University of Suffolk

Habitat Plan

2025 to 2030

March 2025

Habitat Plan 2025-2030

1. Introduction:

This Habitats Plan represents the University of Suffolk's strategic framework for advancing urban ecological sustainability over the next five years. It builds upon the substantial achievements of the 2019-2024 Biodiversity Plan, which successfully sought to address urban landscape degradation through the establishment of biodiverse green spaces. This new plan provides the framework for the next stages our developmental approach to ecological management within the university's open urban campus environment.

Central to the Habitats Plan is a transition from a species-specific focus to a habitat-centric strategy aimed at enriching and sustaining diverse ecosystems. By enhancing habitat quality and connectivity, the plan seeks to support robust ecological networks capable of engendering biodiversity resilience while delivering essential ecosystem services, such as climate mitigation, air quality improvement, and opportunities for education and engagement. This comprehensive approach seeks to address the importance of integrated habitat management in addressing the unique challenges posed by urbanisation and ecological fragmentation.

This document sets a developmental trajectory that aligns with contemporary urban ecological frameworks, employing evidence-based methodologies to achieve its objectives. We will seek to monitor and support our hybrid and emerging novel ecosystems working through our estates, research and curriculum functions to classify and to understand the varying impacts of human activity on ecosystems and to inform management and restoration practices as we work towards addressing climate resilience.

2. Priorities and Objectives

This Habitat Plan is designed to ensure that habitats and biodiversity continue to be an integral part of the University, increasing connectivity within the wider regional habitat network through projects and initiatives that support the University's Strategy and the United Nations Sustainable Development Goals (SDGs). The plan places particular emphasis on SDGs 4, 14, 15, and 17 which we will work towards meeting by delivering through the Habitats Action Plan the following objectives:

- To enhance the quality of habitat and biodiversity on the Estates under the University's management, ensuring alignment with national and regional biodiversity priorities, including those set out in Local Nature Recovery Strategies (LNRS) and Suffolk County Council's environmental initiatives.

- To meet and, where possible, exceed the requirements set out in the Wildlife and Countryside Act (1981), Natural Environment and Rural Communities Act (2006), and associated UK Wildlife and Habitat regulations, with a focus on biodiversity net gain for all new capital build projects as mandated by the Environment Act (2021). The plan will ensure the University plays a leading role in biodiversity conservation and enhancement, with the aim of contributing positively to local and national biodiversity net gain targets.

- To comply with Section 40 of the Natural Environment and Rural Communities Act (2006), which requires public bodies to conserve biodiversity through both conservation and enhancement activities, in line with DEFRA's updated biodiversity policies and local strategies, including Suffolk's Green Infrastructure Strategy.

- To enhance the quality of life and well-being for staff and students by expanding the student experience, making the University of Suffolk a desirable place to live, work, and study, while delivering sustainable habitats through ecological responsibility and engagement activities.

- To create additional Living Lab curriculum and research opportunities as valuable teaching resources for both undergraduate and postgraduate research projects, promoting the integration of sustainability into academic work.

- To further develop partnership links with industry, initiating and implementing knowledge exchange on sustainable practices and environmental conservation.

- To further develop community links and engage with local schools, charities, and wildlife groups, increasing awareness of the natural environment and furthering the University's contribution to local and regional biodiversity goals in collaboration with Suffolk County Council and Ipswich Borough Council's environmental initiatives.

Habitats and biodiversity, particularly in urban settings, represent a complex and often undervalued asset within decision-making processes. In recognition of their critical role in enhancing sustainability and resilience, the University is committed to integrating best practices in habitat conservation and biodiversity enhancement. To ensure a strategic, accountable approach in identifying core values and directing funding and resources, the Estates Department will adhere to the following three core priorities in the implementation of the Plan:

- **Priority 1**: *Protect existing habitats and biodiversity*

  By ensuring a comprehensive understanding of habitat condition and species value, we will safeguard the health of existing ecosystems. This will involve ongoing habitat assessments, the use of ecological monitoring tools, and close collaboration with Grounds Service Partners to ensure proactive management and protection of biodiversity. We will work with local experts to apply the latest scientific research and monitoring techniques to assess the health of these habitats and adapt management practices accordingly.

