Job Description

Summary

Job title	Geospatial Researcher (Nature Recovery)
Division	Social Sciences
Department	Leverhulme Centre for Nature Recovery, Environmental Change Institute, School of Geography and the Environment (SoGE)
Location	South Parks Road, Oxford OX1 3QY
Grade and salary	Grade 7: £36,024 – £44,263 Per annum A less experienced candidate may be appointed at Grade 6(£32,332- £38,205 per annum), with a commensurate adjustment in either the essential criteria, responsibilities or duties
Hours	Full time (37.5 hours per week)
Contract type	Fixed-term (3 years from start date)
Reporting to	Doctor Tom Harwood, Professor Michael Obersteiner, Professor Yadvinder Malhi (Environmental Change Institute, Leverhulme Centre for Nature Recovery)
Vacancy reference	174399
Additional information	Applications are particularly welcome and encouraged from women, black, and minority ethnic candidates, who are under-represented in posts in SoGE. SoGE are committed to equality and values diversity. The School of Geography and the Environment holds an Athena Swan Silver award in recognition of our commitment and success in addressing gender equality. The School of Geography and the Environment is committed to promoting a culture of equality, diversity, and inclusion in the workplace, including the undertaking of appropriate training as opportunities arise and/or when asked to do so

The Leverhulme Centre for Nature Recovery is being established at the University of Oxford in 2022, with an initial period of ten years. Its purpose is to draw on and consolidate the world-leading expertise of the University and its partners to address the challenge of delivering effective and socially inclusive nature recovery at scale, in order to support goals of reversing national and global biodiversity decline by the end of this decade.

Halting and reversing the ongoing loss and degradation of nature and its biodiversity are amongst the greatest challenges of our time. There is new political will and public demand to restore the natural world, but no previous experience of doing so at the scales required while also fully meeting societal needs. The Leverhulme Centre for Nature Recovery will tackle this challenge by addressing the ecological, social, cultural and economic dimensions of nature recovery in a single framework, harnessing state-of-the-art technologies and thereby developing and testing an innovative model to deliver nature recovery at scale, and monitor progress towards this recovery. The work of the Centre will be both empirical and synthetic, being tightly embedded in case studies in the UK and internationally, while also exploiting big data, Earth Observation, artificial intelligence and modelling to connect across scales and work packages. It will also be a hub for innovative thinking: our interdisciplinary approach unites leading researchers and thinkers from a wide range of disciplines including geography, ecology, social science, finance, economics, psychiatry, anthropology, artificial intelligence, statistics and Earth Observation.

The Centre is led by Director Professor Yadvinder Malhi along with an Executive Group. It is supported by a £10 million grant from the Leverhulme Trust lasting for ten years, and additional co-funding from the University of Oxford.

The role

This is an exciting opportunity to play a key role in delivering world leading research in the field of nature recovery. The role allows for supervised development of research ideas involving geospatial data sets whilst taking a key role as research practice lead to ensure the Leverhulme Centre for Nature Recovery has a consistent and coherent approach to research data management.

Working within a team of cross-disciplinary researchers, the individual will be supported in developing their own research areas while taking contribute to existing geospatial research projects focussed on Nature recovery at national and global scales. Working with data sets from remote sensing to climate and land use modelling, the researcher will conduct analysis and help to increase compatibility between data sets and build in interoperability to deliver long-term strategic goals. The individual will also be tasked with different forms of data visualisation and making data sets more relevant for researchers from a variety of backgrounds.

The individual will also be supported to take the lead on data practice throughout the Centre and then co-define best practice. They will work with internal and external stakeholders and partners to ensure the tools, techniques, systems and architecture are fit for purpose and fully accessible. They will also have regular liaison with teams working with modelling, machine learning and artificial intelligence. The individual will be the key point of contact for queries around data management and data protocols and work with the senior management team to ensue strategic goals are achieved.

