

BIODIVERSITY ACTION PLAN

2021 - 2026



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1. INTRODUCTION

The University of Hertfordshire Biodiversity Action Plan sets out our approach to biodiversity and how we aim to deliver our vision to enhance biodiversity, engage and educate the community, and to contribute to biodiversity conservation on campus and further afield. It considers the various internal and external risks and impacts associated with biodiversity, and details how we manage these in line with our broader sustainability and legal commitments, and how the process is governed, monitored, and reported to ensure continual improvement.

1.1 BACKGROUND

Coined by biologists in the 1980s as a contraction of biological diversity, the term usually refers to the **variety of life on Earth as a whole**. The U.N. Convention on Biological Diversity (CBD) breaks it down as follows:

“Biological diversity” means the variability among living organisms from all sources including, inter alia, terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are part. This also includes diversity within species, between species and of ecosystems.

Biodiversity provides four main types of benefits to humans: nutritional, cultural, health, and climate-related, and allows us to live happy and healthy lives. Healthy and functional ecosystems play a crucial role in sustaining human livelihoods through providing necessities and benefits such as food, water, energy sources and carbon sequestration, known as ‘ecosystem services.’ See image below.

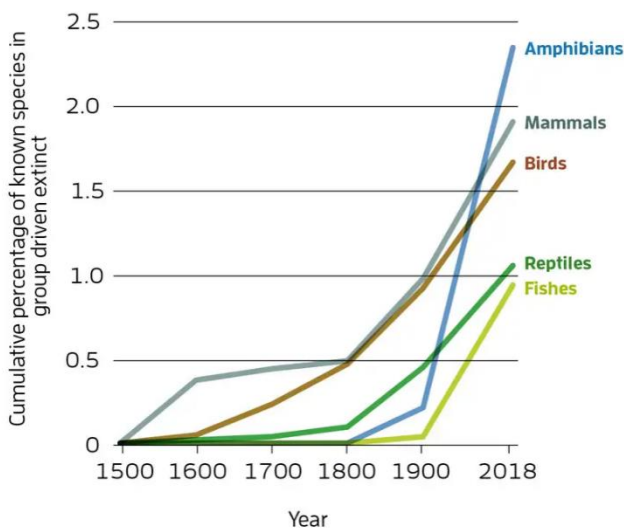


Fig 1. Biodiversity provides four main types of benefits to humans: nutritional, cultural, health, and climate-related.
Source: [Landscape News](#)

1.1.1 THE GLOBAL CONTEXT

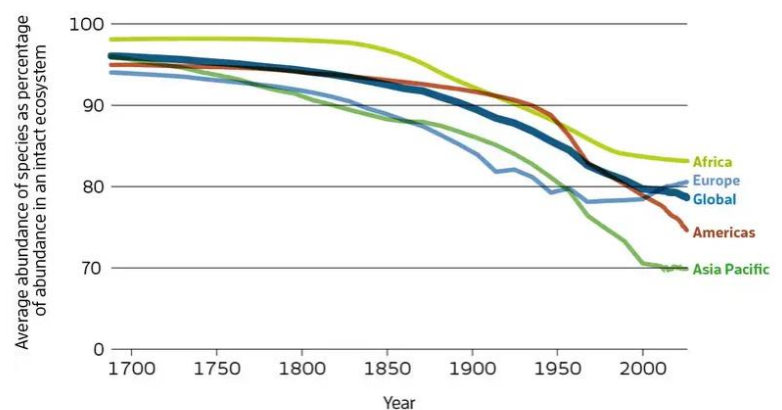
Current rates of ecosystem degradation are unprecedented and unsustainable, and this is largely due to human intervention. More than 70 per cent of ice-free land is now under human control, and the mass of human-made infrastructure exceeds all biomass. Humans and domesticated animals make up more than 90 per cent of the mammalian mass on the planet. Our actions are contributing to a mass extinction that could see up to a million species disappear in the coming decades. During the 20th century, extinction rates were about 100 times higher than they would have been without humans significantly altering most of the planet's surface¹.

Extinctions since 1500



SOURCE: IPBES Global Assessment Report on Biodiversity and Ecosystem Services

Loss of species richness



SOURCE: WWF/ZSL Global Living Planet Index

Fig 2. Extinction levels and loss of species richness since 1700. Sources listed above.

In response to this The Rio Conventions (2014) pledged a global commitment to protect and significantly slowdown the current rate of biodiversity loss. This pledge was endorsed by the 2002 World Summit on Sustainable Development. More recently, the UN Environmental Management Group has released a [report](#) supporting the global biodiversity agenda and delivering the [post 2020 global biodiversity framework](#).

1.1.2 THE NATIONAL CONTEXT

The [UK Biodiversity Strategy](#) was launched by DEFRA (2011) to identify areas to focus conservation work. The priorities included reducing environmental pressures and improving knowledge about biodiversity (DEFRA, 2011). Furthermore, DEFRA (2011), outlined goals including restoration of degraded ecosystems and encouraging more individuals to become engaged with biodiversity.

¹ <https://news.globallandscapesforum.org/44538/biodiversity-101-why-it-matters-and-how-to-protect-it/>

Building on this, the UK Governments 25-year Environmental Plan (DEFRA, 2018) set out to be “first generation to leave our natural environment in a better state than we found it” as an ambition to combat the UK biodiversity degradation and decline, with a “biodiversity net gain approach” to future infrastructure to help deliver this outcome. The Environmental Act 2021 provides the legal framework for delivering the above ambitions.

1.1.3 THE LOCAL CONTEXT

The University of Hertfordshire campuses are located in Hatfield in the borough of Welwyn and Hatfield, Hertfordshire. Biodiversity in Hertfordshire is experiencing a similar decline to the rest of the UK. Evidence analysed in the [2020 State of Nature](#) report by Herts and Middlesex Wildlife Trust provided a stark warning on biodiversity, “there is work to be done”.

Their data shows biodiversity is being lost at an alarming rate and this is closely interlinked with climate change (Three species becoming extinct every two years in Hertfordshire) (Herts and Middlesex Wildlife Trust, 2020). The two issues of climate change and biodiversity loss are connected. Not only is biodiversity affected by Climate Change but climate change is accelerated by biodiversity loss. In Hertfordshire, climate change appears to be exacerbating already existing issues of over-abstraction of ground water, urbanisation, and poor woodland management (Herts and Middlesex Wildlife Trust, 2020).

Whilst the University of Hertfordshire (UH) campus habitats are limited in their diversity and wilderness, the habitats can still play an important role for many species listed in the Hertfordshire State of Nature report, and whilst the list of species might not be diverse, the campuses do support abundance of numbers for certain insects, plants, trees and bird species (see appendix 1). Some examples include: Blue Tit (*Cyanistes caeruleus*), Wood Speedwell (*Veronica officinalis*), Snowdrop (*Galanthus*), Pig-Nut (*Conopodium majus*), Blackbird (*Turdus merula*), Robin (*Erithacus rubecula*), Honey Bee (*Apis mellifera*), Bumble Bee (*Bombus*), Honeysuckle (*Lonicera periclymenum*), Storksbill (*Erodium cicutarium*). In addition, whilst the urban habitat is poor for most wildlife, there is growing evidence that urban areas like those found on De Havilland Campus may be more important for some species than rural areas. Hedgehogs have declined significantly nationally, and this decline has also been recognised in the Hertfordshire records. However, hedgehogs are showing more stability in urban areas and with the right management could benefit from the environments created on the University campuses.

On a University level, as an Higher education institution, UH provides an ideal opportunity to educate and engage students, staff and the wider community about the wildlife surrounding them whilst improving the natural environment through net gain and other initiatives. To assist locally in combating the current net loss of habitats and help improve on the marginal habitat recovery witnessed by DEFRA, 2018, UH has produced a Biodiversity Strategy which will be delivered through a campus specific action plans which will be able to positively contribute towards the progress currently being achieved at the University.

1.2 STRATEGIC AND ENVIRONMENTAL COMMITMENTS

Biodiversity is a core component of our Sustainability agenda, and Sustainability is a recurring green thread through the themes and pillars of the University's [Strategic Plan 2020-2025](#). The University's Environmental Sustainability Framework which sets the foundations for its sustainability approach, which makes the following commitments relating to biodiversity:

- Creating and enhancing biodiversity and wildlife habitats on our campuses.

1.2.1 ENVIRONMENTAL SUSTAINABILITY FRAMEWORK

The strategic plan for Sustainability is structured through the University's Environmental Sustainability Framework which provides a framework for embedding environmental sustainability holistically across all of the university's activity areas. The framework identifies our main environmental impact areas and defines our four pathways through which our commitments will be delivered:



Fig 3. The Environmental aspects and impacts of the university's estate, activities, and operations.

