





Job Description

Summary

| Job title | Postdoctoral Research Associate in Ecoacoustics | | | | |
|-------------------------------------|---|--|--|--|--|
| Division | Social Sciences | | | | |
| Department | School of Geography and the Environment | | | | |
| Location | South Parks Road, Oxford OX1 3QY | | | | |
| Grade and salary | Grade 7: £ 36,024-£ 44,263per annum A less experience 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 | | | | |
| Contract type | Fixed-term (3 years) | | | | |
| Reporting to | Prof Yadvinder Malhi | | | | |
| Vacancy reference | 171759 | | | | |
| Additional information | 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. | | | | |
| | | | | | |
| Research topic | Application of ecoacoustic approaches for evaluation of ecosystem function and health | | | | |
| Principal Investigator / supervisor | Professor Yadvinder Malhi | | | | |



supervisor











| Project team | Leverhulme Centre for Nature Recovery | | | | | |
|------------------|---------------------------------------|-------------------------|----------|-----------------|---------------|--|
| Project web site | Leverhulme www.naturereco | Centre very.ox.ac.uk | for | Nature | Recovery: | |
| Funding partner | The funds supp | • | search p | project are pro | ovided by the | |

The role

We are seeking a researcher with expertise in the collection and application of acoustic methods to monitor biodiversity and ecological function intact and human-modified landscapes in the context of nature recovery. We are particularly interested in approaches that go beyond species detection to yield meaningful information on ecological health. The researcher will be working as part of a large interdisciplinary team in the Leverhulme Centre for Nature Recovery that spans different University departments and research programmes, whose goal is to determine how to best monitor the effectiveness of nature recovery and nature-based solutions in the UK and the Global South.

The post holder will be part of the Leverhulme Centre for Nature Recovery. An initial focus of this work will be on the biodiversity and ecosystem outcomes of restoration efforts in the Leverhulme case study landscapes of Oxfordshire, central Scottish Highlands, Ghana and Kenya.

As the PDRA, your main activities will involve managing academic research activities, including coordinating multiple aspects of work to meet deadlines and desired goals. This will involve designing, overseeing and conducting field work in the UK, working with a wide range of researchers from different disciplines, stakeholders and project partners. You will also be responsible for analysing data and preparing manuscripts for submission to peer reviewed journals. You may also have opportunities to co-supervise Masters and PhD projects.

The successful candidate must hold, or be close to completion, of a PhD in a relevant subject area, or have equivalent experience, and possess experience analysing ecological acoustic datasets. The projects you will be working on are interdisciplinary and so the ability to work collaboratively across disciplinary boundaries is essential.

You will have excellent communication skills, including the ability to write for publication, present research proposals and results, and represent the research group at meetings. Interest in science-art public engagement around nature soundscapes would also be desirable.

You will report to Professor Yadvinder Malhi. This position will start as soon as possible and is for 3 years. Applications for this vacancy are to be made online. You will be required to upload a CV and supporting statement as part of your online application.

Responsibilities

- Advance research on the monitoring of biodiversity and ecosystem functions using ecoacoustic approaches as part of Leverhulme Centre for Nature Recovery at Oxford University;
- Design, collection, processing and interpretation of acoustic data from field sites in the UK and Africa, and potentially other sites
- Close liason, collaboration and sharing of data sets with other researchers who are collecting ecological data on key taxa.
- Cutting-edge analysis of collect data to explore their ecological interpretation
- Work with colleagues who have expertise in machine-learning to advance data analysis methods
- Exploration of frontiers in ecological acoustic monitoring, such as below-ground acoustics.
- Explore how to integrate these acoustic methods into national and international efforts to monitor nature recovery.
- Actively engage with other Leverhulme Centre team members, building networks and relationships with internal and external project partners
- Support and engage in wider communications, Knowledge Exchange and policy engagement activities.
- Manage your own academic research and administrative activities. This involves small scale project management to co-ordinate multiple aspects of work to meet deadlines, such coordinating logistics and permits for fieldwork.
- Collaborate with colleagues across the projects, the wider university and in partner institutions, taking part in weekly meetings including with key researchers from other disciplines.
- Prepare manuscripts for submission to peer-review journals, and present papers at conferences.
- Participate actively in appropriate lab and departmental activities, including weekly meetings, relevant seminars and discussion groups.
- Contribute ideas and analyses for new research projects and follow-up funding for this work.
- Provide guidance to junior members of this research programme, including research assistants, PhD students, and/or project volunteers.
- In support of the development of your research, and as a secondary commitment, undertake some teaching within SoGE including engaging in assessment and university examining
- Contribute to and enhance the academic life and community of the SoGE including taking on citizenship roles.