- **Priority 2**: *Enhance Habitats and Ecological Corridors*

  We will prioritise the enhancement of habitats and ecological corridors by incorporating biodiversity considerations into all planning, construction, and maintenance projects. This includes ensuring that sustainability and biodiversity goals are central to decision-making

within all relevant development activities, guided by the University's ambitions and the environmental strategies of Ipswich Borough Council, and any partner ecological organisations. Additionally, we will actively seek innovative green infrastructure solutions, such as green roofs, urban habitat corridors, and wildlife landscaping, in collaboration with Grounds Service Partners to create multi-functional spaces that support both biodiversity and community well-being.

- **Priority 3**: *Promote Engagement, Research, and Education*

Engaging students, staff, and the wider community in habitat knowledge exchange and biodiversity conservation efforts is crucial. We will further develop a culture of habitat through targeted research projects, educational initiatives, and practical engagement activities, such as habitat restoration workshops and citizen science projects. The inclusion of students and local partners in real-world research, coupled with innovative teaching models such as Living Lab curriculum, will allow us to expand the understanding of biodiversity issues and provide actionable insights. This priority will also involve engaging the wider Ipswich community in habitat conservation through outreach programs, events, and partnerships with local conservation groups and wildlife organisations.

The University of Suffolk's Estates Strategic Masterplan will work over the next five years to take a forward-thinking approach to habitat design, incorporating green infrastructure principles where possible, to create a climate-resilient, biodiverse, and thriving campus environment. Building on the guidance from Natural England's Green Infrastructure Design Guide, we will work to include design features such as sustainable drainage systems (SuDS), green and blue roofs, rain gardens, and ecological corridors to establish a connected network of habitats. These measures will work towards integrating national Urban Greening Factor (UGF) targets into our project work, achieving at least 40% green cover in urban spaces, and deliver measurable biodiversity net gain (BNG) outcomes. Efforts to increase tree canopy cover will also contribute to reducing urban heat islands, improving air quality, and enhancing the ecological and aesthetic value of the campus.

Habitat design will reflect principles of local character, celebrating the natural and cultural heritage of Suffolk while enhancing the University's built environment. This plan will also prioritise accessibility and inclusivity, creating nature-rich spaces that support health and well-being for students, staff, and the local community.

Our projects and initiatives will be subject to monitoring and evaluation, to ensure that our university meets both ecological objectives and community goals.

3. Context:

The University of Suffolk is an urban campus located in Ipswich, Suffolk, in the East of England, a region renowned for its rich natural environment. Suffolk's biodiversity is safeguarded by an extensive network of protected areas, including Sites of Special Scientific Interest (SSSI), which cover 8% of the county, and locally designated County Wildlife Sites (CWS), which account for an additional 3%. These protected areas provide essential habitats for wildlife, supporting

both nationally and internationally significant species and ecosystems. Without these designations, Suffolk's unique biodiversity would face severe depletion. These protected areas not only act as biodiversity hotspots but also deliver critical ecosystem services, including:

- ***Provisioning services***: Supplying food, fresh water, wood, fibre, genetic resources, and medicines.
- ***Regulating services***: Managing processes such as climate regulation, water purification, pollination, and pest control.
- ***Habitat services:*** Supporting migratory species and preserving genetic diversity.
- ***Cultural services***: Offering recreational opportunities, aesthetic value, and intellectual and spiritual enrichment.

The National Planning Policy Framework (NPPF) and Suffolk's Biodiversity Action Plan (BAP) reinforce the importance of protecting and enhancing these vital ecological assets. Local planning policies through the Ipswich Local Plan and supplementary planning documents, integrate the preservation, restoration, and recreation of priority habitats and ecological networks, making impacts on legally protected species and habitats material considerations in planning decisions. This ensures that biodiversity remains central to development in Suffolk and contributes to the protection of ecological networks and the recovery of priority species populations.

Access to green space is not only vital for biodiversity but also plays a transformative and evidenced role in human well-being. Individuals living within 500 meters of accessible green spaces are 24% more likely to meet recommended physical activity levels, which can lead to significant public health benefits, with reductions in sedentary behaviour contributing to an estimated £2 billion annually in savings on the treatment of coronary heart disease, cancer, and strokes. Since 2022, the NHS has invested £4 million in green prescribing initiatives, leveraging nature's ability to enhance mental health, physical activity, and social equity. Ipswich itself contains 500 hectares of green space and wildlife habitats, which supports recreation and well-being while providing vital ecosystem services such as water management and flood mitigation in an urban context.