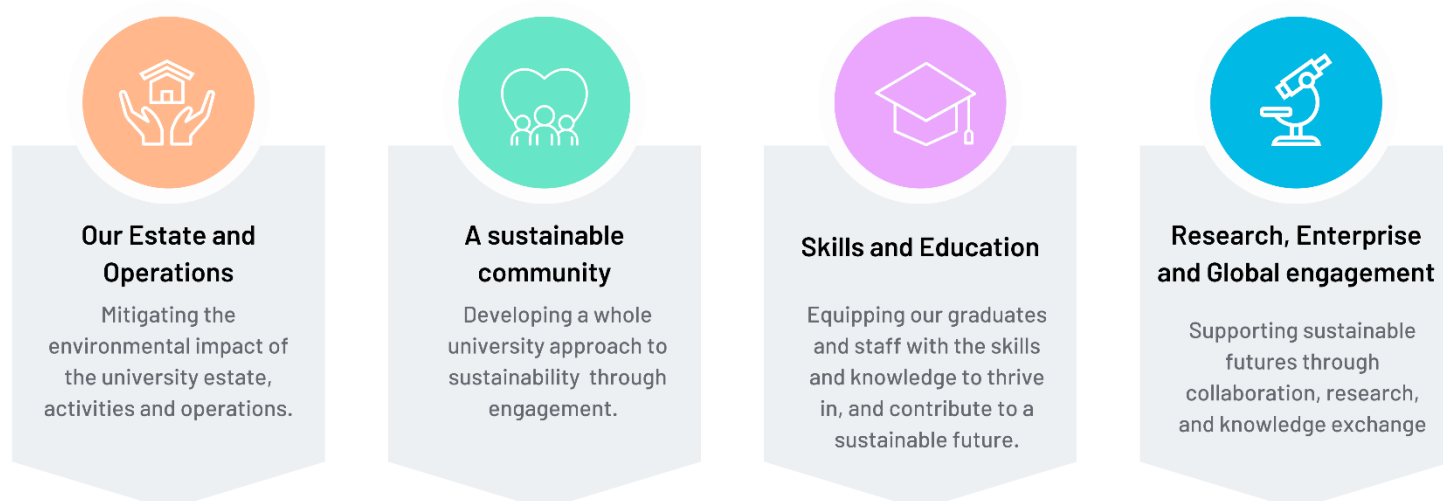


Fig 4. The University of Hertfordshire's four Pathways through which the Environmental Sustainability commitments will be delivered.

1.2.2 SUSTAINABLE DEVELOPMENT GOAL



Fig 5. The Sustainable Development Goals by pillar.

The **Sustainable Development Goals** offer another framework to help institutions embed Sustainability across their operations. While this and the other UH environmental management plans fall mainly under the Environmental Pillar of the framework, it provides context for the interconnected nature of the wider sustainability considerations which also include economic and social aspirations. While Biodiversity relates directly to goal 15 (Life on Land) and 14 (life below water), it also underlies each of the 17 Sustainable Development Goals (SDGs), from eliminating hunger and reducing inequalities to supporting sustainable communities and livelihoods around the world.

1.2.3 NATURE POSITIVE UNIVERSITIES

In December 2022 we pledged to becoming a founding member of **Nature Positive Universities**, thereby committing to being part of an important journey towards a liveable planet for us all. Nature Positive Universities was founded by the United Nations Environment Programme (UNEP) and University of Oxford in partnership with the UN Decade on Ecosystem Restoration. The initiative was launched at the Montreal COP15 in December 2022. Nature

Positive means restoring species and ecosystems that have been harmed by the impacts of a university and its activities and enhancing the university's positive impacts on nature. This refers to everything a university does, from its teaching and research work to the operations and supply chains that keep it running. Becoming a Nature Positive University will involve incorporating a biodiversity baseline, targets, actions and annual reporting, all of which we aim to deliver through our Biodiversity Action Plan.

2. BIODIVERSITY AND THE EMS

The University of Hertfordshire operates an externally certified Environmental Management System (EMS) to manage its environmental risks and drive continual improvement. The EMS is certified against the ISO:14001 standards, and currently holds Eco Campus Platinum status. The EMS provides the plan, do, check, act framework which enables the University to not only manage its environmental risks, but to also strive for continual improvement. The EMS is implemented through its relevant management plans, including the Biodiversity Action Plan.

This Biodiversity Action Plan (BAP) sets out how the university approaches and plans to deliver its biodiversity vision. While legal compliance is not the primary driver for developing a BAP, it is important to consider, and as such the plan and associated objectives are incorporated into our Environmental Management System to ensure compliance and continuous improvement. This section explains how the BAP is held to account through our EMS.

2.1 SCOPE & INTERESTED PARTIES

The sites covered by this Action Plan include:

- College Lane
- De Havilland Campuses

The Bayfordbury campus BAP and Management Plan will be a separate document as this campus has specialist habitat requirements. The BAP will comprise of a number of Species Action Plans (SAPs) that cover key species groups and a Habitat Action Plan (HAP) that covers key habitats. Species and habitats selected for biodiversity action are those which are included in the UK BAP (DEFRA, 2011) or those for which greater provision on campus could considerably enhance their local conservation

The management of Biodiversity at the University is the responsibility of key stakeholders from across the University, with roles and responsibilities outlined in the next section.

2.2 ROLES AND RESPONSIBILITIES

The key stakeholders can be found in the table below.

Department / Title	Duty
Department of Estates	<ul style="list-style-type: none"> • Ensure Legal compliance for the Biodiversity on the campuses • Responsible for the management of Biodiversity through partners and contractors • To provide accurate and timely reporting • To support the wider University on awareness, training, and educational projects • To support with implementing the Biodiversity Action Plan • To ensure information on Biodiversity is accessible and up to date
Environment & Sustainability Team	<ul style="list-style-type: none"> • Organise internal and external audits • Work with Estates to set objectives and targets • Ensure relevant documentation is up to date within the EMS. • Support with engagement on Biodiversity topics
Academic Schools	<ul style="list-style-type: none"> • To support Estates with information and advice • To work with Estates to carry out assessments and surveys where this could be part of academic work
External Biodiversity Adviser	<ul style="list-style-type: none"> • To provide expert support on Biodiversity and provide guidance on our approach
Environment & Sustainability Working Group	<ul style="list-style-type: none"> • To maintain momentum on operational procedures that the EMS holds. • Look at trends and patterns from data and monitor environmental targets and programmes. • Draft-the UH environmental performance report • Look at Environmental awareness opportunities. • Identify areas where the HSS Team can advise and support.
Environment and Sustainability Steering Group	<ul style="list-style-type: none"> • Agree objectives and targets for the EMS • Identify resources required to maintain EMS • Ensure the EMS is implemented and maintained • Monitor the performance of the EMS against the targets and objectives set • Review and revise the Institution's Environment, associated policies, strategies, and Action Plans. • Approve the Environmental Performance Report

2.3 GOVERNANCE

The EMS, Climate Vision, and any associated objectives, including Biodiversity, are governed by stakeholders across the University through our Environment and Sustainability (E&S) working and steering groups. The EMS governance structure can be found in Appendix 1 and on HertsHub.

2.4 INFLUENCING FACTORS

There are many external and internal factors that influence the generation and management of waste which need to be considered when considering biodiversity on camp. Some examples are outlined in this PESTEL analysis chart.

	External	Internal
Political	<ul style="list-style-type: none">- Union influence- Changes in Biodiversity laws and policies- Environmental league tables potentially impacting reputation- Brexit changes impact on policy	<ul style="list-style-type: none">- Strategic plan- Governance structure- Staffing- Changes in site utilisation
Economic	<ul style="list-style-type: none">- Changes to taxes / incentives- Sub-contractor costs- Funding	<ul style="list-style-type: none">- Budgets- Cost of sub-contracting
Social	<ul style="list-style-type: none">- NGO, community, and media pressures and expectations- Societal pressures	<ul style="list-style-type: none">- Staff and student expectation- Stakeholder and partner expectation
Technological	<ul style="list-style-type: none">- Technological advancements in e.g. carbon sequestration through tree stock	<ul style="list-style-type: none">- Training- Access to innovation
Legal	<ul style="list-style-type: none">- Lack of knowledge, understanding and accountability of legal- Resistance to comply due to extra resources required requirements can lead to non-compliance	<ul style="list-style-type: none">- Prosecution for non-compliance- Costs associated with tax, levies and fines- Increased costs of compliance may detract funding from other areas- Lack of enforcement from regulatory bodies can make it difficult to demonstrate the need to comply
Environmental	<ul style="list-style-type: none">- Regulations and laws- Weather and climate	<ul style="list-style-type: none">- Land use / local biodiversity- Local weather / weather events

2.5 LEGAL COMPLIANCE

One of the components of this Action Plan is ensuring the University meets all the relevant legal requirements associated with Biodiversity. There are a number of pieces of legislation which the University must comply with, which are listed below and detailed further in Appendix 2, as well as in the University's EcoCampus Legal Register:

- Town and Country Planning (Tree Preservation) (England) Regulations SI 2012/605
- Wildlife and Countryside Act 1981 (c. 69)
- Conservation of Habitats and Species Regulations SI 2010/490
- Protection of Badgers Act 1992
- Countryside and Rights of Way Act 2000 Chapter 37
- The Wild Mammals Protection Act 1996
- The Environment Act 2021

2.6 ASPECTS AND IMPACTS

Activities that interact, or have a potential to interact with the environment are considered to be environmental aspects. How the aspect alters the environment, whether positively or negatively, is considered an impact, and it is the duty of the university to put measures in place to eliminate or mitigate these risks as much as possible. While the main global threats to biodiversity include changes in land and sea use, overexploitation, climate change, pollution, and invasive species, not all of these are applicable in a UH context. Being a thriving University, however, spanning 200 hectares, and supporting 25,000 students and 3,500 members of staff, the University can have a significant impact on the immediate and local biodiversity.

The main aspects associated with Biodiversity are:

- Construction that removes or impacts biodiversity
- The use of chemicals and pesticides that can harm biodiversity
- Ground maintenance that impacts biodiversity such as clearing, mowing, coppicing
- Pollution that can negatively impact biodiversity e.g. particulate pollution from cars and machinery
- The disturbance of biodiversity from human interaction
- Improper management of existing Biodiversity
- Invasive species

The main impacts associated with these activities are:

- Loss of habitat
- Loss of biodiversity
- Impact on wider region
- Loss of carbon sinks

The main consequences from these impacts are:

- Damage to the environment
- Contribution to global warming and climate change
- Impact on well-being
- Breach of legal / non-legal obligations
- Financial cost to the organisation
- Reputational cost

The aspects and impacts register of Biodiversity as well as the ongoing mitigation controls in places to minimise / eliminate the associated risks can be found in the Appendix 3.

