampling service, monitoring attributes such as soil health, nutrient status and quality. This involves supervision and coordination of junior reports, use of ESRI ARC GIS for spatially planning work, conducting site visits, liaison with local service users and UK laboratories, dissemination of results to customers and responsibility for cost recovery and contractor payments.
 - Be solely responsible for the management and delivery of a Biosecurity monitoring service to act as an early warning system for a wide range of regulated pests, diseases and vectors of animal and human pathogens, in compliance with local, UK and EU legislation which lists organisms that must be surveyed for and reported on annually as part of ongoing pan-European measures to increase biosecurity. This involves working with UK academic and statutory organisations exchanging information on methods and equipment and undertaking GIS mapping of operational areas, installation of various trap types, identification of species and transcription of data into local and national evidence-based decision making.
 - Participate in international cooperation campaigns to conduct scientific surveys, aimed directly and specifically at protecting areas of the local industry and so the economic wellbeing of the Island. This involves attending the joint annual Colorado Beetle Campaign with representatives from Guernsey, DEFRA (UK), EPPO (Paris) FREDON (Basse Normandie), focused on surveying the French Cotentin peninsula, thus protecting Jersey's £40m Jersey Royal Potato industry. OR
- **Biosecurity Projects**
 - Work with scientific colleagues and local experts to implement strategies that eradicate and slow the spread of invasive species, as well as establish long-term management methods of the species to protect the Island's biodiversity and ecology, safeguard the economy, as colonisation with invasive species can have negative impacts on the value of the property market and lead to crop loss and protect public health, where such species are vectors for disease. AND

Carry out surveys and monitoring of invasive species, gathering qualitative or quantitative information about the identity, location, and abundance of such plants and insects within the management area, which is critical for making well-informed management decisions.

Implement action plans derived from policy to monitor, educate and enforce against invasive species that affect the Island, working towards their eradication and ensuring sustainable management of the spread of such species through stakeholder involvement to ensure resilience for the future; follow, produce and update scientific Standard Operating Procedures for survey and surveillance programs, as applicable to the role.

Create, maintain and develop a robust database of scientific information and monitoring data that allows assessment of the progress and impact of invasive species management schemes and enables improvements to procedures, strategies and policy.

Highlight trends, report on research findings and discuss areas of environmental concern with Senior Scientific Officers and colleagues from other Natural Environment teams and/or other directorates as appropriate, contributing to identifying opportunities to protect and enhance the Island's biodiversity and to inform the design and implementation of other Government initiatives which may be impacted by the management of invasive species and implementation of biosecurity measures, including across the Economy and involving public health and wellbeing.

Take part in environmental awareness and public conduct campaigns by contributing to the creation of reports for public presentation, providing educational talks and creating educational and interpretative materials (leaflets, web-based information).

Provide technical advice and assist in the implementation of practical strategies, guidelines, policies and procedures to support management and the resolution of environmental protection and conservation matters.

Be responsible for the administration and logistical management of scientific equipment and materials related to Biosecurity projects and/or the laboratory, including stock management, machinery maintenance and fleet vehicle responsibilities, to ensure full functionality at all times and enable a rapid and adequate response for operational, monitoring and research activities.

Support the Senior Scientific Officers, as appropriate, by deputising for them in certain non-regulatory duties.

Statutory responsibilities

Active engagement, participation and compliance with any other statutory responsibilities applicable to the role, as amended from time to time.

Services

- Scientific Officer - Biosecurity Laboratory and Monitoring
- Scientific Officer - Biosecurity
- Scientific Officer - Invasive Species

Person Specification

Specific to the role

| ATTRIBUTES | ESSENTIAL | DESIRABLE |
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| <p>Qualifications <i>Please state the level of education and professional qualifications and / or specific occupational training required.</i></p> | <p>Level 3 - 5 qualifications in a related Life Science or equivalent level of competency gained through experience in a similar role.</p> | <p>Level 6 qualifications in a related Life Science or equivalent level of competency gained through experience in a similar role.</p> |
| <p>Knowledge <i>This relates to the level and breadth of practical knowledge required to do the job (e.g. the understanding of a defined system, practice, method or procedure).</i></p> | <p>Knowledge of local land-based businesses, business locations and type.</p> <p>Knowledge of local geography, farmland, footpaths and terrain</p> <p>Knowledge of commercially important crop pests and diseases</p> <p>Some knowledge of the island's agricultural/ horticultural industry, modern agricultural practices, biosecurity and plant health issues</p> <p>Knowledge of plant health survey techniques and methodologies</p> <p>A working knowledge of environmental issues related to the farmed and natural environment</p> | <p>Knowledge of:</p> <p>The activity and processes of Government</p> <p>Management reporting as it relates to this role</p> <p>The departmental priorities and key objectives, risks and issues relevant to the directorate, division and the role</p> |
| <p>Technical / Work-based Skills <i>This relates to the skills specific to the job, e.g. language fluency, vehicle license etc.</i></p> | <p>Excellent research skills</p> <p>Proficient user of field recording equipment</p> | |

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| | <p>Computer literate with ability to operate the Microsoft Office package</p> <p>Confidence in utilising GIS mapping and spatial technology (ESRI ARC GIS)</p> <p>Ability to use data management systems</p> <p>Ability to provide management information in both statistical and written form</p> <p>Ability to present data graphically</p> | |
| <p>General Skills/Attributes <i>This relates to more general characteristics required to do the job effectively, e.g. effective written communication skills, ability to delegate, motivation or commitment etc.</i></p> | <p>Analytical and problem-solving skills</p> <p>Confident decision-maker</p> <p>Strong relationship building skills</p> <p>Ability to prioritise work and meet deadlines</p> <p>Ability to work independently, using own initiative and without frequent management</p> <p>Ability to produce written materials (e.g. letters, reports, discussion papers, proposals) to a high level for presentation</p> <p>Driving licence (Group B)</p> | |
| <p>Experience <i>This is the proven record of experience and achievement in a field, profession or specialism. This could include a minimum period of experience in a defined area of</i></p> | <p>Some experience within one or more of the disciplines i.e. Agriculture, Horticulture, Plant Health, Environmental Science (or a relevant discipline) in a</p> | |

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| <p><i>work if required by an external body (for example a period of post-qualification experience).</i></p> | <p>technical capacity, alongside industry professionals</p> <p>Experience in potato farming and other land based industries, allowing the service to be provided in a manner that fits farming work patterns</p> <p>Experience with analytical and monitoring techniques and data gathering to a high scientific standard</p> <p>AND <i>Essential for Laboratory Supervision and Monitoring only:</i></p> <p>Experience of insect species identification, biological survey and insect trapping methods.</p> <p>Experienced in soil survey and sampling methods.</p> <p>Experienced in sample preparation for analysis or dispatch.</p> | |
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Core Accountabilities, Attributes and Behaviour Indicators

Appointees to this role will be required to adhere to and perform their duties in line with the standards identified in the Government of Jersey tier 5 core accountabilities attributes and behaviour indicators.

Organisational structure

ONE GOVERNMENT DEPARTMENTS

