**Job Description**

**Post Title: Earth Observation Specialist**

**Team: Ecosystem Analysis**

**Ref No: 2021105**

**Grade: H (HEO)**

**Type of appointment: Permanent**

**Location:****Peterborough**

**Salary: £28,390**

JNCC will be adopting a more flexible approach to working options and, once we are able to return to working in our office locations, our people will have more flexibility about where they choose to work. The expectation is that we will be expected to work from our office base for 1 – 2 days a month as a minimum.  We can provide more details at the interview and offer stages.

# Who are JNCC?

# Established in 1991, we’re the UK’s statutory advisor on issues affecting the natural environment across the UK and internationally. Our primary role is advising all four Governments of the UK. We also work with private sector organisations to support decision making on the sustainable use of marine waters and natural resources around the UK. JNCC is led by the Joint Committee, which brings together members from the nature conservation bodies for England, Scotland, Wales and Northern Ireland and independent members appointed by the Secretary of State for the Environment, Food and Rural Affairs under an independent Chair. Support is provided to the Committee by almost 200 people who bring together scientific and technical expertise, extensive knowledge of policy at global, European and national levels, and skills in working with other organisations. Staff are based in two main offices in Peterborough and Aberdeen.

# Why JNCC?

# We’re small enough (c.200 staff) that your voice is heard by everyone including the CEO, but big enough that we have all the skills, resources and people you’ll need to get the job done. All our staff are passionate about conservation and making a difference to the world we live in. We have a very flexible, inclusive and welcoming organisational culture. Our Executive Management provides advisers with the freedom and tools you will need, and our friendly team will assist you in your role. You will benefit from our supportive workplace culture, excellent holiday and pension benefits, as well as an exciting job in a unique environment.

# Hours of work: Full-time

Normal minimum hours of attendance for the post are 36 hours per week over a 5-day period, Monday to Friday.

Flexi time is available. This post may also be suitable for job share.

**Annual Leave:**

The annual leave allowance is 25 days per year, rising to 30 days per year after 5 years service.  There are also 12 days public and privilege leave.  Part-time staff will receive this on a pro rata basis.The annual leave allowance is 25 days per year, rising to 30 days per year after 5 years’ service. There are also 12 days public and privilege leave. Part-time staff will receive this on a pro rata basis.

**Short Summary:**

The team helps JNCC’s stakeholders meet the challenges of managing our environment and the benefits it provides. Recent projects have included, working with partners to improve diversity and inclusion in citizen science monitoring; modelling and mapping ecosystem services in the UK and overseas; creating ‘apps’ to help land managers consider the trade-offs for nature based solutions, developing an indicator to show the environmental impact of UK consumption overseas; using machine learning to identify potential areas of peat restoration from EO imagery; and building an ‘app’ to aid remote habitat change detection for restoration, biodiversity net gain and other applications. The team is inter-disciplinary, bringing together skills in citizen science monitoring, rapid analysis and model deployment, and Earth observation application.

The post would contribute projects across the work of the team, and to projects lead by other teams in JNCC, bringing technical evidence skills and insight into integrating evidence on land use and land use change in the UK, mainstreaming biodiversity into Official Development Assistance, and contributing innovative solutions to country monitoring programmes

JNCC’s Ecosystems Analysis Team brings together three elements:

- A set of long-term partnerships with organisations undertaking species surveys in terrestrial, coastal and freshwater ecosystems using networks of volunteers.

- An analysis and modelling capability producing rapidly deployable models. These include a range of models focussed on predicting outcomes from changing land uses and environmental pressures.

- An earth observation data processing and analytical capability which is migrating from an initial focus on spatial mapping of habitats to detecting change within spatial frameworks of habitats.

The post will focus on Earth observation analyses but will also work collaboratively with other analytical skills, data science and data infrastructure skills across Ecosystems Analysis and Digital and Data Solutions Teams. The current team focus is on analysing EO data for mapping habitat extent, detecting habitat condition, management activities and change in both, and linking these to changes in ecosystem services, but stakeholder needs

are diversifying.

The post will help build the team’s skills across scales and sensor types within EO but will have a focus on developing practical applications from optical data in the natural environment. Whilst much of the work of the team is terrestrial, some work on marine environments is also possible.

# Job Description:

***Post Duties***

# The post will be managed by a Senior Earth Observation Specialist and work with other EO specialists, as well as modellers, analysts and surveillance experts. The main duties of the post are to:

* Carry out a variety of analyses where EO is needed as a significant input, working with JNCC colleagues with other technical or stakeholder-facing skills where appropriate.
  + Analysis will include developing new methods and adapting existing ones to analyse EO and other spatial data.
  + Extracting from EO research, methods that can be deployed practically to help ensure SAR data can make a greater contribution to environmental applications
* Provide expert advice on types of analyses and appropriate use of EO data to aid delivery of programmes led by other teams within JNCC, and key stakeholders.
* Carry out research or analytical tasks using research synthesis and spatial/analytical techniques.
* Contribute to the development of data management systems that will enable JNCC to provide EO based outputs over large geographic scales within the UK and elsewhere.

# Collate and analyse information from stakeholders to help identify their evidence needs

# Manage work packages for the team or other teams in JNCC, focussing on projects that will require some EO analytical components, ensuring that staff resources are used effectively and that we work efficiently alongside external contractors

# Manage data effectively with team and to JNCC standards and ensure effective quality control and quality assurance is carried for analyses/products produced

* Maintain a current overview of relevant EO methods and research
* Summarise and communicate work underway via the JNCC website and other media channels

# Technical

To be a successful candidate you will be/have:

# Educated to degree level in a science subject

# Experience (Responsibilities)

To be a successful candidate you will have:

* Ability to understand, and apply, Earth observation data from new and different sensors whether satellite, aerial or drone and understand the physics behind it.

# Ability to manipulate and analyse spatial data including experience of using scripting, particularly for automating processes

# Good understanding of the relationship between biodiversity, ecosystems, sustainable development, and benefits to society

# Behaviours

* Making Effective Decisions
* Managing a Quality Service
* Seeing the Big Picture
* Communicating and Influencing

In the event that we receive a large volume of applications we reserve the right to conduct the sift based on the Lead Behaviour of Making Effective Decisions

Please see the CS Behaviours framework for more details at this grade:

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# Closing date and interview date

The closing date for this post is 23:55 on Monday, 25 October 2021

The anticipated interview date is week commencing Monday, 15 November 2021

How to apply: <https://www.civilservicejobs.service.gov.uk/csr/index.cgi>