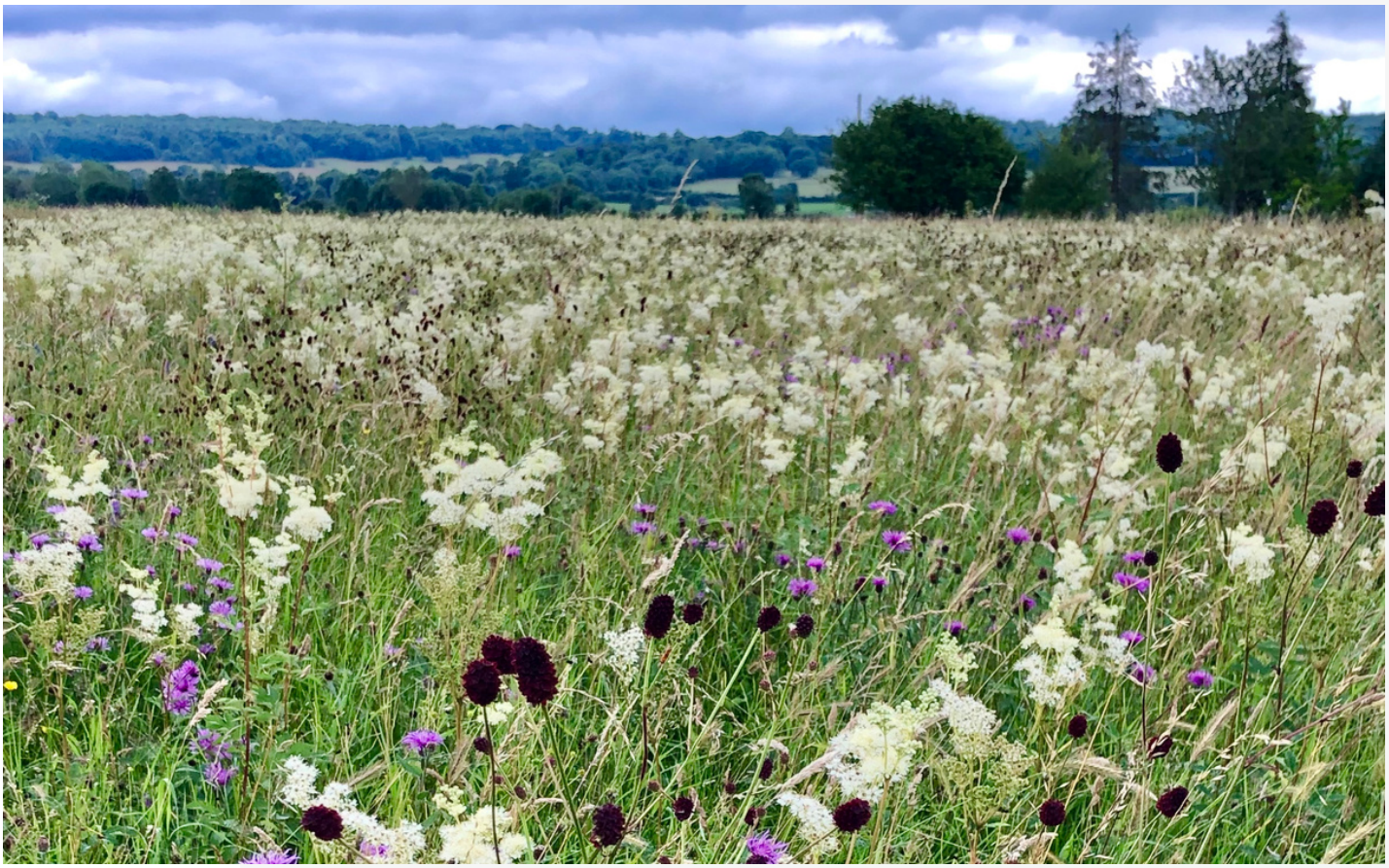
HEALTHY ECOSYSTEM RESTORATION IN OXFORDSHIRE (HERO)