4. Site Characteristics:

The University of Suffolk estate is comprised of multiple buildings situated on an urban site, with both private access roads and a public highway. The campus can be broadly divided into two sections, which are separated by Fore Street. This street demarcates the recently developed waterfront area along Neptune Quay from the older part of the campus to the north. Both the North Campus and Waterfront sites feature several public access points, as illustrated in Figure 1. Figure 2 presents a site map, highlighting university buildings and the associated green spaces.

The estate is bordered to the southwest by the Waterfront, a primarily mixed-use development combining residential and business spaces, which is largely pedestrianised. To the north, the estate adjoins New Suffolk College. To the east, Alexandria Park is accessible via Back Hamlet, with residential areas extending beyond. Duke Street runs north to south, with the Waterfront building situated to the west. Long Street and New Street, privately

owned by the University of Suffolk, are located on the North Campus. East of the North Campus lies Brickmakers Wood, also owned by the University and currently under a charitable lease.

4.1 Historic Land Use:

Historic map research indicates that the North Campus, including the area where Brickmakers Wood is located, was a clay pit dating back to the 1670s. The woodland escarpment, a key topographical feature of the area, owes its existence to the Brick and Tile Works that likely established itself there before the 1850s. During both World Wars, the woodland and the land to the west of Brickmakers were repurposed for aircraft part manufacturing and, later, for the storage of vehicles and gas for barrage balloon filling. The remainder of North Campus was originally a densely packed early Victorian residential area known as The Potteries. In 1939, the houses were demolished, and most of the residents relocated before the outbreak of World War II. After remaining vacant for some time, the land was repurposed for educational use in the late 1960s.

The Waterfront area, including the Waterfront Building, Neptune Marina, James Hehir building and adjacent car parks, is located on the Ipswich wet dock, which opened in 1842, though docks and harbours have existed at this site for centuries. Historically, the area was heavily industrialised, serving businesses that supported the dock, as well as manufacturing gas, fertilizers, and engineering parts.

The land on which the University of Suffolk now stands therefore is characterised by compacted, brownfield terrain, with no evidence of green spaces for at least 200 years prior to the establishment of the Civic College, and later the University. This long history of industrial and residential use has shaped the current landscape, which, while recently repurposed for educational and environmental purposes, presents its own set of habitat challenges. The restoration of these areas to support diverse habitats requires careful management, given the site's historical degradation and the ongoing efforts to enhance biodiversity within this complex environment.

4.2 Geology

The geology across the Campus is variable and site investigations carried out in 1986, show that made ground exists at variable depths over alluvium and terrace gravels, over glacial valley infill and upper chalk, with no London clay. Groundwater lies at an average of about 2 to 3m.

4.3 Key Statutory Designations:

Statutory Designation	Description	Distance from Site
RAMSAR	Stour and Orwell Estuary	>1km
SSSI	Stour and Orwell Estuary	>1km
Special Protection Area (SPA)	Stour and Orwell Estuary	>1km
University falls within the impact Risk Zone for both of the above		
SSSI	Stoke Tunnel	1km
Nitrate Vulnerable Zone	On site – all areas	On site
Designated habitats		

Woodland Improvement – high spatial priority	Brickmakers Wood	Onsite
Deciduous woodland/ National Forest Inventory	Brickmakers Wood	Onsite
Deciduous woodland/ National Forest Inventory	Holywells Park	527m SE
Deciduous woodland/ National Forest Inventory	Finbars Walk	540m NE
Species	**Identified by MAGIC DEFRA/ SBIS – Common Names**	
Birds	Curlew, Lapwing, Redshank, Turtledove, Yellow Wagtail, Hedge Accentor (Dunnock)*, Common Starling*, Song Thrush*, House Sparrow*, Herring Gull, Swift, Raptors	(*Suffolk Priority Species)
Mammals	Common Pipistrelle, Soprano Pipistrelle, Daubentons, Hedgehog	Associated Suffolk Priority Species.
Reptiles and Amphibians	Great Crested Newt, Common Toad	As above
Bees and Wasps	Weevil Hunting Wasp, 5-Banded Tailed Digger Wasp	As above
Beetles	Necklace Ground Beetle, Stag Beetle	As above
Mosses and Liverworts	Thatch Moss, Chalk Screw Moss	As above
Plants	Broad–leaved Cudweed, Red Hemp-nettle, Annual Knawel, Fine-leaved Sandwort, Ash, Elm	As above