Responsibilities

- Developing ideas for new research projects and generating research income, and present detailed research proposals to senior researchers
- Support on the development of integrated assessment models with a particular focus on land use and climate modelling
- Locating, importing, organising and manipulating data sets to maximise re-use and compatibility, ensuring consistent metadata and citation information.
- Conducting supervised research and contributing to academic publications
- Advising and contributing on the creation of data visualisations to improve the comprehension of research
- Working with Internal and external partners to ensure data provision is robust and fit for purpose for cutting edge research. Being the point of contact for data related questions as well as defining protocols and data sharing agreements with partners

- Leading, defining and supporting best practice for researchers on data use and management (curation, metadata, nomenclature, sharing policies, security)

Selection criteria

Essential selection criteria

- Hold, a relevant PhD/DPhil (Grade 7)
- or be close to completion of a relevant PhD/DPhil (Grade 6)
- Experience of working with large geospatial data sets (e.g. remote sensing/climate models/land use data)
- Programming skills (ideally applied to geospatial programming)
- Experience of working in team across multiple research areas, with good people and communication skills.
- Knowledge and experience of excellent data practices within multi-disciplinary organizations
- Passion for nature and interest in developing novel approaches to solving world problems
- Commitment to advancing diversity and inclusion

Desirable selection criteria

- Previous experience of contributing to publications/presentations

- Experiencing of working across multiple operating system storage environments

- Knowledge of current industry trends around data management and analysis

- Experience of independently managing a discrete area of a research project

- Experience of actively collaborating in the development of research articles for publication

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Pre-employment screening

Standard checks

If you are offered the post, the offer will be subject to standard pre-employment checks. You will be asked to provide: proof of your right-to-work in the UK; proof of your identity; and (if we haven't done so already) we will contact the referees you have nominated. If you have previously worked for the University we will also verify key information such as your dates of employment and reason for leaving your previous role with the department/unit where you worked. You will also be asked to complete a health declaration so that you can tell us about any health conditions or disabilities for which you may need us to make appropriate adjustments.

Please read the candidate notes on the University's pre-employment screening procedures at: https://www.jobs.ox.ac.uk/pre-employment-checks

About the University of Oxford

Welcome to the University of Oxford. We aim to lead the world in research and education for the benefit of society both in the UK and globally. Oxford's researchers engage with academic, commercial and cultural partners across the world to stimulate high-quality research and enable innovation through a broad range of social, policy and economic impacts.

We believe our strengths lie both in empowering individuals and teams to address fundamental questions of global significance, while providing all our staff with a welcoming and inclusive workplace that enables everyone to develop and do their best work. Recognising that diversity is our strength, vital for innovation and creativity, we aspire to build a truly diverse community which values and respects every individual's unique contribution.

While we have long traditions of scholarship, we are also forward-looking, creative and cutting-edge. Oxford is one of Europe's most entrepreneurial universities and we rank first in the UK for university spin-outs, and in recent years we have spun out 15-20 new companies every year. We are also recognised as leaders in support for social enterprise.

Join us and you will find a unique, democratic and international community, a great range of staff benefits and access to a vibrant array of cultural activities in the beautiful city of Oxford.

For more information, please visit www.ox.ac.uk/about/organisation.

School of Geography and the Environment

The School of Geography and the Environment (SoGE) is a dynamic, diverse, interdisciplinary department at the University of Oxford combining natural and social science research interests and analytical skills, underpinned by geography's tradition of working in many different situations and contexts. The School is internationally recognized for the quality of its teaching, research and wider engagement across the breadth of human geography, physical geography and environmental studies. Based within the Social Sciences Division, the School incorporates three affiliated research centres as well as Geography: the Environmental Change Institute (ECI), the Smith School of Enterprise and Environment (SSEE), and the Transport Studies Unit (TSU).

The School is based partly within the Oxford University Centre for the Environment (OUCE) building and partly in the Dyson Perrins building, which was completely refurbished in 2022. The School's physical location enables us to easily connect with many academic departments and organisations across the University, and we collaborate with many of them. For example, the School is an active participant in fostering the Oxford University Networks for the Environment (ONE), which links up over 1000 individuals within the University around the themes of Biodiversity, Climate, Energy, Food and Water.

Our research spans issues related to the environment, climate change, energy, transport, development, geopolitics and cities. The School's research portfolio totalled approximately £105million across more than 170 research projects in 2021/22, from a wide variety of funders.

Much of this work is collaborative, and we currently estimate that research with our partners takes place in over 70 countries across the globe. We aim to contribute to the common good, and many of our researchers actively engage in advising local, national and international organisations; in giving written and oral contributions to government consultations both locally and nationally; and in engaging with others through policy, partnerships, business and social enterprise.