JULY 5 2021

PRIORITIES FOR HEALTHY ECOSYSTEM RESTORATION IN OXFORDSHIRE



OXFORD MARTIN SCHOOL

UNIVERSITY OF OXFORD

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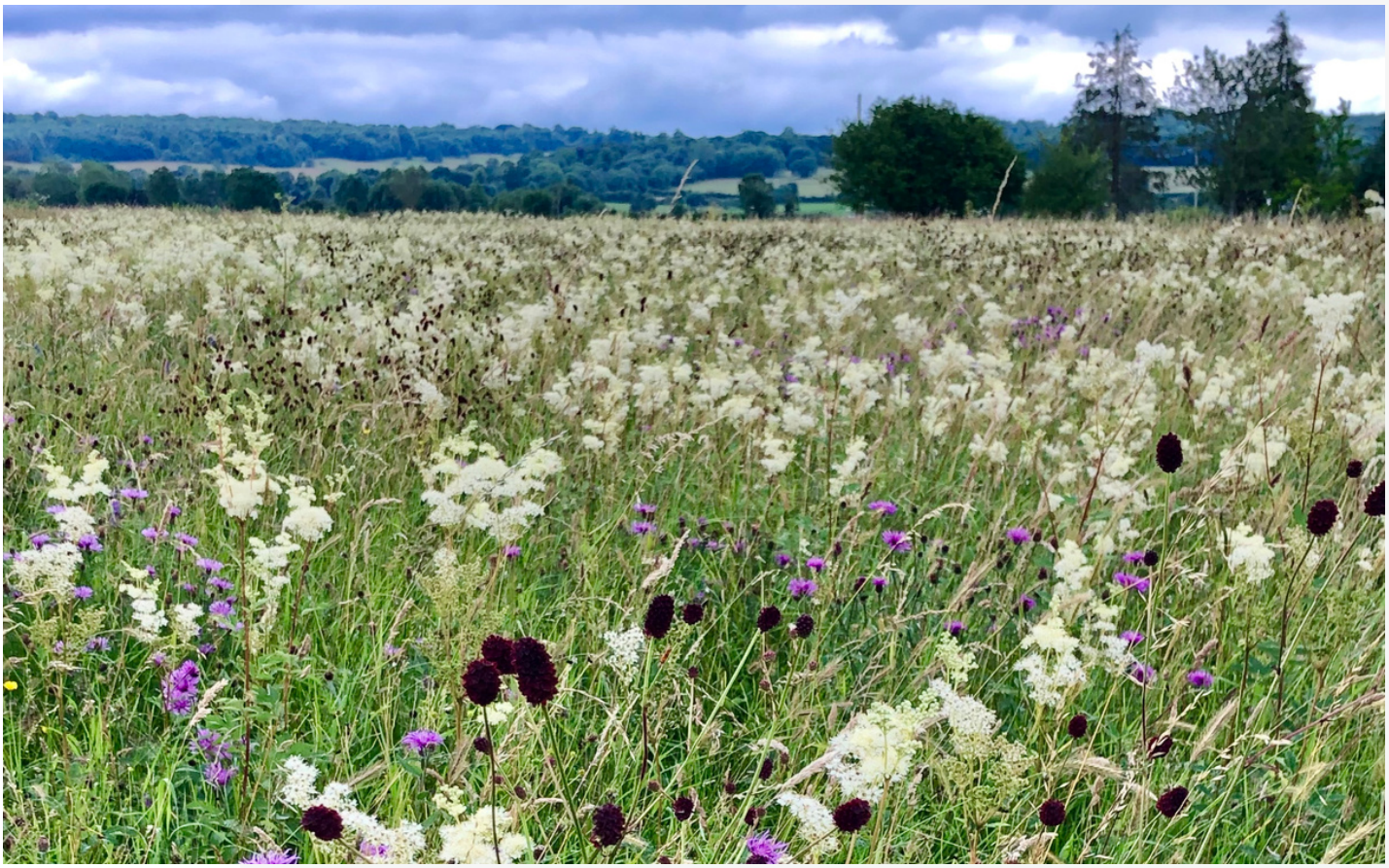


