



University of Lincoln Biodiversity Action Plan 2023

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University of Lincoln: Biodiversity Action Plan (BAP) 2023

1.0 Introduction

The University of Lincoln declared a Climate and Ecological Emergency in 2019 in recognition of the dual crises that threaten environmental and human health, as a direct consequence of anthropogenic activity.

The UK is one of the world's most nature-depleted countries, with an average of about half of its biodiversity remaining. The [UK State of Nature report \(2019\)](#) states that 15% of species in England are threatened with extinction and 32 plant species have become extinct. Changing agricultural management has had the biggest single impact upon nature in the UK over recent decades.

The University of Lincoln acknowledges the impact we can have, both to improve biodiversity across our own Estate, and work with external stakeholders to create inter-connected spaces for wildlife to thrive. The below vision for biodiversity enhancement is captured as a target in the University's Sustainability Strategy.

Our Vision for Biodiversity at the University of Lincoln

To utilise and enhance the natural resources on our Estate to actively improve biodiversity and create inter-connected spaces for wildlife and nature to thrive. We will use these resources as a teaching resource, to engage our students in nature recovery and utilise our land for research to enable a wider impact.



The purpose of this BAP is to provide a structured framework for measuring, monitoring, and improving biodiversity on the University of Lincoln Estate. It responds to the introduction and development of UK environmental legislation relating to biodiversity and environmental management. The formal scope of this Biodiversity Action Plan is *'the management of biodiversity on land owned, or leased, and operated by the University of Lincoln.'*

As part of our commitment to manage and protect the biodiversity assets on our estate, we:

- Include a commitment to monitor the biodiversity value of the estate in the [Energy and Environmental Policy](#)
- Maintain a [Biodiversity Policy](#) (since 2012)

Biodiversity is crucial to ecosystem services, providing and contributing to essential services such as pollination, climate regulation, flood protection, soil fertility and production of food, fuel, fibres, and medicines. Increasingly, the University estate provides opportunities for staff and students to improve their wellbeing, through spending time in nature.

In 2023/24, we are working on a plan to launch a new biodiversity initiative, as part of our Nature Positive Universities pledge.

2.0 Governance

To ensure that the objectives of the BAP are delivered and reviewed periodically, there is a governance structure for Sustainability-related activity, to enable this. This is shown in Figure 1.

2.1 Environment and Sustainability Committee

This is a sub-committee the University of Lincoln Senior Leadership Team. All other sustainability-related working groups, networks and committees report to this committee. This Committee oversees the work and commitment to biodiversity across the campuses.