The School also provides world-class, multidisciplinary teaching. Our Undergraduate Honour School gives undergraduate students research-led teaching across the breadth of human and physical geography and environmental studies by internationally recognised academic staff. Two hundred and fifty graduate students from a wide range of nationalities currently study for taught and research postgraduate degrees with us, in our International Graduate School. For more information the School please visit: http://www.geog.ox.ac.uk

The School is committed to supporting the career development of all its members. Everyone is encouraged to undertake professional training from the range offered by the School, the Division and the University's People, Organisation and Development Unit. The School has a mentoring scheme and all staff are encouraged to work with a mentor during their time at SoGE; academic staff are also encouraged to have regular meetings with the Head of School to plan their career progression.

Since 1973 the **Transport Studies Unit** has established an international research reputation in transport research. Based within the world-leading School of Geography and the Environment at the University of Oxford, the TSU approaches global transport challenges from social science and holistic perspectives. By advancing understandings

of the systems, processes and practices that shape the way people and goods move, the TSU hopes to inspire and inform change towards a more sustainable, just and accessible transport system. Our position within Geography and the University fosters interdisciplinary collaboration with researchers in other parts of the University and based elsewhere.

From geography to engineering, energy research to science and technology studies, and beyond, the TSU draws on the latest relevant developments in various disciplines and research fields. Our core team of researchers come from various disciplinary backgrounds, bringing with them a range of insight and expertise which enriches our research practice. Most TSU staff are full-time researchers working on specific externally funded projects. In addition to the core staff, it also hosts a number of academic visitors working more independently on cross-cutting issues. There is also an active group of international DPhil students working with individual staff.

The TSU has an excellent track record in collaborative projects. TSU researchers often works in partnership with colleagues in many UK universities, and has very active and well-established links with universities and research institutes across the EU, the Americas, Asia and Africa. They also work with partners from international agencies, transport policymakers, local authorities, businesses and industry, employers, non-governmental organisations, and activists.

For more information on the TSU please visit: http://www.tsu.ox.ac.uk

Since 1991, the **Environmental Change Institute** has worked alongside partners in government, business, academia and the community to understand environmental change and explore possible responses to the risks and opportunities it poses. Promoting an interdisciplinary approach, ECI explores sustainable solutions to global problems ensuring a fairer and more equal world for people today and in the future.

ECI has over 100 academics and researchers working around the world, establishing itself as an active and influential player in environmental change science. With a well-established track record in relation to Infrastructure, climate, energy, ecosystems, food, land use governance and water.

ECI is a leading player in a number of large research activities. In 2022 there are over 80 research projects totalling over £57 million funded through the UK's research councils and charitable foundations and trusts. We are proud of all our work but of particularly note we host the multi-agency UK Centre for Research into Energy Demand Solutions (CREDS), understanding the role of energy demand change in accelerating the transition to a zero carbon energy system. As part of Oxford University's strategic research Oxford Net Zero is an interdisciplinary research initiative working to track progress, align standards and inform effective solutions in climate science, law, policy, economics, clean energy, transport, land and food systems and greenhouse gas removal and storage.

In addition, The Oxford Programme for Sustainable Infrastructure Systems (OPSIS) is at the forefront of research and education to enable sustainable and resilient infrastructure. While the Leverhulme Centre for Nature Recovery Centre aims to investigate how to halt and reverse ongoing nature and biodiversity loss, by understanding how implement and finance nature recovery that is scalable, effective and socially just.

The ECI is also home to the MSc in Environmental Change and Management, the School's first taught postgraduate masters' programme, established in 1994. Through this MSc the ECI have successfully trained over 700 upcoming environmental leaders who comprise a lively and increasingly influential alumni community. For more information on the ECI please visit: http://www.eci.ox.ac.uk

The Smith School of Enterprise and the Environment (SSEE) was established at the University of Oxford in 2008 with a generous benefaction by the Smith family. We bring enterprise – public and private - together with world-leading teaching and research to achieve global net-zero emissions and sustainable development. Located within

the internationally top-ranked School of Geography and the Environment, we work in close collaboration with leading academics across Oxford and beyond.

Decisions made this decade will determine the future of humanity and the planet. To stop the climate crisis, we need to shift global economic and financial systems towards sustainability. The Smith School's approach combines academic excellence with real-world impact. Our research shapes business and government policy and practice. We offer innovative evidence-based solutions to the environmental challenges facing humanity.

We apply expertise in economics, finance, business and law to tackle environmental and social challenges in six areas: water, climate, energy, biodiversity, food and the regenerative economy.