3. UH BIODIVERSITY STRATEGY

The aim of the UH Biodiversity strategy is to enhance biodiversity across the entire university estate and to engage students, staff, and the public about the importance of biodiversity as a key part of the sustainability agenda.

3.1 BIODIVERSITY AT UH

Geographically, the University of Hertfordshire has three main campuses spread across Hertfordshire in the borough of Welwyn and Hatfield comprising of Woodland and Urban habitats at the College Lane and DeHavilland Campuses and rural and woodland habitats at Bayfordbury Campus. No part of the University estate within Welwyn Hatfield falls within an Archaeological Priority Area or Conservation Area; nor does it include any listed buildings or scheduled monuments. Most parts of the University estate are already developed to varying degrees and have been subject to extensive ground disturbance. They are therefore relatively unlikely to be of archaeological interest.

3.1.1 COLLEGE LANE

The University of Hertfordshire College Lane Campus encompasses the University's teaching buildings, the Learning Resources centre, the Forum and student residences as seen in Figure 6.

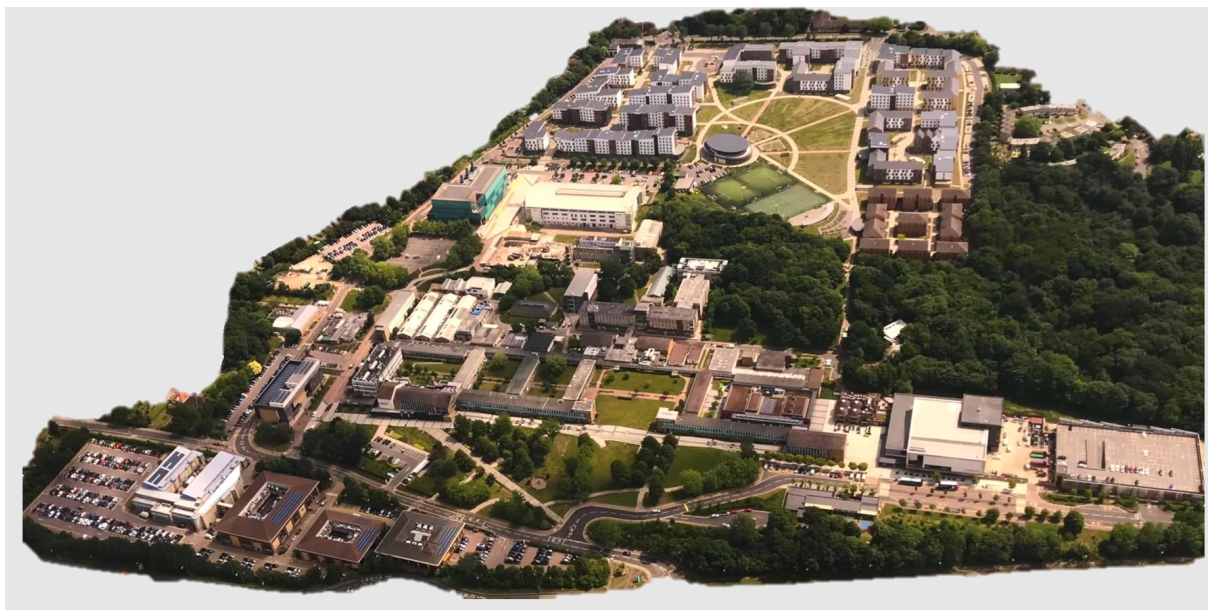


Fig 6. Aerial photo of College Land Campus

There is a combination of grassland and other trees (separate to Hazel Grove Woods) placed around the campus. In total there are 872 trees on the College Lane Campus species mix is dominated by *Quercus robur* (pedunculate oak), *Platanus x hispanica* (London plane), *Fraxinus excelsior* (European ash) and *Betula pendula* (silver birch). Remaining species include *Acer saccharinum* (silver maple), *Tilia x vulgaris* (common lime), *Betula utilis* (Himalayan birch), *Cerasus avium* (syn. *Prunus avium*) (wild cherry), *Acer platanoides* (Norway maple) and *Tilia cordata* (small-leaved lime), along with a

vast array of less represented species (Tim Mayo Associates, University of Hertfordshire Tree Survey, 2020). Figure 7.

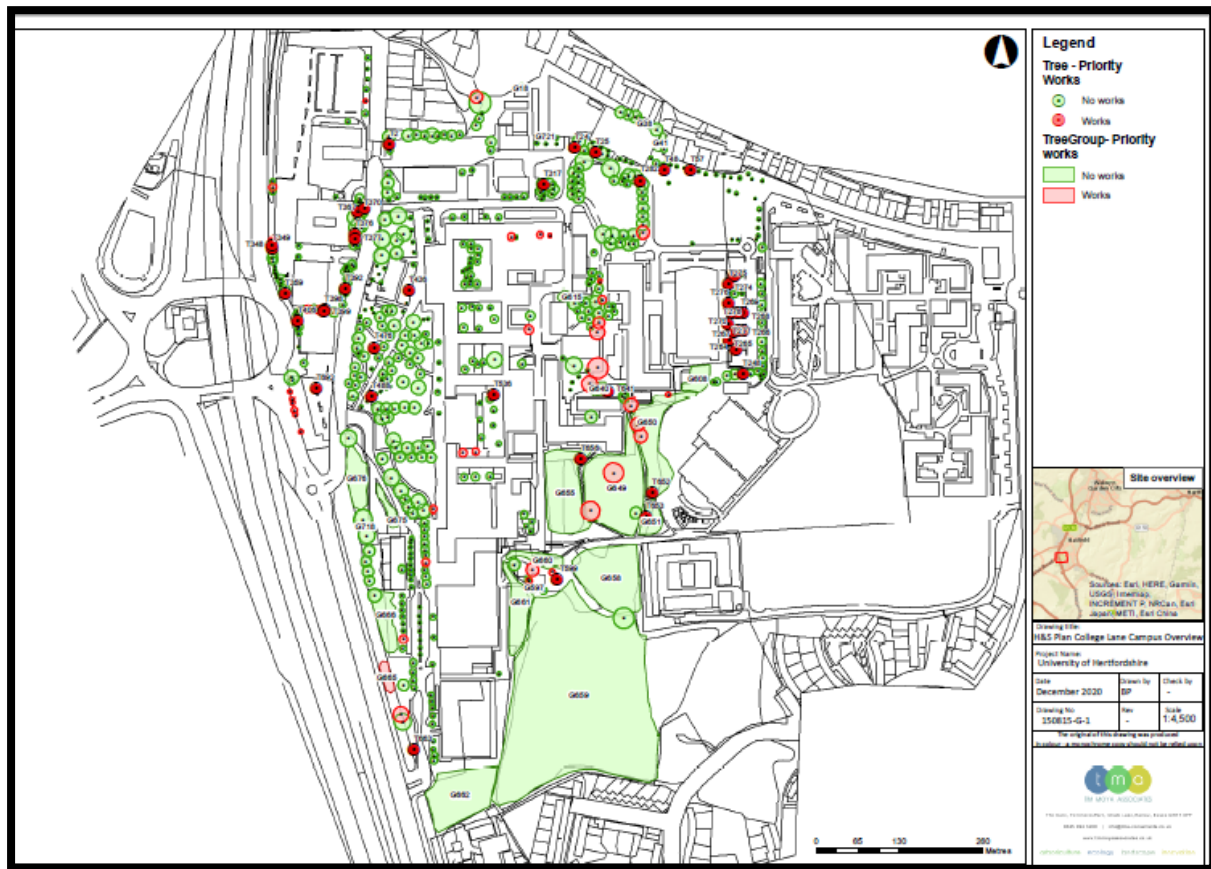


Fig 7. Tree location on College Lane

Key wildlife sites on College Lane are identified in Figure 5 with lists of the species found in those areas and the ecosystems that support these species. An extensive list of plants on College Lane can be found in Appendix 4.

Hazel Grove

Hornbeam (*Carpinus betulus*)
Raspberries (*Rubus idaeus*)
Lords and Ladies (*Arum maculatum*)
Oak (*Quercus*)
Yellow Archangel (*Lamium galeobdolon*)
Long Tailed Tit (*Aegithalos caudatus*)
Great Tit (*Parus major*)

Main Reception

Honey Bee (*Apis mellifera*)
Bumble Bee (*Bombus*)
Honeysuckle (*Lonicera periclymenum*)
Storksbill (*Erodium cicutarium*)
Cranesbill (*Geranium*)

The Oval Ponds

Man-made pebble bed ponds with water insects

The Oval Lawn

Honey Bee (*Apis mellifera*)
Bumble Bee (*Bombus*)
Bulbous Buttercup (*Ranunculus bulbosus*)

The Forum

Forget-Me-Not (*Myosotis sylvatica*)
Native Woodland Bluebells (*Hyacinthoides non-scripta*)
Garlic-mustard (*Alliaria petiolata*)
Speckled Wood Butterfly (*Pararge aegeria*)
Planted Barberry (*Berberis*)
Sycamore (*Acer pseudoplatanus*)

Roof Garden

Bee Orchids

Bus Stops

Sticky Moles/ Mouse Ear (*Cerastium glomeratum*)
Star of Bethlehem (*Ornithogalum*)
Toadflax (*Linaria vulgaris*)
Cow Parsley (*Anthriscus sylvestris*)
Speed Wells (*Veronica*)
White Dead Nettle (*Lamium album*)

Spiral Bridge

White Stonecrop

College Lane Amphitheatre

Honey Bee (*Apis mellifera*)
Bumble Bee (*Bombus*)
Cranesbill (*Geranium*)
Bulbous Buttercup (*Ranunculus bulbosus*)

Across Campus

A mix of tree species are found across the campus totalling 872 individual trees of a variety of species both native and non-native.