SUSTAINABILITY GOVERNANCE

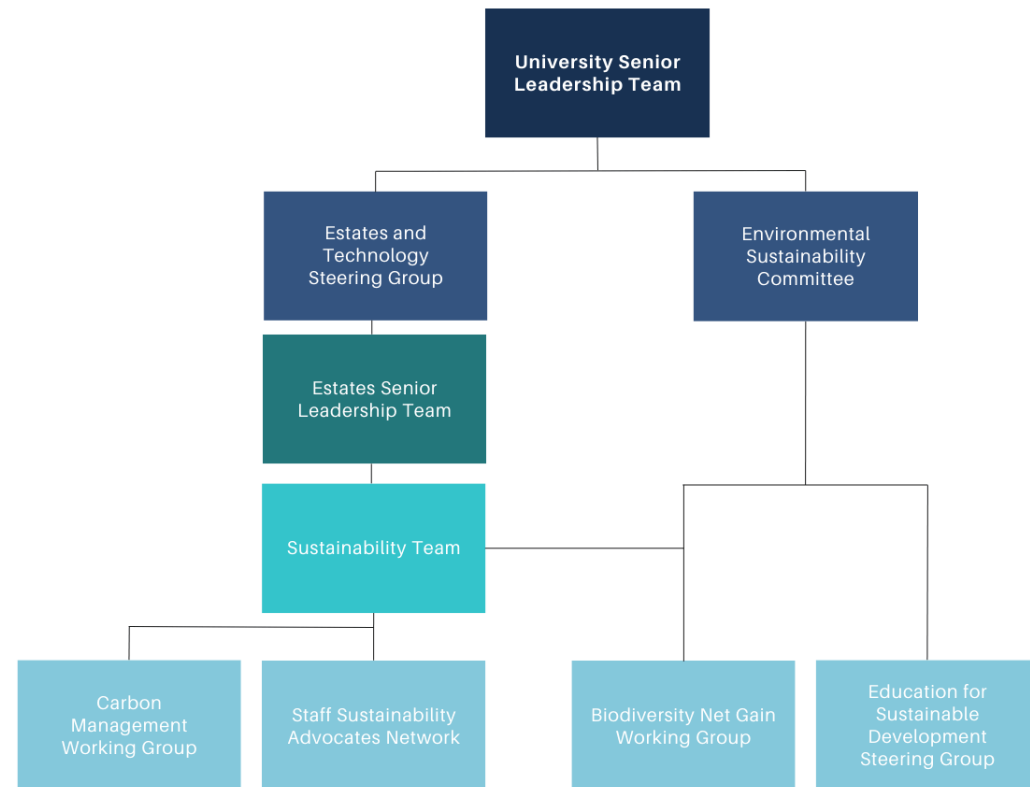


Figure 1: Sustainability Governance Structure at UoL



2.2 Biodiversity Net Gain Working Group

This group is responsible for developing, reviewing, and agreeing the actions to ensure continual improvement of the BAP.

The initial aims of the group are as follows:

- To develop and be responsible for the University of Lincoln (UoL) BAP.
- Approve landscaping specifications for projects.
- To be a consultee in relation to landscaping plans as part of the Masterplan development and delivery for Brayford and Riseholme.
- To commission a baseline habitat survey for all three campuses in 2023/24.
- To develop a repository for survey results and data on sightings, e.g., historic BioBlitz data at Greater Lincolnshire Nature Partnership.
- Encourage student engagement in surveying, including workshops, which could be delivered in collaboration with local stakeholders.
- Support improvement in biodiversity at Holbeach specifically, despite challenges regarding land ownership, e.g., plant fruit trees and install green roof cycle shelter.
- Improve education around biodiversity and landscape management, e.g., encourage 'untidiness' and increase signage identifying measures that have been taken to improve biodiversity.
- Run educational surveys of weeds around the University Estate.

The initial UoL BAP is for 12 months 2023/24 to allow for delivery of short-term objectives to enhance biodiversity across the Estate. The BAP will be reviewed each year, with a view to developing a longer-term (5 year) plan, consistent with the master plans for the Estate. The plans will need to ensure they allow for longer term changes and measurement of impact but remain relevant and focused.

3.0 Relevant legislative requirements

As part of the Environment and Energy Management System, the University maintains a register of Compliance Obligations. Biodiversity-related legislative requirements can be found within this document. In addition, we will implement good practice guidance relating to specific species, wherever possible.

The UoL BAP will respond to legislative requirements and set actions that are aligned with the UK 25-year [Environment Plan](#), which identifies the following goals:

- Clean air.
- Clean and plentiful water.
- Thriving plants and wildlife.
- A reduced risk of harm from environmental hazards such as flooding and drought.
- Using resources from nature more sustainably and efficiently.
- Enhanced beauty, heritage and engagement with the natural environment.
- Mitigating and adapting to climate change.
- Minimising waste.
- Managing exposure to chemicals.
- Enhancing biosecurity.



3.1 Biodiversity Net Gain

The Environment Act 2021 makes provision for biodiversity gain to be a condition of planning permission in England. Developments that need planning permission will need to achieve a measurable net gain in biodiversity of 10% or more, as a new general planning condition, within the Town & Country Planning Act 1990. Biodiversity Net Gain is a way to contribute to the recovery of nature while developing land. This will impact on future developments on the University Estate, and will apply to developments from November 2023 and small sites from April 2024.

When submitting for planning consent, the plan must show a gain of at least 10% as measured by an ecologist against an established baseline (from pre-development biodiversity value of onsite habitats to biodiversity value attributable to the development). Onsite net gain must be legally secured for 30+ years after completion of the development.

3.1.1 Biodiversity Net Gain Calculation

The DEFRA biodiversity metric 3.1 measures area-based habitats, e.g., rivers and streams, hedgerows, by a qualified ecologist, using 'biodiversity units' as the metric.

The biodiversity value attributable to the development, must be demonstrated by:

1. Biodiversity value of the onsite habitat (inside the 'red line' development).
2. Biodiversity value of any registered offsite biodiversity gain (nearby) allocated to the development (inside the 'blue line').
3. Biodiversity value of any purchases 'biodiversity credits'.

Of the above options, the emphasis is on onsite and nearby offsite biodiversity gain.