We equip the next generation through undergraduate and graduate teaching as part of the top-ranked School of Geography and the Environment. SSEE's new master's course in Sustainability, Enterprise and the Environment (MSc SEE) is already one of the most applied to at Oxford. Our executive education programmes empower business leaders and policy-makers throughout the world to take action.

SSEE's Advisory Board, Business Fellows and our wide-ranging external partnerships bring together experts from industry, consultancy, governments and NGOs to achieve the vision of a cleaner, fairer and more prosperous future

Social Sciences Division

The University's academic departments and faculties are organised into four large groups, known as Academic Divisions (Social Sciences, Mathematical, Physical and Life Sciences (MPLS), Medical Sciences, and Humanities). The academic divisions are responsible for academic oversight of the teaching and research of their constituent departments and faculties, for strategic and operational planning, and for personnel and resource management. The Head of the Social Sciences Division is Professor Timothy Power, who is a member of the University's Council.The Social Sciences Division is a world-leading centre of research and education in the social sciences. The social sciences at Oxford are distinctive for both their depth and breadth, with activity spanning fourteen departments and faculties and one cross-divisional unit. (These are as follows: Law, the Saïd Business School, Economics, Politics and International Relations, the Blavatnik School of Government, the School of Anthropology and Museum Ethnography, International Development, Sociology, Social Policy and Intervention, the Oxford Internet Institute, Archaeology, the School of Interdisciplinary Area Studies, Education, the School of Geography and the Environment and the Oxford Martin School.) Interdisciplinary links within and beyond the university are strong, extending to the humanities, natural sciences, and medical sciences.

Academic and research staff and research students are engaged in world-leading research that challenges current ideas and theories and is tackling some of the major challenges facing humanity, such as sustainable resource management, migration, governance, poverty and development, and justice. REF 2014 confirmed Oxford as the UK powerhouse for research in the social sciences, where Oxford accounted for more world-leading (4*) research than any other institution, across the social sciences units of assessment to which it made submissions. The division has an extensive portfolio of external funders and collaborators, with competitively-awarded external research income exceeding £40million per year. Researchers in the division engage actively beyond academia and their research has influence in many spheres from innovation in public policymaking to practitioner communities such as law, business, education, social welfare and NGOs.

The division also delivers an exceptional range of high quality educational programmes (undergraduate, postgraduate taught and postgraduate research), all of which are underpinned by the innovative research being undertaken by our academics. Programmes range from those at the interface of the natural sciences, through to professionally-oriented provision in areas such as business, law and education. The division is home to several of Oxford's most widely recognised teaching programmes, such as Philosophy, Politics and Economics (PPE); the BCL; the MPhils in International Relations, in Economics, and in Development Studies; the MBA and EMBA; and the nationally regarded PGCE.

For more information please visit: http://www.socsci.ox.ac.uk/

How to apply

Applications are made through our online recruitment portal. Information about how to apply is available on our Jobs website https://www.jobs.ox.ac.uk/how-to-apply.

Your application will be judged solely on the basis of how you demonstrate that you meet the selection criteria stated in the job description.

As part of your application you will be asked to provide details of two referees and indicate whether we can contact them now.

You will be asked to upload a CV and a supporting statement. The supporting statement must explain how you meet each of the selection criteria for the post using examples of your skills and experience. This may include experience gained in employment, education, or during career breaks (such as time out to care for dependants)

Please upload all documents **as PDF files** with your name and the document type in the filename.

All applications must be received by **midday** UK time on the closing date stated in the online advertisement.

Information for priority candidates

A priority candidate is a University employee who is seeking redeployment because they have been advised that they are at risk of redundancy, or on grounds of ill-health/disability. Priority candidates are issued with a redeployment letter by their employing department(s).

If you are a priority candidate, please ensure that you attach your redeployment letter to your application (or email it to the contact address on the advert if the application form used for the vacancy does not allow attachments).

If you need help

Application FAQs, including technical troubleshooting advice is available at: https://staff.web.ox.ac.uk/recruitment-support-faqs

Non-technical questions about this job should be addressed to the recruiting department directly *recruit@ouce.ox.ac.uk*

To return to the online application at any stage, please go to: www.recruit.ox.ac.uk.

Please note that you will receive an automated email from our online recruitment portal to confirm receipt of your application. **Please check your spam/junk mail** if you do not receive this email.