OXFORD MARTIN SCHOOL

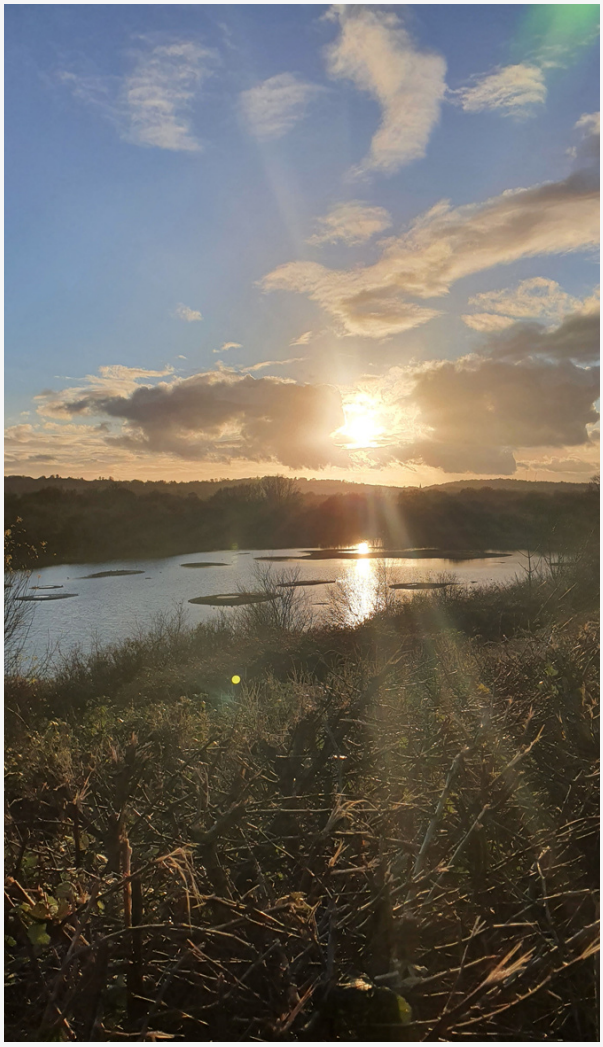
UNIVERSITY OF OXFORD

INCEPTION WORKSHOP

HELD VIRTUALLY AND PHYSICALLY

In-person event: Ada Grabowska-Zhang- University of Oxford, Ben Heaven Taylor- Trust for Oxfordshire's Environment, Bruce Winney- Wildlife & Countryside Link/Wild Oxfordshire, Camilla Burrow- Wild Oxfordshire, Carlyn Samuel- Organising team, Cecile Girardin- University of Oxford, Dominic Lamb- South Oxfordshire & Vale of White Horse District Councils, George Levvy- Facilitator, Ian Curtis- University of Oxford, Ian Wilkinson- FarmED, Kathy Willis- University of Oxford, Mark Hirons- University of Oxford, Neil Bailey- Earthwatch, Olivia Thornton- University of Oxford, Prue Addison- BBOWT, Rachel Crookes - West Oxfordshire district council, Richard Lofthouse- Rapporteur, Sue Roberts- Councillor for Wallingford, Victoria Macnamara- Oxfordshire Treescapes, Yadvinder Malhi- University of Oxford.

Virtual event: Andrew Hector- Oxford University, Ben McCarthy- National Trust, Harriet Waters- Oxford University, Henry Grub- Oxford University, James Bullock- CEH, Justin Adams- TOE, Nick Mottram- Oxfordshire County Council , Pam Berry- Oxford University, Steve Wilkes- TVERC, Alison Smith- University of Oxford. Yadvinder Malhi, Cecile Girardin, George Levvy, Richard Lofthouse.



Healthy Ecosystem Restoration Oxfordshire (HERO) is a three year programme (in the first instance) supported by the Oxford Martin School, under their new Programme on Biodiversity and Society. HERO will explore how Oxford University can play a role in efforts to restore ecosystems to health in Oxfordshire, by bringing the University's strengths in academic knowledge, research capacity and convening power to support ongoing and planned nature recovery activities by a range of local partners and stakeholders, including land-owners and farmers.

