HEALTHY ECOSYSTEM RESTORATION IN OXFORDSHIRE (HERO)

SEPTEMBER 20 2021

MAPPING, ASSESSMENT & TRACKING OF LAND AVAILABILITY & NATURE RECOVERY ACTIVITIES IN OXFORDSHIRE

OXFORD MARTIN SCHOOL

UNIVERSITY OF OXFORD

HERO WORKSHOP #2

HELD VIRTUALLY

Participants:
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About HERO

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.

About this report

This note presents the outputs from the second HERO workshop, which was attended virtually by 23 participants on the 20th of September 2021. The inception workshop in July 2021 identified seven priorities for nature recovery across Oxfordshire, which involved planning, mapping, monitoring, managing connectivity, public engagement, financing, and developing a project pipeline. This second workshop focuses on the second of those priorities: Mapping, assessment and tracking of land availability and nature recovery activities. Prior to the workshop, the HERO team (Alison, Michaela and Wallerand) had gathered some preliminary information on 42 nature recovery initiatives in Oxfordshire. At the workshop this preliminary data collection was presented and discussed, and we gathered feedback and insights on what additional information should be collected in subsequent stages, and how this data could be analysed to feed into effective nature recovery strategies.

Five themes emerged from the discussion surrounding the challenges posed by adequate and reliable land mapping:

1. Extending, refining and streamlining the data collected
2. Mapping land ownership
3. Including farmers in the mapping effort
4. Interactions between nature, climate and other issues
5. Mapping change over time.

PROGRESS SO FAR

PRESENTATION ON THE PURPOSE OF THE DATABASE, PRELIMINARY FINDINGS AND POTENTIAL NEXT STEPS

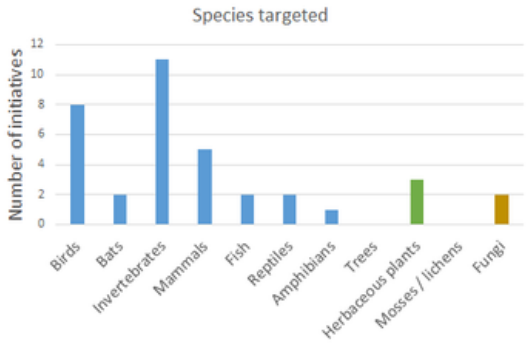
Purpose of database

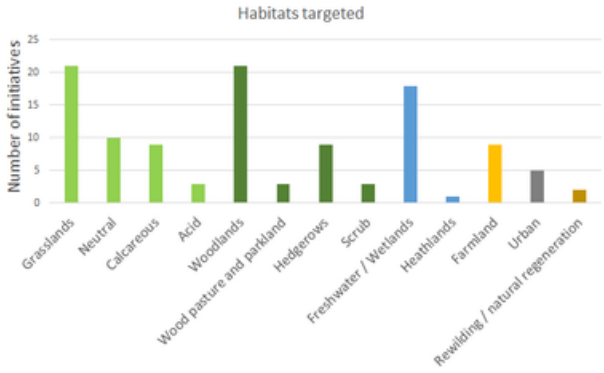
The database compiles information on current, past and future nature recovery activities across the county. It is intended to form an open resource tool that can track progress in restoring Oxfordshire's ecosystems and identify gaps where more investment is needed, in order to support the development of a nature recovery strategy.

