



Geospatial Data Manager (NCAP)

Closing Date: Wednesday 6 March 2024, noon

Expected Interview Date: w/c 18 March 2024

Recruitment Reference:
HES/24/009

Starting Salary:

£38,988 per annum

Salary Range:

£38,988 - £44,797 pro
rata per annum

Pay Band:

D

Directorate:

Marketing & Engagement

Location:

Seven Hills Business
Park, Edinburgh

Line Manager:

Dr Allan Williams, Head
of NCAP

Contract Type:

Permanent

Working Hours:

Full time, 37 hours per
week

Thank you for your interest in the post of Geospatial Data Manager at the National Collection of Aerial Photography (NCAP), part of Historic Environment Scotland (HES). This is a permanent and pensionable appointment.

With expertise in data, technology and innovation, this new leadership role within NCAP is responsible for the continuous evolution and management of our geospatial data lifecycle. With detailed knowledge and understanding of the challenges and opportunities of Big Data, you will develop approaches and techniques for the automated processing and analysis of historic geospatial data using High Performance Computing (HPC) systems.

About us

We are the lead body for Scotland's historic environment; a charity dedicated to the advancement of heritage, culture, education and environmental protection. We're at the forefront of researching and understanding the historic environment and addressing the impact of climate change on its future. We investigate and record architectural and archaeological sites and landscapes across Scotland and care for more than 300 properties of national importance. We have a People Strategy, which is an overarching strategy to ensure we support and develop staff within the organisation.

Our Vision

Our vision is that Scotland's historic environment is cherished, understood, shared and enjoyed with pride by everyone.



Our Priorities

- The historic environment makes a real difference to people's lives
- The historic environment is looked after, protected and managed for the generations to come.
- The historic environment makes a broader contribution to the economy of Scotland and it's people
- The historic environment inspires a creative and vibrant Scotland
- The historic environment is cared for and championed by a high-performing organisation.

Overview of the post and information about the team

With over 30 million (and an ever-growing number) high-resolution analogue aerial images, NCAP is one of the largest collections of historic imagery in the world. A centre of excellence and standard-setter for the custodianship of historical aerial photography, NCAP imagery records key moments in history and places throughout the world.

Part of the Commercial Development & Enterprise Team, within the Marketing and Engagement Directorate at HES, the operational and development costs of NCAP are funded through commercial enterprise, partnership working and academic engagement.

As analogue photography is a physically deteriorating medium – and the applied use of historic aerial imagery is now a digital activity – we have an ambitious plan to digitise all our holdings and those of our partners throughout the world. To achieve this mission, a purpose-built centre for the physical preservation and automated digitisation of analogue aerial photography and associated records was built in the Seven Hills Business Park, Edinburgh, in 2021.

Alongside the creation of a new facility, and the evolution and growth of the NCAP team, a new online platform for the dissemination of millions of aerial images is currently being developed. From its launch in 2024, the NCAP GeoPortal will transform both virtual access to high-quality geospatial data and the scope for our stakeholders to generate new knowledge and understanding across a wide range of disciplines.

A newly created post, the Geospatial Data Manager will play a critical role in maintaining and enhancing the usability and value of NCAP geospatial data. This role requires a combination of technical expertise in geospatial data management and a strategic understanding of how this data can support research and commercial applications.

Working alongside stakeholders and partners, notably the Edinburgh International Data Facility (EIDF) at the University of Edinburgh, the post-holder will have line management responsibility for the NCAP team dedicated to the high-volume processing of digital imagery and the creation of geographical metadata.



Key responsibilities, duties and objectives

- **Geospatial Data Lifecycle:** You will lead all aspects of the ingest, processing, storage, analysis, visualisation, sharing, and archiving of the geospatial data created and held by NCAP, including the management of the Geospatial Team.
- **Subject Matter Expertise:** A core member of the NCAP management team you will lead on all aspects of geospatial data management, including high-value partnership projects.
- **Quality Management:** With an emphasis on innovation and continuous improvement, you will develop and ensure that quality assurance and quality control systems are embedded throughout the Geospatial Data Lifecycle.
- **Digital Image Processing:** Using HPC systems, you will lead the programmes of automated processing of petabyte-sized volumes of raw digital imagery and the online dissemination of images on the NCAP GeoPortal.
- **Metadata Standards:** You will set and maintain the metadata standards for geospatial data, adopting best practices in data management, that ensure the accuracy and reliability of NCAP geospatial data.
- **Product Development:** Contribute to the development and continuous evolution of value-added NCAP products and services.
- **Continuous Process Improvement:** Lead and develop a team culture that proactively identifies new opportunities and recommend appropriate interventions to solve new challenges.
- **Collaboration:** Working with internal teams, external partners, stakeholders and commercial customers you will understand their data needs and ensure that our geospatial datasets meet their requirements.