With its active network of nature recovery groups, Oxfordshire presents a compelling opportunity to test and showcase a portfolio of different ecosystem restoration strategies, to become a model county for nature recovery. HERO aims to build a community of practice between the University and local practitioners, and will also form a resource for the University and its constituent Colleges within broader institutional sustainability goals.

The HERO network brings together researchers from the natural and social sciences with local authorities, environmental organisations, landowners and community groups who are already working on a range of initiatives to help support nature's recovery and enhance the multiple benefits that nature provides in Oxfordshire. We also aim to invite prominent supporters of Oxford's biodiversity research in the business, finance, government and NGO sectors, to strengthen links with external stakeholders.

HERO aims to hold a regular series of workshops and seminars to examine key opportunities, challenges and evidence gaps around nature recovery in Oxfordshire, and also provide a limited amount of research resource to help fill evidence gaps.

This note presents the outputs from the first HERO workshop, which was held on 5th July 2021, with an online session in the morning attended by 13 HERO members and an in-person meeting in the afternoon attended by 20 members. It gathered insights on setting the goals of HERO for the next three years, and the priorities for the next year.

Nature recovery, nature-based solutions and ecosystem restoration have never been so prominent in the political agenda, presenting an extraordinary window of opportunity to channel public and private funding and enthusiasm towards restoring ecosystems across Oxfordshire. There is an urgent need to form a strategy, set goals and secure funding, yet we also recognise the importance of gaining a thorough understanding of the ecological and socio-economic implications of nature recovery activities, and developing reliable and practical monitoring and evaluation methodologies.

With this in mind, we aimed to answer the following questions:

- What are the key challenges to nature recovery across Oxfordshire?

- How can the University work alongside local partners with the aim of making Oxfordshire a model county for nature recovery?

- **What are the priorities where HERO can contribute on a three-year timescale, and what should be the priority for the first year?**

CHALLENGES

WHAT ARE THE KEY CHALLENGES TO NATURE RECOVERY ACROSS OXFORDSHIRE?

We asked participants to vote on identifying the top priorities for the next three years, and to focus on how the University can support local partners in the activities they are carrying out, with the aim of making Oxfordshire a model county for nature recovery.

The top priorities identified are listed below. Some of these were discussed in further depth at the workshop.

1. Overarching Strategic Plan
2. Mapping, Assessment and Tracking of Land Availability and Nature Recovery Activities
3. Monitoring and Evaluation
4. Scale and Connectivity
5. Mindset Change and Wider Public Engagement
6. Exploring and Evaluating Funding Strategies
7. Developing a Pipeline of Funded Projects

1. OVERARCHING STRATEGIC PLAN

To achieve something different, participants recognised the importance of an overarching strategic plan for nature recovery in Oxfordshire. The Local Nature Partnership (LNP) is a key forum through which such a plan can be developed. Furthermore, the ongoing Local Nature Recovery Strategy (LNRS) process represents a critical avenue for making connections between HERO and relevant activities. Oxfordshire County Council will have responsibility for developing the LNRS, but may devolve this to the LNP. Specifically, the LNRS should set out a clear, ambitious and long-term vision of where the county needs to be for nature's recovery, with shorter-term targets/milestones, and mechanisms for delivery and funding. HERO can support these efforts by working with Thames Valley Environmental Records Centre (TVERC) to fill gaps in the baseline evidence to support the strategic plan, analyse alternative scenarios and trade-offs, and investigate what needs to be implemented where, the scale of actions required, the opportunities, and pitfalls. It can also provide convening capacity through its workshops to address key issues and points of discussion.

Possible research and analysis questions are:

- What happens to our natural environment under different scenarios for development at various scales, climate change, changes in agricultural practice.
- What are the costs and benefits of creating different habitats (wetlands, woodlands, grasslands) and using different methods (e.g. rewilding vs tree-planting, changes in agricultural management)
- How much of different habitats (grassland, woodland, wetland) do we need to create, and where?
- What conservation action is currently taking place, and is this enough?
- What are the blockers & solutions (e.g. lack of capacity in the environmental sector, lack of land availability, how to engage mainstream farmers and landowners).
- How would a National/Regional, 36sq ml landscape-scale park to the NE of Oxford square up, relative to funding regeneration across the Nature Recovery Networks (NRNs)? Should both happen? What are the trade-offs?