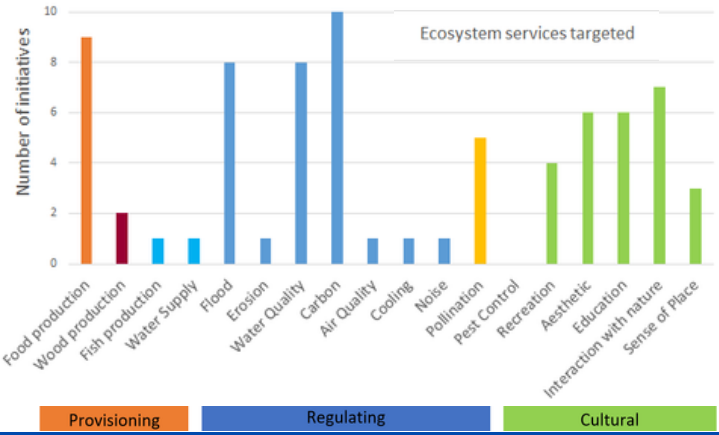
Summary of information collected so far

42 initiatives in Oxfordshire have been identified, collected through an eight-question google form – which received twelve responses – as well as direct emails from HERO Members and a web search of the news items on the Wild Oxfordshire website. This list has been consolidated in an Excel database, including the location, size of area, timescale of activities and organisations involved, as well as the habitats, species and ecosystem services targeted. We have also set up additional tabs within the Excel file to collect information on relevant stakeholders, funding opportunities, plans for consultation (e.g., OP2050) where HERO could feed in, and citizen science initiatives.

Preliminary inspection of the data shows a mixed bag of projects ranging in scale, from small-scale projects to catchment level programmes. A wide range of habitats, species and ecosystem services were targeted by these activities, but there was a strong focus on certain habitats (woodlands, hedgerows, wetlands), species (invertebrates, birds, mammals), and ecosystem services (carbon, water regulation and quality). Initial data suggests a lack of projects targeting heathlands, acid grassland and scrub as well as rewilding projects.







Potential next steps

1. Add further nature recovery initiatives to the dataset by building on other existing maps, such as Wild Oxfordshire Community Action Group Map and the TOE map of funded projects.
2. Map each activity spatially as polygons. This will present difficulties since many initiatives do not have pre-defined boundaries, are aspirational projects or are run by associations with limited resources.
3. List target species and their habitat requirements: type of habitat(s); minimum core area for breeding / feeding; network requirements.
4. Analyse the data to determine the overlaps with designated areas and target areas for ecosystem restoration as well as the extent and proportion of each type of priority habitat that is intact, being restored, or degraded.

FEEDBACK AND DISCUSSION

1. EXTENDING, REFINING AND STREAMLINING THE DATA COLLECTED

When gathering data, duplication may be a risk given the multiple databases that exist (e.g., datasets on regenerative agriculture in the Cotswolds. HERO will therefore need to streamline various datasets. However, it needs to avoid generating additional workload and frustration when asking short-staffed organisations for datasets that may be available elsewhere.

The importance of sharing a common language with other counties from the onset was articulated by participants to ensure that the performance and progress made by HERO can be compared in five to ten years' time with other counties. It was noted that Oxfordshire could become a reference point, setting a precedent for other counties to follow, as our natural capital mapping approach has been emulated by others. Furthermore, HERO is using the national UKHab classification system and the ecosystem services framework used by Natural England to ensure comparability.

When classifying inputs, it was suggested that we could distinguish higher biodiversity sites from other sites since their performance targets and gaps differ. Furthermore, it was proposed to only include in the dataset projects with clear intervention on the ground and exclude top-level governance and educational campaigns.

It was also suggested that we should collect information on project outcomes and success rates. There is already a field in the database for 'datasets' where we can note whether data on outcomes exists.

We decided that the next workshop will explore available datasets and the extent to which HERO could carry out field data collection and develop metrics, indicators and monitoring methodologies, beyond this high-level mapping.

2. MAPPING LAND OWNERSHIP

Identifying initiatives should be done in tandem with an analysis of the ownership and governance scheme of the land on which the intervention is led. This will enable the development of an inter-relational database mapping land ownership, which can facilitate the identification of nature ambassadors and land agents. Land agents are powerful vectors for change as mediators between conservation groups and landowners. They are increasingly interested in nature conservation as the new Environment Land Management Scheme (ELMS) will make subsidies contingent on ecosystem services generated by the farms. It was noted that mapping land ownership should be done in collaboration with the Oxford Treescapes Project.

3. INCLUDING FARMERS IN THE MAPPING EFFORT

Participants shared the conviction that agriculture will need to play a greater role in HERO, which aims to mend the tension between nature recovery and farming in Oxfordshire. This means identifying early adopters of biodiversity net gain projects, mapping ecosystem services provided by the farmlands in the county as well as including in the database regenerative agriculture initiatives. It would be useful to include Countryside Stewardship data on the maps to indicate where farmers are currently receiving agri-environment funds for environmental improvements.