Post Competencies

You will be assessed against these competencies during our selection process.

Core Competencies:

- Delivering excellent Service – Demonstrating a commitment to quality services
- Teamwork - Contributing to and supporting working together
- Planning and Organising - Putting plans and resources in place to achieve results
- Communication - Communicating appropriately and clearly
- Knowledge & Expertise - Applying and developing knowledge and expertise to achieve results - (See below for specific criteria)

Management Competencies:

- Achieving results - Focusing on the delivery of objectives
- Leading a Team/Project/Task – Focusing on leading a Team/Project/Task or developing people.



Knowledge, skills and experience

You will be required to demonstrate that you meet the requirements and qualifications below as part of the selection process.

Essential requirements:

- Advanced knowledge of geospatial principles, imagery and mapping, spatial analysis and GIS concepts.
- Practical knowledge of the challenges and opportunities of Big Data to enable (and for HPC to accelerate) the processing and applied use of geospatial data.
- Knowledge of data quality standards and methods for assessing and ensuring the accuracy and reliability of geospatial data.
- Skills in developing and managing multiple data processing workstreams, with productivity measured using SMART KPIs.
- Skills in developing and managing geospatial databases for the efficient storage, retrieval, and analysis of data.
- Capability to perform spatial analysis and interpret geospatial data to derive meaningful insights.
- Strong level of competence using geospatial software tools including GIS, remote sensing tools, spatial databases, and advanced-level experience developing programming (notably Python) and scripting for the automation of geospatial processes.
- Line management experience, displaying leadership and motivational skills in developing and maintaining a high-performance team.
- Demonstrable ability to collaborate with interdisciplinary teams, notably geospatial, data science and HPC specialists.
- Excellent communication skills to convey complex geospatial concepts to diverse audiences, both technical and non-technical.
- Experience managing geospatial projects from data acquisition and processing to analysis and dissemination.
- A history of continuous learning and adaptation to new technologies and methodologies in the geospatial field.

Desirable requirements:

- Experience of partnership working across academia, industry or the public sector with a focus on research, development and innovation.
- Experience working within a commercial production environment.
- Experience working with large analogue collections of historic geospatial information.

Qualifications & Professional Memberships:

- Qualification or demonstrable equivalent experience in a relevant field to [SCQF Level 11](#).



What we offer

We welcome applications from all nationalities, assuming that they have the right to work in the UK: applying for a job with us could open the door to a unique work environment. It will give you job satisfaction and excellent development opportunities, plus a competitive salary, 25 days paid holidays (rising to 30 days after 3 years' service) and 11.5 public holidays a year – pro rata for part time staff.

In addition, we offer a great benefits package to our employees which includes:

- flexible working hours (where appropriate)
- special leave
- maternity/paternity leave
- adoption leave
- reimbursement for relevant professional subscriptions
- support for further education and personal development
- study leave for work related courses
- access to a learning resource centre

Health and welfare

We offer you access to:

- our Employee Assistance Programme – for confidential advice and counselling
- an occupational sick pay scheme
- discounts at some local authority leisure facilities
- access to a free Headspace membership
- interest free loans for bicycles and annual travel passes (see 'season ticket' below)
- reasonable adjustments when needed, as part of our Equalities policy

Staff discounts

You will receive:

- free entry to all of our properties (with up to three guests)
- free entry to English Heritage, Manx and Cadw properties
- 20% off purchases in our retail outlets

Season tickets

You can receive an advance to help with the cost of buying an annual season ticket for travel between home and work. The advance is then repaid from your salary over the life of the season ticket. Available to all permanent and fixed-term staff.



How to apply for this post

You can apply on-line by visiting our website at <https://applications.historicenvironment.scot/>.

Guidance on completing the application can be found in the 'Guidance notes for applicants' document, also available at the above website, which we recommend that you read, in conjunction with this Job Description.

Your application must arrive by the advertised closing date. Please note that when applying online, we will only be able to see your application once you fully submit it.

If you are unable to complete an online application form, please email recruit@hes.scot, quoting the job title and recruitment reference, and we will arrange for an application form to be sent to you.

Please note that, as we operate an electronic recruitment system, we will contact you via the email address that you provide in your application to inform you of the outcome of your application.

For further information about the post, please contact Dr Allan Williams, Head of NCAP via email at allan.williams@hes.scot.

We welcome all applicants from under-represented groups within HES. We know from our [equality monitoring](#) that we need to increase our diversity in terms of ethnicity and disability. We also want to address occupational areas where the ratio is disproportionately in favour of women or men. We ask all applicants to complete the Equality Monitoring section of the recruitment paperwork to help us pursue a diverse and inclusive workforce. In support of our Gaelic language plan we welcome applications from Gaelic speakers.

Human Resources
Historic Environment Scotland