2. MAPPING, ASSESSMENT AND TRACKING OF LAND AVAILABILITY AND NATURE RECOVERY ACTIVITIES

The number of activities around nature recovery is burgeoning, ranging from individual efforts on private lands to farmer cluster activities, and county-wide and national conservation targets. There is a need to produce an easily accessible and regularly updated map of these activities, in order to identify synergies with overall strategic goals and to identify key spatial or ecological gaps where extra resources could be channelled. This map can also track how activities are tracking (or failing to track) the overall strategic plan.

Mapping at a county-wide level will allow us to envision and communicate our vision of the future, and compare it to the present and the past. HERO will seek to provide such a mapping effort, and aims to produce a map of nature recovery in the county by the end of year one. The map would feed into a detailed plan for specific interventions and targets for all the recovery areas.

3. MONITORING AND EVALUATION

Biodiversity provides a particular challenge for reliable monitoring of progress. Challenges include a plethora of potential metrics, and the need to identify methodologies that are simple enough to be deployed at scale without requiring high degrees of specialised knowledge while also being robust enough to provide credible information. Measurement of natural capital and ecosystem services also provides new opportunities and challenges. There is also a need to be compatible with national efforts. Oxfordshire provides an ideal "laboratory" to explore these questions, evaluate different methodologies, and also test large scale maps and tools that map biodiversity and natural capital.

At the same time, there is a rich body of local knowledge and a large number of communities of practice engaged in land and nature stewardship efforts. The social science component of this study will examine the role of local knowledge and multi-scale social and political engagement in shaping land use change.

4. SCALE AND CONNECTIVITY

A key challenge is how to move on from a series of localised conservation and nature recovery activities, to bring the additional benefits of scale and connectivity. This includes activities in the wider land use matrix that go beyond sites that are focused on conservation. As we gather the evidence base to provide clarity on what needs to be implemented where, we will identify the scale of actions required, the opportunities and pitfalls, and the ecological and socio-economic implications of a range of approaches. We will seek to gain more clarity on how to achieve nature recovery at scale, identifying key challenges and approaches to achieving such scale. We aim to improve understanding of how we can achieve nature recovery in a linked-up way across different land use types, ecosystems, and processes (e.g. connectivity, flow of energy, linking processes).

Another thread of connectivity which we could explore is connectivity between nature restoration and communities, including land-owners and farmers and the wider food system.

5. MINDSET CHANGE AND ENGAGING KEY-DECISION MAKERS AND THE WIDER PUBLIC

A broader challenge is mindset change. Post-COVID recovery, increased awareness of biodiversity decline and changes in land use policy provide a time-sensitive opportunity. Participants proposed organising a series of events to engage in dialogue and raise awareness with a range of participants. This would be a series of arts, science, and policy events involving local groups, all with a coordinated outreach and marketing plan.

Action: increase awareness by producing a public-oriented update on the state of nature in Oxfordshire. We can provide a map of what we have, what we have lost, what could be potentially restored (woodlands, grasslands, rivers), taking into account both ecological and social factors.

Action: working on a meeting with Colleges around biodiversity net gain. This would be an opportunity to start the discussion, and we would then need to meet with bursars and start working with pioneer Colleges. Focus specifically on land owning Colleges. Christ Church, All Souls, Magdalen would be good starters but the land ownership map which is being worked on will give a better idea.

Action: The plan-making process (but not the contents) of the Oxfordshire 2050 Development Plan (OP2050) has been approved by the cabinets of the six councils, and is out for 'Reg 18' consultation. It outlines the draft Nature Recovery Network (NRN) for Oxfordshire and shows Otmoor as a big blob of biodiversity. Ideally HERO would have fed into OP2050 with a strategic nature recovery plan. Instead we must contribute to the Reg 18 consultation which finishes in early October. It is unlikely that significant changes would be accepted, but perhaps a commitment could be made in OP2050 to follow whatever strategy HERO develops.