Fig 8. wildlife locations around College Lane Campus

3.1.2 HAZEL GROVE

Hazel Grove is a 3.875 ha urban broad-leaved and semi-natural ancient woodland with a variety of tree species (Woodland Trust, 2020); predominantly Hornbeam (*Carpinus betulus*) and Oak (*Quercus robur*) and number of common wildflowers; snowdrops, Bluebells (*Endymion non-scriptus*), Wood anemone (*Anemone nemorosa*), and Yellow Archangle (*Lamium galeobdolon*) which is known as an Ancient woodland indicator species. Bats, Badger and insects are known to reside close to the woods and the wood is apparently used for butterfly transects. The woodland occupies a prominent hillside position overlooking the lower lying Colne Valley to the west and is an important landscape feature. The wood is now surrounded entirely by urban development and is divided into two by a security fence, half owned by the University of Hertfordshire and the other by Welwyn Hatfield Borough Council. The wood is an important local landscape feature within the grounds of the University proving a feeling of peace and tranquillity within the site. Permissive paths run through the wood.



Fig 9. Bluebells in Hazel Grove

It appears that the wood was extensively coppiced until approximately 1947; most management then ceased until the early part of the 21st century when limited coppicing was resumed following the preparation in 2000 of a detailed management plan that followed English Nature's guidelines for site management. Some of the coppice particularly in the north appears to be older than 8-9 years but not as old as the areas that were last coppiced after the second world war. It may be that this area was coppiced around 15-20 years ago.

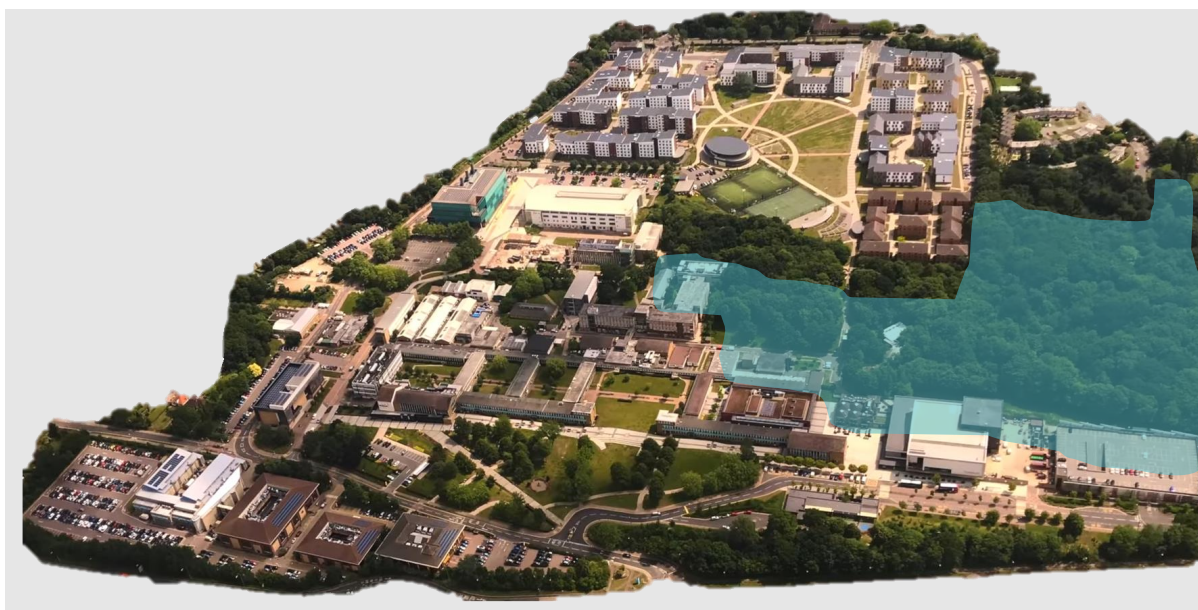


Fig 10. Aerial view of College Lane and Hazel grove highlighted in blue.

Managing and protecting Hazel Grove is key, woodland wildlife is struggling. The Hertfordshire State of Nature report highlights what has been lost over the last 50 years and just how many species are now threatened with extinction in Hertfordshire. If we want to halt and reverse the decline, it is important to act now and focus on reinstating conservation management of existing habitats as well as creating and connecting habitats across the county (Herts and Middlesex Wildlife Trust, 2020).

The 2010-2030 Hazel Grove Management Plan is still functioning as a management document but requires a review to ensure the approach is still working as intended.

ONGOING HAZEL GROVE MANAGEMENT

- RIDE MANAGEMENT

Vegetation is cut along the woodland rides to allow access. Cuttings are either chipped and added to paths or removed for composting; width of the rides are 1 – 1.5 metres. Any vegetation overhanging this area is removed. Timber boards marking ride boundaries were previously realigned where necessary, but this is being reassessed due to vandalism.

- VEGETATION MANAGEMENT

Vegetation is managed to ensure undesirable species, such as willow, ash, elder and cherry, do not become established in coppiced area. Care is taken to ensure coppice stools, regenerating trees (esp. hornbeam and oak) and buddleia are not damaged. Vegetation is either stacked or removed and handled according to our current waste management policy.

- CONTROL OF SYCAMORE

Sycamore seedlings and saplings are removed.

3.1.3 DE HAVILLAND CAMPUS

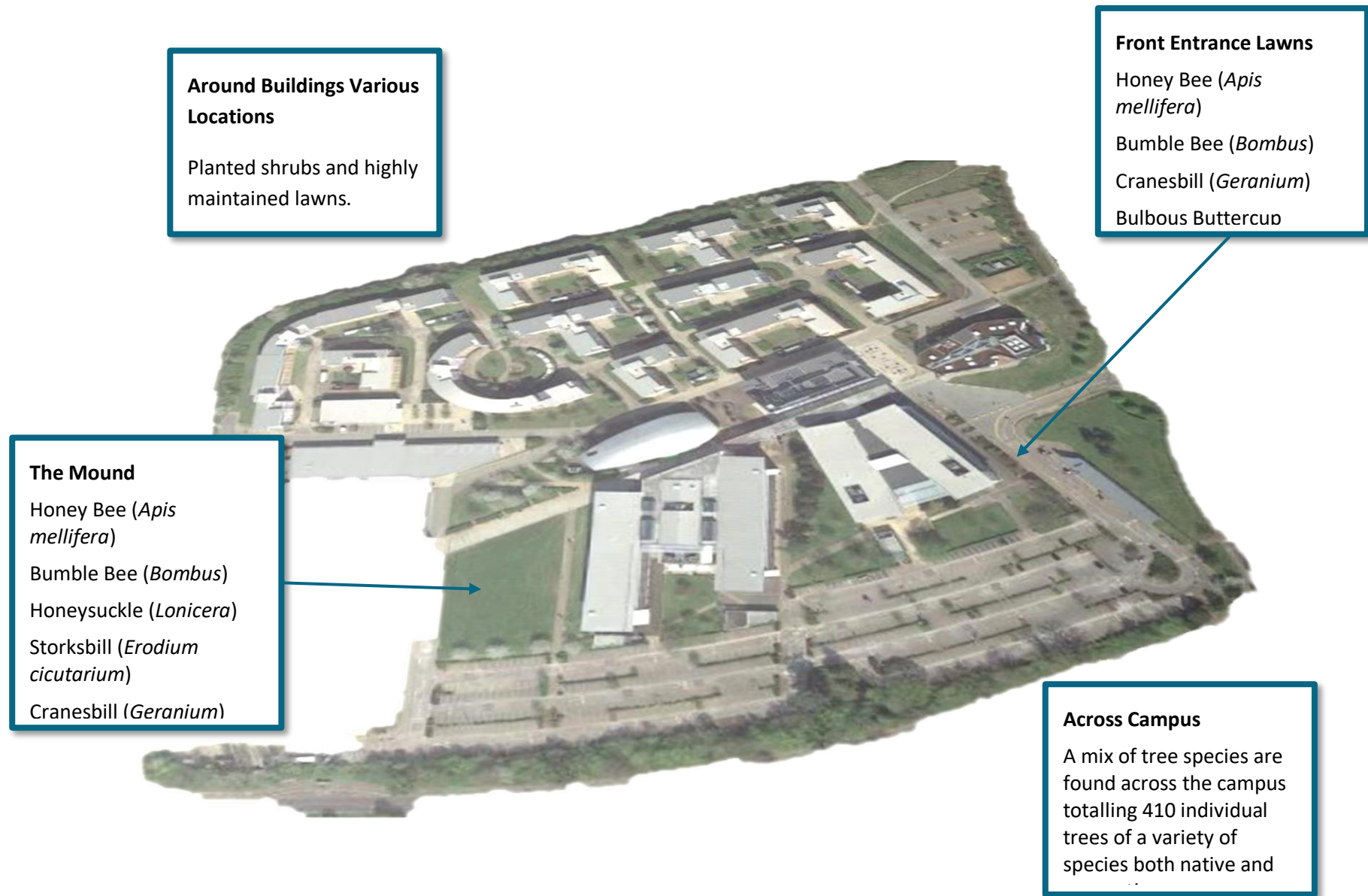


The De Havilland campus was developed on a Brown Field site Figure 11. The site is largely an urban environment with areas of amenity grassland, horticultural trees (410 trees located onsite) and bushes, as shown in Figure 13. According to the Hertfordshire Landscape Character Assessment the campus and surrounding sites is classed as having poor biodiversity condition and moderate strength to move to a more biodiverse space. The assessment lists the site as a requirement to improve and restore as the approach to management biodiversity onsite. There is a potential for green roofing, which is considered to be a highly effective approach to enhance biodiversity on this campus (Hertfordshire County Council, 2021). Enhancing existing green space and incorporating more areas of wild-flowers will increase the potential for biodiversity.