Important information for candidates

Data Privacy

Please note that any personal data submitted to the University as part of the job application process will be processed in accordance with the GDPR and related UK data protection legislation. For further information, please see the University's Privacy Notice for Job Applicants at: https://compliance.admin.ox.ac.uk/job-applicant-privacy-policy. The University's Policy on Data Protection is available at: https://compliance.admin.ox.ac.uk/data-protection-policy.

The University's policy on retirement

The University operates an Employer Justified Retirement Age (EJRA) for very senior research posts at **grade RSIV/D35 and clinical equivalents E62 and E82** of 30 September before the 70th birthday. The justification for this is explained at: https://hr.admin.ox.ac.uk/the-ejra.

For **existing** employees on these grades, any employment beyond the retirement age is subject to approval through the procedures: https://hr.admin.ox.ac.uk/the-ejra.

There is no normal or fixed age at which staff in posts at other grades have to retire. Staff at these grades may elect to retire in accordance with the rules of the applicable pension scheme, as may be amended from time to time.

Equality of opportunity

Entry into employment with the University and progression within employment will be determined only by personal merit and the application of criteria which are related to the duties of each particular post and the relevant salary structure. In all cases, ability to perform the job will be the primary consideration. No applicant or member of staff shall be discriminated against because of age, disability, gender reassignment, marriage or civil partnership, pregnancy or maternity, race, religion or belief, sex, or sexual orientation.

Benefits of working at the University

Employee benefits

University employees enjoy 38 days' paid holiday, generous pension schemes, flexible working options, travel discounts including salary sacrifice schemes for bicycles and electric cars and other discounts. Staff can access a huge range of personal and professional development opportunities. See https://hr.admin.ox.ac.uk/staff-benefits

Employee Assistance Programme

As part of our wellbeing offering staff get free access to Health Assured, a confidential employee assistance programme, available 24/7 for 365 days a year. Find out more https://staff.admin.ox.ac.uk/health-assured-eap

University Club and sports facilities

Membership of the University Club is free for University staff. It offers social, sporting, and hospitality facilities. Staff can also use the University Sports Centre on Iffley Road at discounted rates, including a fitness centre, powerlifting room, and swimming pool. See www.club.ox.ac.uk and https://www.sport.ox.ac.uk/.

Information for staff new to Oxford

If you are relocating to Oxfordshire from overseas or elsewhere in the UK, the University's Welcome Service includes practical information about settling in the area, including advice on relocation, accommodation, and local schools. See https://welcome.ox.ac.uk/

There is also a visa loan scheme to cover the costs of UK visa applications for staff and their dependants. See https://staffimmigration.admin.ox.ac.uk/visa-loan-scheme

Family-friendly benefits

We are a family-friendly employer with one of the most generous family leave schemes in the Higher Education sector. Our Childcare Services team provides guidance and support on childcare provision, and offers a range of high quality childcare options at affordable prices for staff. In addition to 5 University nurseries, we partner with a number of local providers to offer in excess of 450 full time nursery places to our staff. Eligible parents are able to pay for childcare through salary sacrifice, further reducing costs. See https://childcare.admin.ox.ac.uk/. We also subscribe to the Work+Family Space, a service that provides practical advice and support for employees who have caring responsibilities for dependants of all types. See https://hr.admin.ox.ac.uk/my-family-care

Supporting disability and health-related issues (inc menopause)

We are committed to supporting members of staff with disabilities or long-term health conditions, including those experiencing negative effects of menopause. Information about the University's Staff Disability Advisor, is at https://edu.admin.ox.ac.uk/disability-support. For information about how we support those going through menopause see https://hr.admin.ox.ac.uk/menopause-guidance

Staff networks

The University has a number of staff networks including for research staff, BME staff, LGBT+ staff, disabled staff network and those going through menopause. Find out more at https://edu.admin.ox.ac.uk/networks

The University of Oxford Newcomers' Club

The University of Oxford Newcomers' Club is run by volunteers that aims to assist the partners of new staff settle into Oxford, and provides them with an opportunity to meet people and make connections in the local area. See www.newcomers.ox.ac.uk.

Research staff

The Researcher Hub supports all researchers on fixed-term contracts. They aim to help you settle in comfortably, make connections, grow as a person, extend your research expertise and approach your next career step with confidence. Find out more https://www.ox.ac.uk/research/support-researchers/researcher-hub

Oxford's Research Staff Society is a collective voice for our researchers. They also organise social and professional networking activities for researchers. Find out more https://www.ox.ac.uk/research/support-researchers/connecting-other-researchers/oxford-research-staff-society