



## Job description

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| Post                   | Postdoctoral Research Associate in Sustainable Agriculture (or if appointed at grade 6, Research Assistant)   |
| Department             | Biology   |
| Division               | Mathematical, Physical and Life Sciences Division (MPLS)  |
| Location               | 11a Mansfield Road, Oxford, OX1 3SZ   |
| Grade and salary       | Grade 7: £36,024 – £40,521 p.a.   |
| Hours                  | Full time   |
| Contract type          | Fixed Term until 30 <sup>th</sup> August 2025   |
| Reporting to           | Professor E.J. Milner-Gulland, Dr Harriet Bartlett  |
| Application deadline   | 12 noon Wednesday 1 <sup>st</sup> May 2024  |
| Vacancy reference      | 172087  |
| Recruitment contacts   | HR: <a href="mailto:recruitment@biology.ox.ac.uk">recruitment@biology.ox.ac.uk</a> or<br>PI: <a href="mailto:harriet.bartlett@smithschool.ox.ac.uk">harriet.bartlett@smithschool.ox.ac.uk</a>   |
| Additional information | Whilst the role is a grade 7 position, we would be willing to consider candidates with potential but less experience who are seeking a development opportunity, for which an initial appointment would be at grade 6 (£32,332 – 40,521 per annum) with the responsibilities adjusted accordingly. This would be discussed with applicants at interview/appointment where appropriate. |

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| Research topic                      | The environmental impacts of agriculture: Farm Sustainability Researcher  |
| Principal Investigator / supervisor | Dr Harriet Bartlett   |
| Project team                        | Prof E.J. Milner-Gulland, Dr Joseph Poore, Emily Hogg, HESTIA team  |
| Project web site                    | <a href="https://www.hestia.earth/">https://www.hestia.earth/</a><br><a href="https://hestia-fst.oxfordmartin.ox.ac.uk/home">https://hestia-fst.oxfordmartin.ox.ac.uk/home</a><br><a href="https://www.iccs.org.uk/">https://www.iccs.org.uk/</a> |



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| Funding partner     | The funds supporting this research project are provided by the Login5 Foundation and Ardevora   |
| Recent publications | <p>Poore, J. and Nemecek, T. 2018. Reducing food's environmental impacts through producers and consumers. <i>Science</i>, 360(6392), pp.987-992.</p> <p>Bartlett, Harriet, Andrew Balmford, James LN Wood, and Mark A. Holmes. "Identifying ways of producing pigs more sustainably: tradeoffs and co-benefits in land and antimicrobial use." <i>Scientific Reports</i> 13, no. 1 (2023): 2840.</p> <p>Travers, H., Walsh, J., Vogt, S., Clements, T. and Milner-Gulland, E.J. 2021. Delivering behavioural change at scale: What conservation can learn from other fields. <i>Biological Conservation</i>, 257, p.109092.</p> |



## The role

We are seeking a Sustainable Agriculture Researcher to join an exciting, rapidly expanding international research project which seeks to reduce the environmental impacts of thousands of farms worldwide using digital tools. You will be part of the HESTIA team, a growing and motivated team of environmental scientists, software developers, and behavioural change specialists. The team is based within the Interdisciplinary Centre for Conservation Science in the Department of Biology and the Oxford Martin School. You will assist on the design and implementation of experimental trials of the HESTIA Farm Sustainability Toolkit. You will design benchmarking and advice tools for farmers which will be deployed in randomised control trials (RCTs) to test whether enabling farmers to quantify their environmental impacts, benchmark against other farmers, and receive advice on how to improve their environmental impacts, affects their attitudes, behaviour and real farm outcomes. You will design these tools by collaborating with an advisory group of farmers, and if desired there will be opportunities to visit farms and collect data. Some travel within Europe will be required for fieldwork.

## About the Project

Agriculture is one of the biggest drivers of humanity's environmental impacts. However, very few farmers measure their environmental impacts, such as their greenhouse gas emissions, biodiversity impact, or the toxicity of the pesticides they use. Without measurement, neither farmers nor policymakers can make informed decisions about what to change.

This project will provide the data and models behind the HESTIA data platform (<http://hestia.earth/>) to farmers to allow them to quantify their environmental impacts, benchmark against other farmers, and receive advice on how to improve performance. It is likely that we will deploy HESTIA data and models through software integrations with the digital tools farmers already use. We will then use experimental trials in Europe and other geographies to quantify how effective these HESTIA-enhanced tools can be at changing farmer uptake of digital tools, intent to change practices (including both contributing data and changing agricultural practices), and potentially in reducing environmental impacts in a way that supports farmer livelihoods. We will also explore how the insights we gain from these trials could contribute to the development of policies to promote agricultural sustainability in Europe and worldwide.

## Responsibilities

- Collate information on farm practices, environmental impacts, and behaviour-change science to design benchmarking and advice tools to give farmers information on their environmental impacts
- Work with software developers to build these tools and integrate them with digital tools farmers use, and work with farmers to co-design these tools.
- Manage own academic research and administrative activities. This involves small scale project management and coordination of multiple aspects of work to meet deadlines
- Prepare working theories and analyse qualitative and/or quantitative data from a variety of sources, reviewing and refining theories as appropriate
- Develop ideas for generating research income, and present detailed research proposals to senior researchers
- Collaborate in the preparation of research publications



- Represent HESTIA and present papers at conferences or public meetings
- Act as a source of information and advice to other members of the group on methodologies or procedures
- There will be opportunities for the post holder to carry out teaching and supervision within the Department of Biology, if desired.