Fig 11. Aerial view of De Havilland Campus

Fig 13. Key Biodiversity on De Havilland Campus



3.2 AIM AND OBJECTIVES

The aim of the Biodiversity Strategy is to enhance biodiversity across the entire university estate and to engage students, staff, and the public about the importance of biodiversity as a key part of the sustainability agenda.

The UH Biodiversity objectives are:

Objective 1: To promote biodiversity by conserving, protecting, and enhancing existing wildlife habitats and creating new ones. This will be enabled through specific habitat and key species management plans.

Objective 2: To avoid or mitigate activities that may damage habitats or key species. This will be managed through our legal and internal compliance obligations.

Objective 3: To collect and report data on biodiversity for monitoring and to inform action, including a biodiversity baseline assessment.

Objective 4: To provide biodiversity education and engagement opportunities for the UH community, including students, staff, and other interested parties. To promote links between the biodiversity agenda with health and well-being where appropriate.

3.3 ACTION TO DATE

The University of Hertfordshire has already taken action on each of these objectives through a number of initiatives and activities. These include:

Objective 1. To promote biodiversity by conserving, protecting, and enhancing existing wildlife habitats and creating new ones.

- Wildflower Management Areas
- Managing Bee orchids
- Site audits have been carried out to identify potential areas for conservation and improvement action. These can be seen in figures 17 and 18.
- Hazel Grove woodland Management Plan



Fig 14. Example of a Bee Orchid

Objective 2: To avoid or mitigate activities that may damage habitats or key species.

- The University's Environmental Management System details a Compliance Register, which is updated regularly and any changes to waste legislation cascaded to relevant staff.

Objective 3: To collect data on biodiversity for monitoring, reporting and to inform action.

- Annual Tree surveys
- Annual flora survey on CL

Objective 4: To provide biodiversity communication, education, and engagement opportunities for the UH community.

- Biodiversity Walk
- Community Gardens
- Seasonal events e.g. Fungi & bat walk
- Information boards around campus