The ecologist agrees the date of assessment with the Local Plan Authority (LPA) and the planning submission will need to show 10% gain in the above areas of habitat. A development cannot be started unless the Net Gain plan (submitted as part of planning consent) is approved, otherwise a penalty from LPA may be given.

4.0 Guiding Principles of the UoL Biodiversity Action Plan

Specific actions will be set by the governance group responsible for developing and delivering the actions set out within the BAP.

The BAP is based on the below principles, which guide the actions set:

1. To be led by science and the guidance of the Biodiversity Net Gain Working Group to set appropriate actions and targets as part of the BAP.
2. To establish a baseline for biodiversity on each of the three University Campuses.
3. To identify the most appropriate measures that can be taken to enhance biodiversity.
4. To ensure that there is no net loss of biodiversity across our Estate, due to changes to management regimes or land requirements.
5. To ensure compliance with the Biodiversity Net Gain requirement for new developments and deliver a gain of at least 10% for all new developments that require planning permission.
6. To deliver continual improvement of biodiversity and maximise carbon sequestration.
7. Take steps to quantify the carbon sequestration value of the University's natural capital.
8. To mitigate or minimise any detrimental impact on wildlife or nature, as a result of works carried out by, or for, the University.
9. To seek the advice of qualified ecologists to guide actions taken, whilst also drawing on the expertise of academic colleagues in relevant subject matters to ensure actions are informed and appropriate.
10. To engage our staff and students in projects to enhance biodiversity and create habitats for wildlife on our campus.
11. To enable access to green spaces on our campus for the purpose of mental and physical wellbeing.
12. To establish partnerships with stakeholders to improve biodiversity.
13. To maintain and implement the [Nature Positive University](#) pledge.



Note: Natural England, in their [2019 report](#) on engagement in nature, found that when considering the proportion of the population spending time in nature every week, for Lincolnshire, it was only 48% (one of the ten lowest percentages for England, only ahead of the West Midlands).

4.1 References to external documents and local strategy

- Greater Lincolnshire Nature Partnership - [Nature Strategy 2020](#)
- Lincolnshire County Council [Tree Planting Project](#)
- [Central Lincolnshire Local Plan](#)
- SBTs ([Science Based Targets](#)) for Biodiversity

5.0 Current Baseline for Biodiversity

Biodiversity baseline surveys were carried out by Burton Reid Associates for the Riseholme and Brayford campuses in 2023.

The aim of these surveys was to establish a baseline, using the DEFRA 3.1 metric, and to identify key habitats on the University estate, particularly those that have the great opportunity for enhancing biodiversity, as well as areas that are most constrained. Results have been used to inform the actions set out below.

The surveys, including maps identifying areas of greatest opportunity for enhancing biodiversity, are included as an appendix to this document.

A survey for the Holbeach campus will be delivered in 2023/24.



6.0 Biodiversity Net Gain Actions

6.1 Vegetation Management and Landscaping

Below are a series of 'Action Tables,' the first relates to all UoL campuses, and then an action table for individual campuses, where specific targets have been identified.

Actions Applicable to all Campuses	Person Responsible	Target Date	Monitoring
To employ sensitive grounds maintenance and management practices.	Riseholme Farm and Estates Manager, Facilities Manager	September 2023	Ongoing, in accordance with Biodiversity Policy, reviewed annually
Review the University's approach to the use of rodenticides (with the Riseholme farm as an exception), with the aim to reduce or eliminate unintended harm to mammals.	Facilities Manager	December 2023	Quantity of rodenticides procured
Review the University's approach to the use of herbicides to control weed growth on the Estate.	Riseholme Farm and Estates Manager	December 2023	Quantity of herbicides procured
Engage staff and students to record observations and identification of natural resources on the UoL Estate using iNaturalist	Biodiversity Net Gain Working Group	May 2024	Records on iNaturalist
Establish biodiversity monitoring and regular surveying, working with students from BSc Ecology and Conversation and MSc Biodiversity, Conservation and Nature Recovery.	Biodiversity Net Gain Working Group	June 2024	Data / Reports received
Engage with the Greater Lincolnshire Nature Partnership and other environmental/stakeholder organisations to peer review the actions and progress set out in this BAP.	Sustainability Manager	February 2024	Recorded feedback on BAP
Manage invasive species in accordance with good practice and the law.	Riseholme Farm and Estates Manager, Facilities Manager	Ongoing	Annual review of invasive species present on Estate
Provide opportunities for staff and students to engage in biodiversity via the delivery of a Wildlife and Biodiversity Engagement Campaign, to be developed in 2023/24.	Sustainability Manager	Launch September 2024	Proposal approved Feb 2024
Choose native species for new and replacement planting.	Riseholme Grounds Team	Ongoing	Surveys of flora on the estate
Plant native trees and hedgerows (Hawthorn, Blackthorn, Elder)	Riseholme Grounds Team	Ongoing	Surveys / observations