Action: Plans for the Oxford-Cambridge development arc are in development. HERO should find the means to engage with this.

Action: The Oxfordshire Growth Board comprises the Leaders of the five Oxfordshire Councils and advisory groups such as the Oxfordshire Local Enterprise Partnership, the University, and developers. HERO should get representation at the Growth Board.

6. EXPLORING AND EVALUATING FUNDING OPPORTUNITIES

A range of funding mechanisms are becoming available for nature recovery, ranging across government funds, private funding for carbon offset and biodiversity net gain, through to philanthropy. Oxfordshire provides an ideal test-bed for these initiatives, exploring their delivery and social and cultural dimensions.

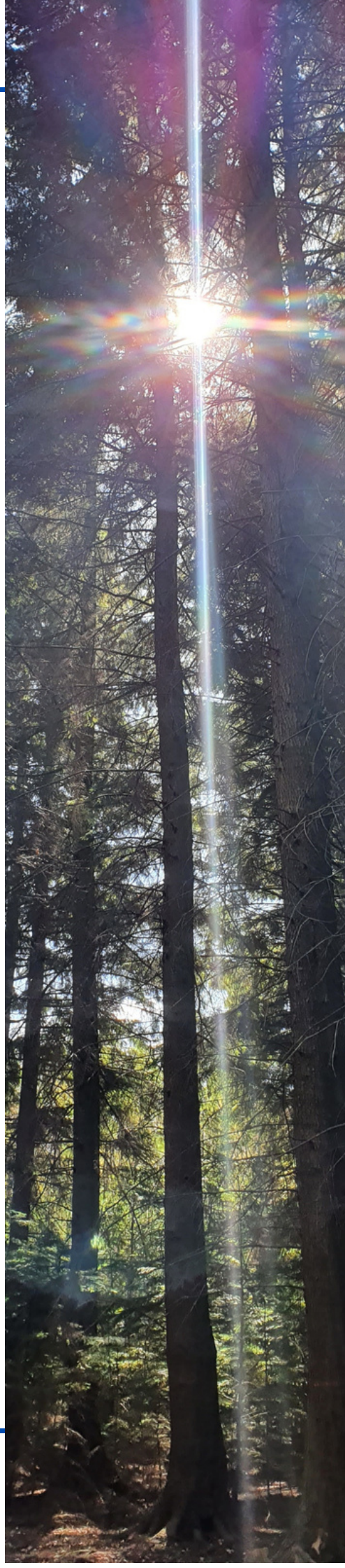
7. DEVELOPING A PIPELINE OF PROJECTS

There is a need to develop a pipeline of well-designed projects across the county that are ready to implement given financial support, and that can provide charismatic case studies of nature recovery which can build support for wider efforts.

As major landowners in the county, the University and Colleges have the potential to lead by example and develop some of these projects on their own lands, and to improve the state of biodiversity on their lands consistent with the University's 2021 Environmental Sustainability Strategy. The University's policy includes net-zero emissions by 2035 and net biodiversity gain in the same timeframe. HERO will seek to promote and leverage action within the University and Colleges to support this goal.

A 'quick win' would be converting some College quadrangles and/or gardens to wildflower meadows.

The University and its constituent Colleges should be held to account with their development agendas to prove that all that they do serves the now crucial aims of climate change mitigation and adaptation, and nature recovery.



ABOUT HERO

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ABOUT OUR FUNDER

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The Oxford Martin School is a world-leading research department of the University of Oxford. Its 200 academics, work across more than 30 pioneering research programmes to find solutions to the world's most urgent challenges. It supports novel and high-risk projects that often do not fit within conventional funding channels, with the belief that breaking boundaries and fostering innovative collaborations can dramatically improve the wellbeing of this and future generations. Underpinning all our research is the need to translate academic excellence into impact – from innovations in science, medicine and technology, through to providing expert advice and policy recommendations.