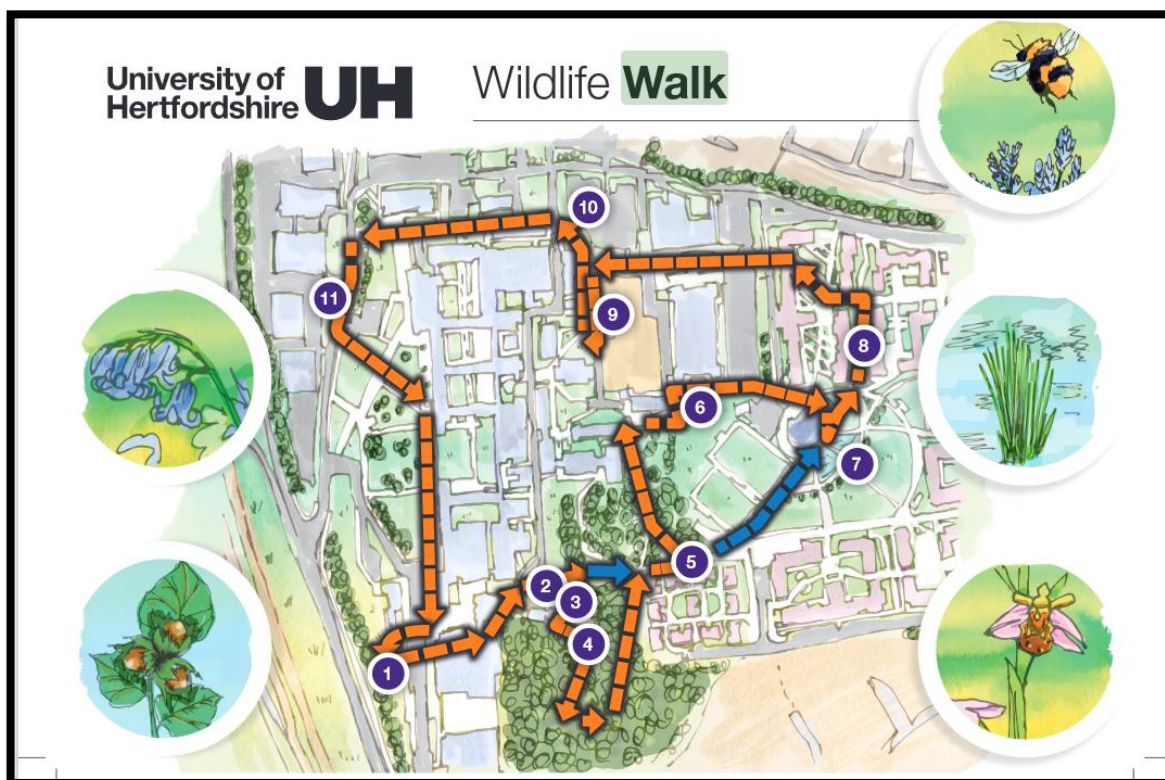


Fig 15. The Biodiversity walk on College Lane



Fig 16. Community garden being worked on by Students



Fig 17. Fungi walk as part of Biodiversity engagement

Fig 18. Suggested conservation of College Lane Campus

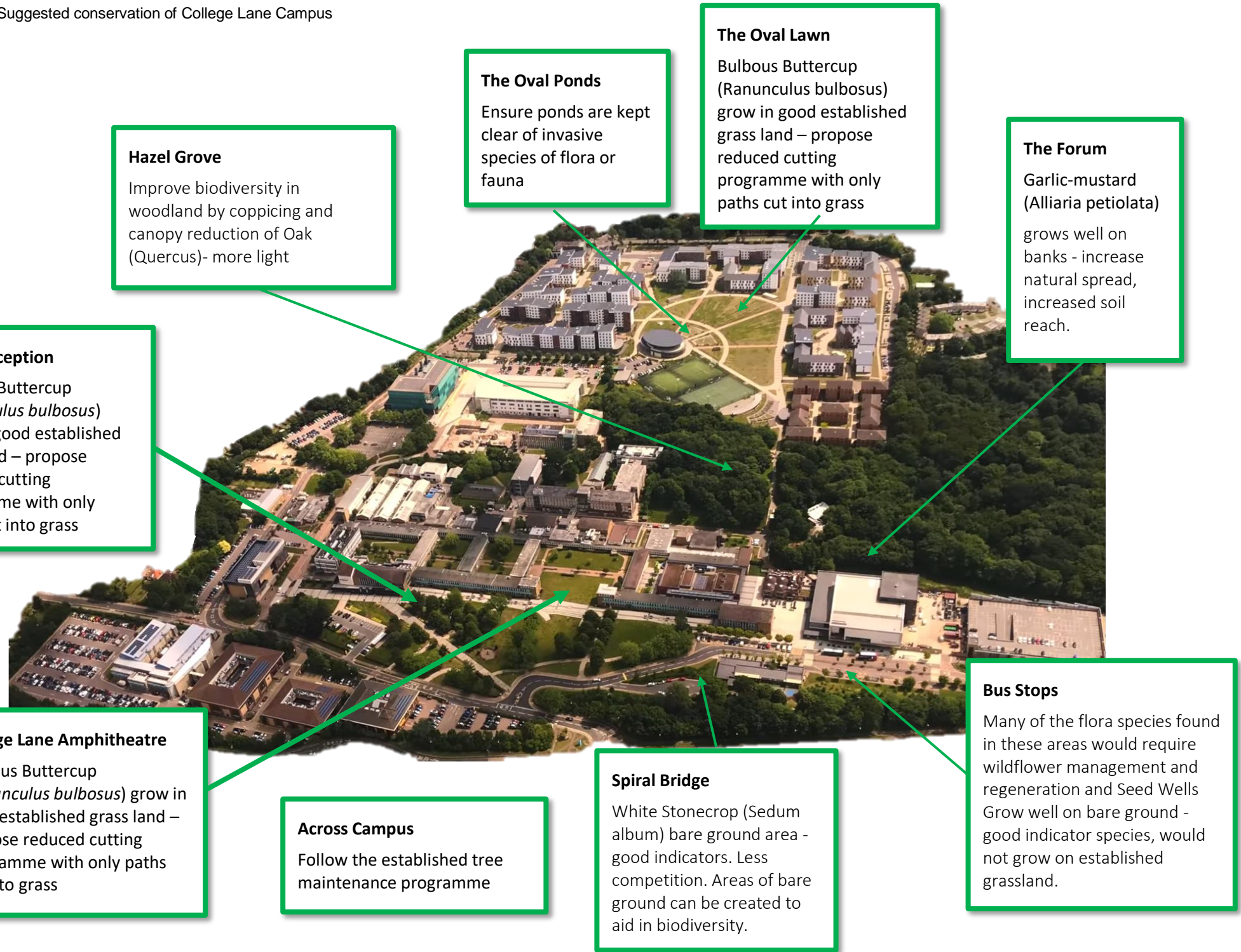


Fig 19. Suggested conservation on De Havilland Campus

Around Buildings Various Locations

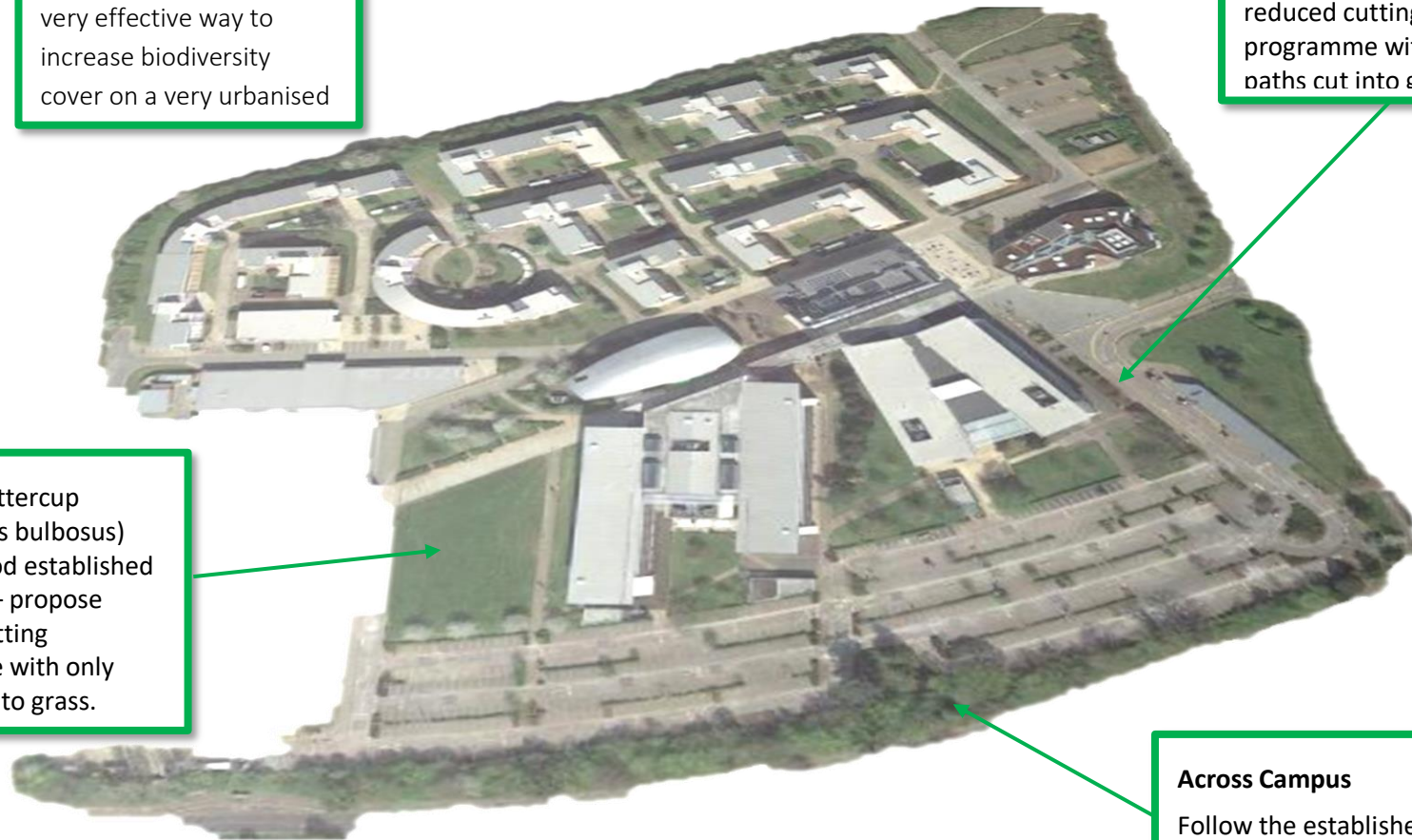
Green roofing would be a very effective way to increase biodiversity cover on a very urbanised

Bulbous Buttercup (*Ranunculus bulbosus*) grow in good established grass land – propose reduced cutting programme with only paths cut into grass.

Bulbous Buttercup (*Ranunculus bulbosus*) grow in good established grass land – propose reduced cutting programme with only paths cut into grass.

Across Campus

Follow the established tree maintenance



3.4 ACTION PLAN

This plan sets out actions which will be carried out as part of this Biodiversity Action Plan, as well as the KPIs proposed to measure progress against each action where relevant. The actions have been categorised by species and habitat. All planned activities and scope of these activities are subject to feasibility and modification, legislation, budget, best practice and guidance changes, facility, and technology developments.

Species / Habitat	Action	Date	Campus	Who	KPI
Objective 1: To promote biodiversity by conserving, protecting, and enhancing existing wildlife habitats and creating new ones					
Birds	Repair bird boxes where possible or install new boxes where a need has been identified (funding dependant)	Following survey (see below)	CL & DH	Facilities / Creative Arts?	No. of boxes repaired / installed
	Ensure no hedgerow or tree cutting activities are undertaken during nesting season	Ongoing	CL & DH	Facilities & Grounds team	Included in grounds management plan
	Enhance bird nesting sites in all future campus redevelopments	Ongoing	All campuses	Capital projects	Number of new bird nesting sites
Mammals	Take action to provide safe areas for any mammals identified in the surveys	Survey dependant (see below)	All	HSS / Facilities	No of actions taken
Insects and Pollinators	Install insect hotels – to be made by CA / architecture students	As often as possible	All	HSS / Facilities / CA	Number of bug hotels installed
	Leave piles of wood and vegetation in situ for insects where appropriate	Ongoing	All	Facilities / Grounds	In grounds management plan
	Review mowing plan so that insects and pollinators have more access to wildflower meadows	Apr 22 / ongoing	All	Facilities / Grounds	Incorporated into mowing plan
	Bi-Annually pollinator and invertebrate surveys	Yearly	All	LMS	Completed Surveys
	Review existing and new builds for potential incorporation of green roof and/or brown roof installation	Oct 22	All	Capital projects / Facilities	Completed review
Meadows and	Create programme of Bulb Flower planting including a cyclical nature of blooms	April 2022	CL & DH	Facilities and Grounds Team	Programme created

amenity grassland	Review the planted wildflower meadows to ensure that the areas are being appropriately managed and over growth has been reduced	February – April annually	CL & DH	Facilities and Grounds Team	Reviewed annually?
	Identify areas which can be turn into wild areas e.g. the grass behind the forum or more areas around the coppice.	July 2021	CL & DH	Facilities and Grounds Team and HSS Team	Survey completed?
	Bee Orchids: update locations on HertsHub / move signs	March-April Annually	CL	Facilities, Grounds Team and HLS.	Update
	All green waste should be composted, and relevant documentation provided. (Green waste is defined of as the arisings from grass cuttings and all pruning works including any tree trunks or branches)	August 2022	All	Estates and Ground Maintenance Team	Agree with grounds
	Explore the possibility of composting on site	Oct 22	All	Estates and Ground Maintenance Team	Proposal
Ponds	Liaise with Derwent to enhance biodiversity potential of pond outside oval (not managed by UH)	September - December 2021	CL (U Living)	ULiving – Fulcrum / Derwent	Discuss with Derwent
Woodland	Reinstate the College Lane Coppice Management Plan	September 2022	CL	Estates and Grounds Team	Coppicing Plan
	Review the Hazel Grove Management Plan to ensure it is still working as intended	Nov 2022	CL	Facilities, Grounds, and LMS	Plan reviewed
	Create a management plan for tree planting which outlines short-, mid-, and long term objectives, including funding, based on surveys and site tours	Nov 22	CL & DH	Estates and Grounds Team, LMS	Plan completion
	Leave piles of dead wood in situ, where practical and safe to do so.	Ongoing	CL & DH	Grounds Team	Agree with grounds team
	Ensure walkways through Hazel Grove are clear and easily accessible	Ongoing	CL	Grounds Team	Agree with grounds team

Objective 2: To avoid or mitigate activities that may damage habitats or key species.				
Ensure that surveys for protected species are completed prior to developments	Prior to development	All	Capital projects	Surveys completed
Review the application of pesticide, specifically on when and how they are applied. Explore environmentally friendly alternatives	January 2022	All	Estates and Ground Maintenance Team	Pesticide plan
Objective 3: To collect data on biodiversity for monitoring, reporting and to inform action.				
Set scope and methodology for a biodiversity baseline assessment.	April 2023	All	LMS & Estates	
Complete bird surveys	April 22 (yearly)	All	LMS & Estates	Bird report
Survey existing boxes and the condition of these / if they are in the right locations?	Aug 22	CL & DH	Estates	Survey report
Explore possibility of carrying out a mammal survey	Oct 22	CL	LMS	Meeting to discuss / research
Complete bat surveys to see if we have bats on campus	Oct 22	CL	LMS & Estates	Bat report
Hedgehog surveys as part of Hedgehog Friendly Campus	Yearly	CL & DH	LMS & Estates	Number of surveys
Survey locations of Bee Orchids and curate a list of areas identified as viable for transforming	March-April Annually	CL	Facilities, Grounds and LMS.	Completed survey
Conduct bi-annual review of trees where coppicing could enhance surrounding biodiversity and encourage undergrowth recovery	Ongoing / bi-annually	CL	Estates and Grounds Team / LMS	
Complete annual tree survey including the Oak trees, ash, and hornbeam in Hazel Grove	Refer to Estates Schedule	CL & DH	Estates and Grounds Team	
Objective 4: To provide biodiversity communication, education, and engagement opportunities for the UH community.				
Promote the Big Bird Count for RSPB by engaging staff and students	Every Jan	All campuses	HSS	Bird count campaign
Take part in Hedgehog Friendly Campus Certification	Yearly	All	HSS	Certification
Ensure that Coppice Management Plan is communicated to stakeholders	Ahead of coppicing	CL	Estates and MarComms	Comms delivered
Litter pick walks around Hazel Grove	Ongoing	CL	Estates & Grounds Team	Number of litter picks
Organise Biodiversity Walks for College Lane – promote through Staff network, Herts Hub and other platforms	Ongoing	CL	Estates	Number of walks