Commission tree surveys periodically to determine the health (and safety implications) of the trees on our Estate. Take action to manage trees in accordance with these surveys.	Facilities Manager	Periodically	Action plans developed from Tree surveys
Increase the amount of signage (including Wildflower areas) and information boards to communicate benefits of biodiversity enhancement projects to staff, students and members of the public.	Sustainability Manager	May 2024	Purchase Order for new signage for key areas / high footfall areas
Establish current nest box locations (for bird, bee, bat boxes) and identify new sites for boxes. Species to include swift boxes, barn owls, little owls and other species in decline (BBS population declines and increases BTO - British Trust for Ornithology).	Riseholme Grounds Team, Sustainability Manager	February 2024	Quantity of boxes existing and planned
Undertake key species surveys to understand presence, current populations, potential ecological constraints and any management required.	Biodiversity Net Gain Working Group	December 2024	Surveys, data and reports
Create visual landscaping plans to be shared with our key stakeholders and guide the future development of external spaces across the University Estate.	Riseholme Grounds Team, Sustainability Manager	June 2024	Creation of visual landscaping plans Stakeholder meetings to share plans

6.2 Brayford Campus actions

Landscape management is predominantly undertaken by the Riseholme Grounds Team at the Brayford Campus. Some elements of grounds management are undertaken by a landscaper management contractor. It is essential that work carried out by contractors supports the delivery of the BAP and aligned to the actions taken by the University.

Actions specific to Brayford Campus	Person Responsible	Target Date	Monitoring
Develop an improvement plan for the management of Charlotte Scott Balance Ponds.	Sustainability Manager	June 2024	Delivery of an agreed improvement plan
Work with the IDB to identify opportunities to improve the river and banks near the Engine Shed.	Sustainability Manager	August 2024	Meeting with IDB Management plan in place
Increase planting in green space between the Medical School and the Isaac Newton Building (allow areas to grow wild / create mown paths). Work with Riseholme Grounds Team to plant native trees and bushes.	Riseholme Grounds Team	June 2024	Number of trees planted
Identify a potential site for green waste composters and more log stacks around the campus to improve biodiversity at a bacterial, fungal and invertebrate level, generating food for larger creatures.	Riseholme Grounds Team	June 2024	Proposal for green waste composter(s)
Create pilot projects for (1) wild paving (without impeding accessibility); and (2) microbeds (removal of paving slabs to plant / leave wild)	Riseholme Grounds Team	June 2024	Proposal for pilot projects

6.3 Riseholme Campus

Landscape management is undertaken by the Riseholme Grounds Team at the Riseholme Campus. It is essential that work carried out by contractors supports the delivery of the BAP and aligned to the actions taken by the University.

Action specific to Riseholme Campus	Person Responsible	Target Date	Monitoring
Measure the carbon footprint of the Riseholme farm, including the inputs and outputs from an agricultural perspective.	Sustainability Manager and Riseholme Farm and Estates Manager	July 2024	Carbon footprint assumptions and data
Create new hedgerows / infill gaps <ul style="list-style-type: none"> - Identify infill hedgerow required - Hedgerow planting - Identify potential new hedgerows 	Riseholme Grounds Team	October 2023 December 2023 July 2024	Plan of hedgerow required Purchase of hedgerow Plan of new hedgerow required
Establish and maintain wildflower areas	Riseholme Grounds Team	Ongoing	Observation of wildflower meadows
Create deadwood habitats and/or dead hedges	Sustainability Manager and Riseholme Grounds Team	April 2024	Habitat survey

6.4 Holbeach Campus

At Holbeach grounds management is undertaken by landscape management contractor.

Action specific to Holbeach Campus	Person Responsible	Target Date	Monitoring
To engage with local landscape management contractors to reduce the schedule of mowing to encourage an increased number of wildflowers to support local wildlife.	Facilities Manager	September 2023	Meeting with landscape contractor Mowing schedule in place
Tree planting	Facilities Manager	March 2024	Identification of tree planting area Planting plan / map

Appendix I: Landscaping Plan and Map

Brayford Campus