4.4 Habitat Compartments

The University estate blends educational spaces with multiple buildings and hard surfaces, alongside a variety of distinct habitats that have been created as part of a strategic programme of works under the previous Biodiversity Plan (2019 – 2024). These include:

- Two wildflower meadows,
- A physic garden,
- Areas of improved grassland,
- A small heritage orchard and bumble bee buffet,
- Wildlife garden with pond,
- Areas of species-rich, native hedge,

As a result of the 2019-2024 Biodiversity Plan, the estate has seen an increase in biodiversity and species uplift, as measured using the Joint Nature Conservation Committee's Phase 1 Habitat Survey Guidelines.

Following our previous five-year Biodiversity Plan, all identified habitat compartments have been re-evaluated and ranked based on their progress in improving ecological status. This assessment prioritises species abundance, habitat quality, and reversing species decline. An evidence-based approach highlights both successful recovery and areas needing further intervention and includes the addition of the new areas created over the last 5 years. This process informs targeted conservation efforts and ensures the long-term sustainability of our natural environments, the results of which are highlighted below.

- Brickmakers: **Favourable.**
- Amenity Area Arts 1 – wildlife garden – GR: 1719344204: **Favourable improving**
- Amenity Area Arts 2 – Woodland Walk – GR: 1716344184: **Adequate.**
- Atrium East – Bumblebee Buffet Area – GR: 1706544236: **Favourable Improving.**
- Atrium west – Wildflower Meadow and Swift Boxes – GR: 1696744246: **Favourable Improving.**
- Waterfront Building Coprolite Street – GR 1702644059: **Inadequate**
- Waterfront Building green roof – GR: 1700644077: **Adequate**
- Jame Hehir wildflower meadow – GR: 1707843814: **Favourable Improving**
- James Hehir Green Roof – GR: 1702943845: **Inadequate**

Over the course of this Habitat Plan, we will aim to raise adequate sites to at least a 'favourable improving' status and progress 'favourable improving' sites to a fully 'favourable' classification.

4.5 Living Laboratories

Since 2016, the University Estates Department has been at the forefront of embedding sustainability across the organisation through the establishment of on-site Campus Living Laboratories. These Living Labs serve as practical frameworks for addressing real-life sustainability challenges, enabling knowledge transfer among students, operational teams, and academic staff. This is achieved through active engagement, internal and external partnership collaboration, and the testing of innovative management practices and technologies.

A significant number of these initiatives have focused on biodiversity restoration and enhancement, working to meet the objectives of the 2019–2024 Biodiversity Plan. Beyond meeting these objectives, the Living Labs provide an ongoing platform for generating insights into the practical application of biodiversity-based programmes. Over the past five years, these programmes have created opportunities for research and curriculum engagement, particularly through assessment and surveying activities that generate measurable performance metrics.

This approach will remain integral to the success of the Habitat Plan, ensuring the continued transformation and ecological enhancement of the campus environment.

The University has developed four main Ecological Living Labs for biodiversity, listed below:

- Brickmakers Wood
- Adastral Park, Digitech – Smart House
- Atrium West – Wildflower Meadow
- Wellbeing Allotment

4.5.1 Brickmakers Wood

Brickmakers Wood is a University owned 3.5 acre brown field urban woodland on North Campus abutting Alexandra Park. Following an audit in 2015 the site was found to be in deleterious condition, with evidence of substance misuse and anti-social behaviour. As part of our Estates commitment to sustainability a long term peppercorn lease was extended to ERCT; a regional cancer care and well being woodland charity whose exemplary work in social sustainability, education and biodiversity resonate with the University's strategic vision to seek to address the SDG's and habitat creation within its own activities and research.