Review interpretation boards and ensure they are in the correct locations	August 2021	CL & DH	Estates	Project completion
No Mow May / rewilding communication and information campaigns	May / Yearly	CL & DH	Estates	Campaign delivered
Organise a series of seasonal engagement activities such as Hedgehog surveys, winter and spring-watch etc.	Ongoing	All	E&S	Number of activities
Identify training and education needs within key interested parties to help meet the aims of the BAP, and providing support where appropriate.	Yearly update	All	LMS	Training assesment

3.5 MONITORING AND REPORTING

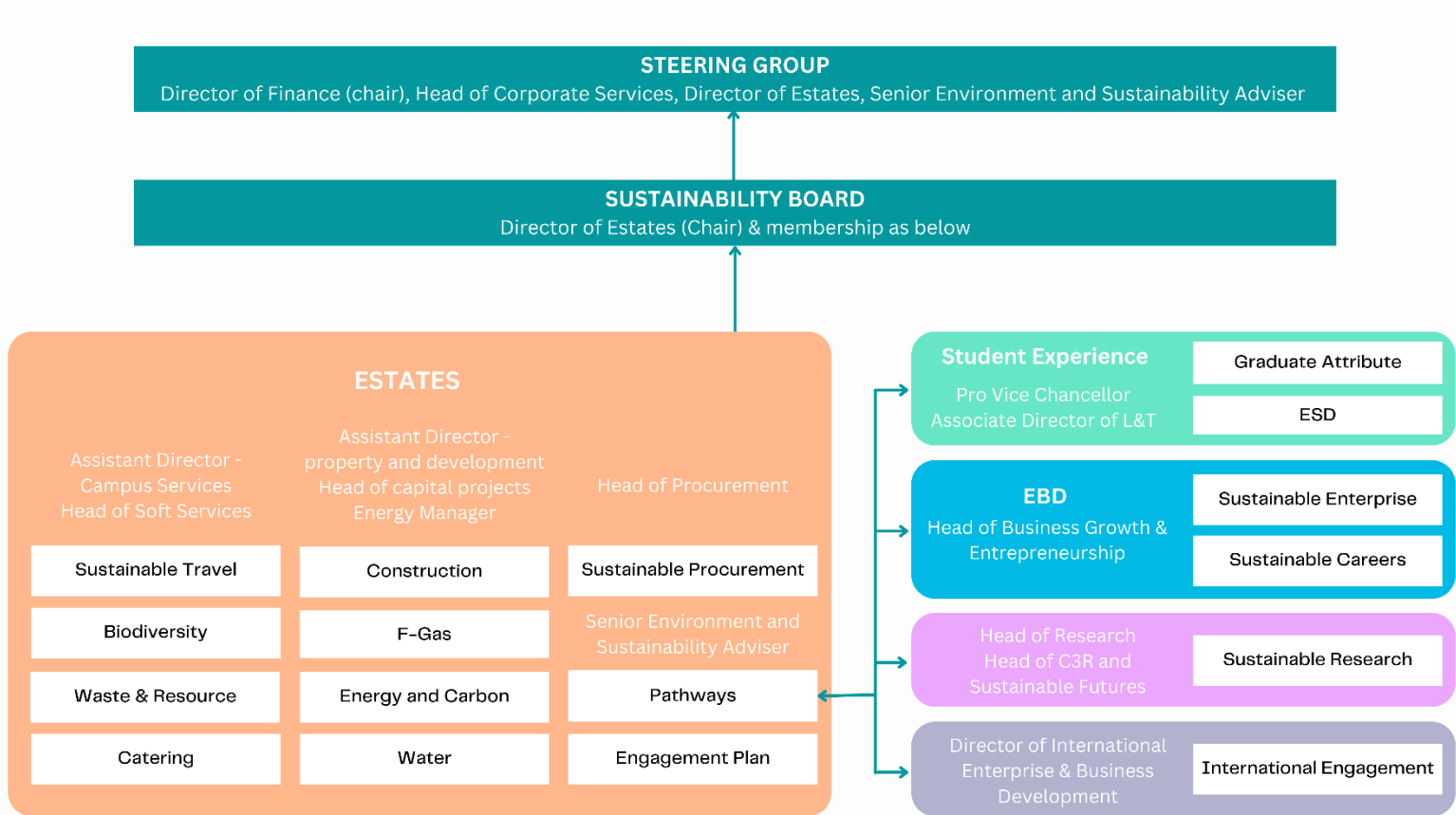
This Biodiversity Action Plan sets out a range of actions to be taken on biodiversity which will also be tracked via the KPIs annually as set out below. Each of the actions will be listed as objectives in a biodiversity working document and will be reviewed annually by relevant stakeholders and fed back to the wider EMS working group at regular intervals. At the end of the Plan period, the Biodiversity working group will report progress back to the Environmental and Sustainability Working Group in order to inform a decision on what action is required to meet the overarching targets, and to ensure continual improvement. Biodiversity Baseline to be included once this has been measured.

Key Performance Indicator		Status / date
Birds	Annual survey on existing bird boxes and the condition of these / if they are in the right locations?	
	Number of bird boxes repaired or installed	
	Annual bird survey completed and reported	
	Number of channels / platforms through which Bird Big Count for RSPB is promoted	
	Number of new bird nesting sites	
Mammals	Meeting / research to explore possibility of mammal survey	
	Bat survey carried out and reported	
	Hedgehog survey carried out annually as part of Hedgehog friendly campus	
	Hedgehog Friendly Capus certification level	
	Number of actions taken to provide safe areas for any mammals identified in the surveys	
Insects and Pollinators	Bi-annual invertebrate and pollinator survey report	
	Number of bug hotels installed	
	Grounds management plan to include policy on leaving piles of wood and vegetation in situ for insects where appropriate	

	Mowing plan to consider insects and pollinators access to wildflower meadows	
	Review of possibility on incorporating green roofs on structures and buildings	
Meadows and amenity grasslands	Create programme of Bulb Flower planting including a cyclical nature of blooms	
	Annual review of planted wildflower meadows to ensure that the areas are being appropriately managed and over growth has been reduced	
	Report on areas which can be turn into wild areas e.g. the grass behind the forum or more areas around the coppice.	
	Survey of bee orchid location - annually	
	Report on Bee Orchid locations - annually	
	Comms update on Bee Orchid locations – annually	
	Agree with grounds team to compost all green waste and relevant documentation provided.	
	Meeting / research to explore possibility of on-site composting	
Ponds	Meeting with Derwent to discuss pond biodiversity	
Woodland	Write coppicing management plan	
	Survey report of trees ahead of coppicing	
	Review the Hazel Grove Management Plan	
	Create tree planting management plan	
	Agree with contractors to leave piles of wood in situ into grounds management plan	
	Agree with contractors to ensure path in Hazel Grove is clear and accessible	
	Tree survey report for CL and DH - annual	
Compliance	Policy to survey for endangered species in construction plan	
	Agree with grounds to limit pesticide use	
	Discuss with grounds team use of environmentally alternatives to pesticides	
Engagement & Education	RSPB Big Bird Count campaign - annually	
	Hedgehog Friendly Capus programme delivered	
	Communication of coppice management plan	
	Number of litter picks / number of volunteers	
	Biodiversity walks communication / delivered	
	Review of interpretation boards	
	No Mow May communication	
	Number of biodiversity training course attended by involved members of staff e.g. tree management etc.	

4. APPENDIX

APPENDIX 1. GOVERNANCE STRUCTURE



APPENDIX 2. LEGAL COMPLIANCE REGISTER

Legislation	Summary and relevance
Town and Country Planning (Tree Preservation) (England) Regulations SI 2012/605	The Regulations give the Local Planning Authority (LPA) the power to allocate a Tree Preservation Order (TPO) which prohibits the cutting down, uprooting, topping, lopping, wilful damage, or wilful destruction of trees without the LPA's consent.
Wildlife and Countryside Act 1981 (c. 69)	The act makes it an offence (with exception to species listed in Schedule 2) to intentionally kill, injure, or take, possess, or trade in any wild animal listed in Schedule 5, and to interfere with places used for shelter or protection, or to intentionally disturb animals occupying such places. It is an offence (subject to exceptions) to pick, uproot, trade in, or possess (for the purposes of trade) any wild plant listed in Schedule 8, and to intentionally uproot such plants without authorisation. The Act contains measures for preventing the establishment of non-native species which may be detrimental to native wildlife, prohibiting the release of animals and planting of plants listed in Schedule 9. It also provides a mechanism making any of the above offences legal through the granting of licenses by the appropriate authorities. The act also prohibits certain methods of killing, injuring, or taking birds, restricts the sale and possession of captive bred birds, and sets standards for keeping birds in captivity. It provides for the notification of Sites of Special Scientific Interest (SSSI) by reason of their flora, fauna, geological or physiological features.
Conservation of Habitats and Species Regulations SI 2010/490	<p>The Regulations cover the designation of habitat sites and classification of sites as special areas of conservation (SAC) and special protection areas (SPA) under Directive 92/43/EEC on conserving natural habitats and wild fauna and flora.</p> <p>In instances where damage could occur, special nature conservation orders, prohibiting any person from carrying out damaging activities may be used.</p> <p>The Regulations make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2, or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 4. However, these actions can be made lawful through the granting of licenses by the appropriate authorities. Licenses may be granted for a number of purposes (such as science and education, conservation, preserving public health and safety), but only after the appropriate authority is satisfied that there are no satisfactory alternatives and that such actions will have no detrimental effect on wild population of the species concerned.</p> <p>The Regulations require competent authorities to consider or review planning permission, applied for or granted, affecting a European site, and, subject to certain exceptions, restrict or revoke permission where the integrity of the site would be adversely affected.</p>
Protection of Badgers Act 1992	The Act makes it an offence to kill, injure, ill-treat or take badgers unless it can be proved that it was under an exempt condition or a licence was obtained. Licences can be obtained from a conservation body if certain conditions are met.