Selection criteria

Essential selection criteria

- Hold, or be close to completion of, a PhD/DPhil in a relevant subject area, or equivalent experience (for a Grade 7 position). Less experienced candidates may be considered for a Grade 6 position.
- Demonstrated understanding of relevant areas of ecology and biodiversity science.
- Strong quantitative analysis skills appropriate for analysis of acoustic data
- Strong publication track record, appropriate to career stage
- Willingness to undertake short periods of field data collection, in the UK and in Africa.

- Have a positive, collaborative and mutually nurturing approach to academic research and collaboration.
- Be committed to advancing diversity and inclusion.

Desirable selection criteria

- Prior experience in collection and/or analysis of acoustic data for ecological research
- Experience in advanced quantitative analysis approaches
- Interest in science-art public engagement around soundscapes
- Excellent communication skills, including the ability to write for publication, present research proposals and results, and represent the research group at meetings
- Strong interest in applying technologies to help guide the wider uptake of nature recovery and nature-based solutions to address societal challenges
- Experience of, and enthusiasm for, working collaboratively across academic disciplines

About The Leverhulme Centre for Nature Recovery

The Leverhulme Centre for Nature Recovery (LCNR) was established at the University of Oxford in 2022, for 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. 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.

Further details can be found at www.naturerecovery.ox.ac.uk

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. 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

<u>The Smith School of Enterprise and the Environment (SSEE)</u> 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 <u>and</u> 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 <u>new master's course in Sustainability</u>, <u>Enterprise and the Environment (MSc SEE)</u> 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 <u>Advisory Board</u>, <u>Business Fellows</u> 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 Science 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 / three referees and indicate whether we can contact them now.

Include the paragraph below if you are asking candidates to submit a CV and supporting statement. If you are using the application form with in-built supporting statement there is no facility for applicants to attach documents so this paragraph should be removed.

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. (*Customise this statement to confirm the document(s) you would like the applicant to attach, but make sure that you keep the reference to PDF.*

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 *hr@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**, which with effect from 1 October 2023 will be 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, travel discounts, and a variety of professional development opportunities. Our range of other employee benefits and discounts also includes free entry to the Botanic Gardens and

University colleges, and discounts at University museums. See https://hr.admin.ox.ac.uk/staff-benefits

University Club and sports facilities

Membership of the University Club is free for all University staff. The University Club 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 website 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

With one of the most generous family leave schemes in the Higher Education sector, and a range of flexible working options, Oxford aims to be a family-friendly employer. We also subscribe to the Work+Family Space, a service that provides practical advice and support for employees who have caring responsibilities. The service offers a free telephone advice line, and the ability to book emergency back-up care for children, adult dependents and elderly relatives. See https://hr.admin.ox.ac.uk/my-family-care

The University has excellent childcare services, including five University nurseries as well as University-supported places at many other private nurseries.

For full details, including how to apply and the costs, see https://childcare.admin.ox.ac.uk/

Disabled staff

We are committed to supporting members of staff with disabilities or long-term health conditions. For further details, including information about how to make contact, in confidence, with the University's Staff Disability Advisor, see https://edu.admin.ox.ac.uk/disability-support

Staff networks

The University has a number of staff networks including the Oxford Research Staff Society, BME staff network, LGBT+ staff network and a disabled staff network. You can find more information at https://edu.admin.ox.ac.uk/networks

The University of Oxford Newcomers' Club

The University of Oxford Newcomers' Club is an organisation 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.

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