The Living Lab Project has provided curriculum access for Wildlife, Radiotherapy, Oncology, Arts and Teacher Training students, affording them designated curriculum time to work within the woodland on team building conservation activities along clinical representatives from all four partner NHS Trusts, academic SEN and nature conservation specialists.

4.5.2 Digitech Smart House

The DigiTech Smart House serves as a dynamic "living laboratory," purpose-built to evaluate and showcase the efficacy of sustainable materials, energy-efficient technologies, and advanced water management systems. This innovative facility provides a platform for practical experimentation and real-time data collection, offering valuable insights into the performance and integration of environmentally responsible solutions.

A key feature of the Smart House is its sophisticated rainwater harvesting and intelligent irrigation systems. These systems enable precise monitoring and management of water usage, supporting optimal crop growth within a series of raised beds designed to replicate domestic horticulture. In addition to edible crops, these beds host carefully selected plant species chosen to encourage cross-pollination, facilitated by the strategic introduction of pollinator species.

4.5.3 Wildflower Meadow

The wildflower meadow serves as a dynamic living lab on campus, offering significant ecological value and engagement with the university community. As a habitat for a diverse range of native plant species, the meadow plays a critical role in supporting biodiversity and has credited a notable increase in the presence of indicator species, reflecting an uplift in the health of the surrounding urban environment. The meadow provides opportunities for both students and staff to engage directly with nature, through activities such as surveying, monitoring plant growth, and participating in ongoing maintenance.

Additionally, the proximity of swift boxes nearby amplifies the importance of the meadow, contributing to the broader conservation efforts for local bird populations.

4.5.4 Wellbeing Allotment

The Wellbeing Allotment at the University of Suffolk is a practical green space focused on ecological sustainability and community health, supporting responsible food production and sustainable agricultural practices.

From a habitat perspective, the allotment provides valuable biodiversity benefits by cultivating a range of plant species that support pollinators and other beneficial wildlife. The careful selection of crops and companion plants enhances habitat quality, encouraging species abundance and creating a micro-ecosystem that contributes to local ecological networks. The space also aids in reversing species loss by offering food sources and shelter for insects and birds.

In addition to cultivation, the allotment functions as an outdoor learning and wellbeing area, offering staff and students a space to take breaks from work and study, improving mental and physical health through hands-on engagement with nature. The space is also used for outdoor education, one-on-one academic sessions, and practical training for paramedic students.

4.4 Student and Staff Engagement and Opportunities

Green spaces constitute an essential component not only in sustaining biodiversity but also in improving the health and wellbeing of students and staff. Extensive research substantiates that exposure to green environments enhances mental and physical health by mitigating stress, anxiety, depression, and loneliness, while simultaneously cultivating a sense of community and social cohesion (Oxford Health NHS Foundation Trust, 2021; North London Mental Health Partnership, 2023). Furthermore, our green spaces enhance the spatial character of the campus, engendering a distinctive 'sense of place', that supports student satisfaction and experience.

Beyond individual wellbeing, we are able to offer invaluable opportunities for engagement, skill acquisition, and scholarly inquiry. Activities such as biodiversity assessments, applied conservation efforts, and horticultural undertakings have over the last few years provided experiential learning and collective participation. Initiatives such as the wellbeing allotment epitomise the therapeutic advantages of horticulture while also underpinning community welfare initiatives and the provision of surplus produce to local food banks.

The development of our urban habitats is intrinsically connected to the University's Civic University mission, advancing the principles of sustainability, social accountability, and ecological literacy. These spaces embody exemplars of how academic institutions can confront and mitigate biodiversity degradation and climate change, while simultaneously enriching the educational and communal experience of our immediate and wider communities.

5 Habitat Action Plan:

The University of Suffolk's, Habitat Action Plan serves as the principal supporting document driving the implementation of this Habitats Plan and operationalises our strategic objectives and priorities.

The Habitat Action Plan is reviewed on an annual basis to ensure its continued relevance and effectiveness. It delineates specific programmes of work, including the maintenance of existing habitats, the establishment of new ecological areas, and the promotion of sustainable management practices and engagement activities. Through this structured approach, the Action Plan ensures that biodiversity remains an integral and evolving component of the University's landscape and its wider regional habitat networks.

Both the Habitat Plan and the Habitat Action Plan are accessible on the University of Suffolk website and the staff and student intranet.