The Land App is increasingly being used on farms. This was developed separately to the Natural Capital mapping approach being used in Oxfordshire. Although collaboration between HERO, Land App and our Natural Capital mapping approach would yield valuable insights, the commercial aim of Land App may prove incompatible with HERO's ambition of providing open access tools and datasets.

Engaging with farmers also means allowing space for feedback from the farmers who are well acquainted with the land and consequently can provide valuable insight on the conservation projects that can be led on it. Compiling successful case studies of farmers that have changed their farming methods could help to increase uptake of nature recovery actions.

Participants noted that buy-in from farmers would be increased if HERO is perceived by financially constrained farmers as an initiative that facilitates easy access to information on portfolios of farming methods on their land.

However, it is very important that HERO does not approach farmers separately who have already been approached by the Treescapes Opportunity Map team or by Wild Oxfordshire (Mike Pollard and Bruce Winney are engaging farmers). We should set up a meeting to discuss a joint engagement strategy.

4. INTERACTIONS BETWEEN NATURE, CLIMATE AND OTHER ISSUES

Participants proposed to extend the scope of the mapping to address interconnecting issues, such as interactions between flood alleviation, climate change mitigation and adaptation. For instance, adequately planned flood alleviation can have positive knock-on effects for biodiversity (i.e., supporting wetlands and habitats for birds). It would be a mistake to try and compartmentalise different ecosystem services. Furthermore, quantifying the benefits of conservation for other ecosystem services would secure access to other channels of funding.

A future workshop should reflect on the impact of climate change on local biodiversity. This is particularly relevant for farmers, since there is very limited knowledge on how climate change will impact the resilience of farmlands. Farmers are already experiencing considerable seasonal change. For instance, one participant related the experience of one farmer's planting season shrinking from four weeks to a week.

5. MAPPING CHANGE OVER TIME

The temporal dimension of the database was raised multiple times during this workshop. Obtaining a historical outlook by compiling information from past projects can establish a baseline from which progress can be measured. Furthermore, factoring in different timescales for each conservation project and farming investment can provide valuable insight into respectively the net biodiversity gain and the willingness of a farmer to take on a conservation project.

Finally, it was suggested that we should also map future housing development, so that HERO can play a role in safeguarding nature recovery networks from the political push for development. Future development for housing – 85,000 houses in the next 12 years - should be factored in to first identify where nature will be preserved and then plan housing accordingly.

NEXT STEPS

- Merge current datasets with the TOE project map and Wild Oxfordshire Community Action Group map in order to compile an exhaustive list of initiatives. This will allow HERO to say with more confidence what the gaps are, and what project pipeline is needed to allocate sufficient resources to fill this gap. We might also be able to add Habitat banking sites from South and Vale districts. Also check out FWAG, LANDWISE and Glorious Grasslands.
- Map projects spatially. Projects where we do not have information on spatial areas targeted will be contacted to see if they can provide a spatial indication of the area covered by their intervention, either as a GIS file, a pdf or other description of the area covered.
- Add a field to the dataset to collect any information on land ownership / land agents for each area targeted.
- Reach out formally to partners: Catchment partnerships, Freshwater Habitats Trust, Conservation Target Area leads, Forestry Commission, Natural England, CLA, NFU (Georgia Craig) and Farm Clusters (see also below).
- Set up a meeting with Treescapes team and Wild Oxfordshire to discuss how to reach out to farmers without duplicating effort. Farm Cluster facilitators can help (see the Farm Cluster website).
- Add Countryside Stewardship data to the activity map to capture initiatives on farms.
- Try to identify land agents for college land. Harriet Waters may know.
- Talk to Judy Webb and Jeremy Biggs at the Freshwater Habitats Trust about mapping groundwater catchments important for fen recharge.

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ABOUT OUR FUNDER

THE OXFORD MARTIN SCHOOL

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