## Selection criteria

### Essential selection criteria

- Hold, or be close to completion of, a PhD/DPhil in a relevant subject (e.g. ecology, environmental science, geography, agriculture, psychology, behaviour change) or equivalent experience
- Experience reviewing and collating information on environmental sustainability
- Demonstrable enthusiasm for, and knowledge of, farming and sustainable agricultural practices.
- Experience working in excel and handling datasets
- Ability to independently plan and manage own research activities
- Experience in contributing to scientific publications

### Desirable selection criteria

- Experience working with farmers
- Experience working with data on the environmental impacts of farming (e.g. Life Cycle Assessments)
- Experience working with behaviour change science
- Knowledge of farming systems in Europe
- Experience in research with human participants – for example, assessing their perceptions and behaviours
- Experience applying for funding

## 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>

### Hazard-specific / Safety-critical duties

This job includes hazards or safety-critical activities. If you are offered the post, you will be asked to complete a health questionnaire which will be assessed by our Occupational Health Service, and the offer of employment will be subject a successful outcome of this assessment.



The hazards or safety-critical duties involved are as follows:

- Lone Working
- Driving on University business



## 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](http://www.ox.ac.uk/about/organisation).

## The Department of Biology

You will be joining the Department of Biology at an exciting time. The Department established from August 2022 as a result of a merger between the Departments of Zoology and Plant Sciences, and is preparing to move into the new state-of-the-art Life and Mind Building in two to three years time.

The Department of Biology is recognised internationally for its research in a wide range of fields spanning all levels from molecules to ecosystems, and tackling global challenges through fundamental bioscience research. Over time, the research interests of the Department has been focused on five primary themes: Behaviour & Biomechanics; Ecology & Conservation; Evolutionary Biology; Microbiology & Infectious Disease; and Molecular Plant Biology. Research is conducted in all spheres from laboratory and in silico analysis to theoretical and field-based research.

At all times we seek to reinforce the connections between research and our education offering, at both graduate and undergraduate level. The Department teaches a four-year undergraduate degree MBiol course in Biology, with fourth-year students undertaking a Masters-level research project. It also supports a variety of graduate placements and hosts the University's DPhil in Biology.

External research income to the Department is derived from over 50 different funding agencies, with the principal current funders being the European Research Council, the Royal Society, the Wellcome Trust, BBSRC and NERC. The Department has a significant record in integrating broader societal impacts of its research, including the provision of policy to government at the highest level, as well as supporting the commercialisation of research through spin-out companies and licensing arrangements that have generated hundreds of millions of pounds' worth of innovation.



The Department is located in the University's Science Area at two sites, and will move into the new £200m Life and Mind Building in 2024 that will include extensive laboratory provision with controlled environment rooms, glasshouses and an imaging suite. The Department also benefits from extensive facilities at the John Krebs Field Station at Wytham, with Wytham Woods nearby, as well as partnerships with organisations in the area such as the Oxford Botanic Gardens and Oxford Natural History Museum.

For more information please visit: <https://www.biology.ox.ac.uk>

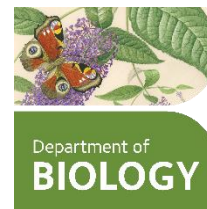
## About the Mathematical, Physical, and Life Sciences (MPLS) Division

The Mathematical, Physical, and Life Sciences (MPLS) Division is one of the four academic divisions of the University, alongside the Humanities, Social Sciences and Medical Sciences Divisions. It is led by an academic Head of Division (Professor Sam Howison) and an administrative Divisional Registrar (Dr Tracy Gale) and comprises nine of the University's academic departments – Biology, Chemistry, Computer Science, Earth Sciences, Engineering Science, Materials, the Mathematical Institute, Physics, and Statistics – as well as Begbroke Science Park, the multidisciplinary Ineos Oxford Institute for Antimicrobial Research and an interdisciplinary Doctoral Training Centre.

MPLS is proud to be home to some of the most creative and innovative scientific thinkers and leaders in academia, whose interdisciplinary research is tackling major societal and technological challenges, from new energy solutions or improved cancer treatments to understanding climate change processes and helping to preserve biodiversity, tackling antimicrobial resistance, advancing AI and quantum technologies and space exploration, and much more. The quality and impact of our work have been recognised by successive rounds of the national Research Excellence Framework and Teaching Excellence and Student Outcomes Framework exercises, and our departments frequently top the major higher education league tables. We teach around 7,300 students (including around 3,400 graduate students) and are playing a key part in training the next generation of leading scientists.

Divisional activity is co-ordinated and represented by the MPLS Divisional Office based at 9 Parks Road, in the heart of Oxford's Science Area. The Divisional Office, which is led by the Divisional Registrar, has around 55 dedicated members of staff, as well as a number of colleagues who are embedded in divisional teams but based in central University services (e.g. in Finance, HR and Development).

To find out more, please visit: [www.mpls.ox.ac.uk](http://www.mpls.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.

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## 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).

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## 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 at [Recruitment@Biology.ox.ac.uk](mailto:Recruitment@Biology.ox.ac.uk)

To return to the online application at any stage, please go to: [www.recruit.ox.ac.uk](http://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 70<sup>th</sup> 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](http://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](http://www.newcomers.ox.ac.uk).