Countryside and Rights of Way Act 2000 Chapter 37	The Act provides for public access on foot to certain types of land, amends the law relating to public rights of way, increases measures for the management and protection for Sites of Special Scientific Interest (SSSI) and strengthens wildlife enforcement legislation, and provides for better management of Areas of Outstanding Natural Beauty (AONB).
The Wild Mammals Protection Act 1996	This Act makes it an offense for any person to mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.
The Environment Act 2021	<p>This Environment Act 2021 has two main functions:</p> <ol style="list-style-type: none"> 1. To give a legal framework for environmental governance in the UK. 2. To bring in measures for improvement of the environment in relation to waste, resource efficiency, air quality, water, nature and biodiversity, and conservation. <p>The vast majority of this Act does not make any immediate changes for organisations other than regulators. Changes to duties for businesses and other organisations are expected in subsequent legislation made under this Act.</p>

APPENDIX 3. ASPECTS AND IMPACTS REGISTER

Aspect	Impact	Consequences	Risk Owner	Mitigation controls
Construction that removes or impacts biodiversity	Loss of habitat Loss of biodiversity Impact on wider region Loss of carbon sinks	Damage to the environment Contribution to global warming and climate change Impact on well-being Breach of legal / non-legal obligations Financial cost to the organisation Reputational cost	Estates / capital projects	Carry out proper assessments prior to construction
The use of chemicals and pesticides that can harm biodiversity	Loss of habitat Loss of biodiversity Impact on wider region	Damage to the environment Breach of legal / non-legal obligations Financial cost to the organisation	Estates / Contractors	Use pesticides sparingly Use environmentally-friendly pesticides where possible Don't spray when rain is forecast

		Reputational cost		
Ground maintenance that impacts biodiversity such as clearing, mowing, coppicing	Loss of habitat Loss of biodiversity Impact on wider region Loss of carbon sinks	Damage to the environment Contribution to global warming and climate change Impact on well-being Breach of legal / non-legal obligations Financial cost to the organisation Reputational cost	Estates / Contractors / working group	Develop and work according to site management plans
Pollution that can negatively impact biodiversity e.g. particulate pollution from cars and machinery	Loss of habitat Loss of biodiversity Impact on wider region	Damage to the environment Financial cost to the organisation Reputational cost	Estates	Care to be taken to reduce particulate pollution on site. Travel plan.
The disturbance of biodiversity from human interaction	Loss of habitat Loss of biodiversity	Damage to the environment Impact on well-being Breach of legal / non-legal obligations Financial cost to the organisation Reputational cost	Estates / E&S	Include as consideration in BAP. Signs and barriers
Improper management of existing Biodiversity	Loss of habitat Loss of biodiversity	Damage to the environment Impact on well-being Breach of legal / non-legal obligations Financial cost to the organisation Reputational cost	Estates / contractors	Follow management plan

Invasive species	Loss of habitat Loss of biodiversity Impact on wider region	Invasive species are capable of causing extinctions of native plants and animals, reducing biodiversity, competing with native organisms for limited resources, and altering habitats.	Estates / contractors / LMS	Ensure no invasive species are planted, and existing invasive species are dealt with accordingly to stop the spread
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APPENDIX 4. PLANTS LIST AT COLLEGE LANE AND DE HAVILLAND

Latin	English	Comments
<i>Acer campestre</i>	Field Maple	
<i>Acer platanoides</i>	Norway Maple	ornamental
<i>Acer pseudoplatanus</i>	Sycamore	
<i>Acer saccharinum</i>	Silver Maple	ornamental
<i>Achillea millefolium</i>	Yarrow	
<i>Aegopodium podagraria</i>	Ground Elder	
<i>Aesculus hippocastanum</i>	Horse Chestnut	
<i>Aethusa cynapium</i>	Fool's Parsley	
<i>Agave americana</i>	Centuryplant	ornamental
<i>Agrimonia eupatoria</i>	Agrimony	
<i>Agrostis stolonifera</i>	Creeping Bent	
<i>Ajuga reptans</i>	Bugle	
<i>Alchemilla sp.</i>	Lady's Mantle	
<i>Alliaria petiolata</i>	Garlic Mustard	
<i>Allium subhirsutum</i>	Hairy Garlic	
<i>Allium ursinum</i>	Ramsons	planted
<i>Alnus glutinosa</i>	Alder	
<i>Alnus incana</i>	Grey Alder ?	
<i>Alopecurus myosuroides</i>	Black Grass	
<i>Anacamptis pyramidalis</i>	Pyramidal Orchid	

<i>Anagalis arvensis</i>	Scarlet Pimpernel	
<i>Anemone blanda/appenina</i>		planted?
<i>Anemone nemorosa</i>	Wood Anemone	
<i>Anemone x hybrida</i>	Japanese Anemome	planted?
<i>Anisantha sterilis</i>	Barren Brome	
<i>Anthriscus sylvestris</i>	Cow Parsley	
<i>Anthyllis vulneraria</i>	Kidney Vetch	sown?
<i>Aphanes arvensis agg.</i>	Parsley Piert	
<i>Aquilegia vulgaris</i>	Columbine	planted?
<i>Arabidopsis thaliana</i>	Thale Cress	
<i>Arabis caucasica</i>		planted
<i>Arctium minus agg.</i>	Greater Burdock	
<i>Arrhenatherum elatius</i>	False Oat-grass	
<i>Artemisia vulgaris</i>	Mugwort	
<i>Arum maculatum</i>	Lords-and-Ladies	
<i>Ballota nigra</i>	Black Horehound	
<i>Bellis perennis</i>	Daisy	
<i>Berberis darwinii</i>	Darwin's Barberry	ornamental
<i>Berberis thunbergii</i>	Thunberg's Barberry	ornamental
<i>Betula pendula</i>	Silver Birch	
<i>Borago officinalis</i>	Borage	planted
<i>Bromus hordeaceus</i>	Soft Brome	
<i>Brunnera macrophylla</i>	Siberian Bugloss	planted?
<i>Buddleja davidii</i>	Butterfly Bush	
<i>Calendula officinalis</i>	Pot Marigold	
<i>Caltha palustris</i>	Marsh Marigold	planted
<i>Calystegia sepium</i>	Hedge Bindweed	
<i>Calystegia silvatica</i>	Large Bindweed	
<i>Campanula rapunculoides</i>	Creeping Bellflower	planted?
<i>Capsella bursa-pastoris</i>	Shepherd's Purse	
<i>Cardamine flexuosa</i>	Wavy Bitter-cress	
<i>Cardamine hirsuta</i>	Hairy Bittercress	
<i>Carex pendula</i>	Pendulous Sedge	
<i>Carpinus betulus</i>	Hornbeam	

<i>Castanea sativa</i>	Sweet Chestnut	
<i>Catalpa bignonioides</i>	Indian Bean Tree	ornamental
<i>Ceanothus</i>		ornamental
<i>Centaurea cyanus</i>	Cornflower	planted
<i>Centaurea montana</i>	Perennial Cornflower	planted
<i>Centaurea nigra</i> agg.	Common Knapweed	
<i>Centaurea scabiosa</i>	Greater Knapweed	
<i>Cerastium fontanum</i>	Common Mouse-ear	
<i>Cerastium glomeratum</i>	Sticky Mouse-ear	
<i>Chaenorhinum minus</i>	Small Toadflax	
<i>Chaerophyllum temulum</i>	Rough Chervil	
<i>Chamerion angustifolium</i>	Rosebay	
<i>Cichorium intybus</i>	Chicory	planted
<i>Cirsium arvense</i>	Creeping Thistle	
<i>Cirsium vulgare</i>	Spear Thistle	
<i>Clarkia amoena</i>		planted
<i>Clematis vitalba</i>	Traveller's Joy	
<i>Conium maculatum</i>	Hemlock	
<i>Conopodium majus</i>	Pignut	
<i>Convolvulus arvensis</i>	Field Bindweed	
<i>Conyza canadensis</i>	Canadian Fleabane	
<i>Conyza sumatrensis</i>	Guernsey Fleabane	
<i>Coronopus squamatus</i>	Swine-cress	
<i>Cornus sanguinea</i>	Dogwood	
<i>Cornus sericea/alba</i>		planted
<i>Corylus avellana</i>	Hazel	
<i>Cotoneaster horizontalis</i>	Wall Cotoneaster	
<i>Crataegus monogyna</i>	Hawthorn	
<i>Crepis capillaris</i>	Smooth Hawksbeard	
<i>Crepis vesicaria</i>	Beaked Hawksbeard	
<i>Crocus tommasinianus</i>	Early Crocus	planted?
<i>Cynosurus cristatus</i>	Crested Dogstail	
<i>Cyrtomium</i> sp.		planted?
<i>Dactylis glomerata</i>	Cocksfoot	

<i>Dactylorhiza fuchsii</i>	Common Spotted Orchid	
<i>Daucus carota</i>	Wild Carrot	
<i>Dianthus barbatus</i>	Sweet William	
<i>Dianthus sp.</i>		planted
<i>Digitalis purpurea</i>	Foxglove	
<i>Dipsacus fullonum</i>	Wild Teasel	
<i>Echium vulgare</i>	Viper's Bugloss	
<i>Elytrigia repens</i>	Common Couch	
<i>Epilobium ciliatum</i>	American Willowherb	
<i>Epilobium hirsutum</i>	Great Willowherb	
<i>Epilobium montanum</i>	Broad-leaved Willowherb	
<i>Epilobium parviflorum</i>	Hoary Willowherb	
<i>Epilobium tetragonum</i>	Square-stemmed Willowherb	
<i>Eranthis hyemalis</i>	Winter Aconite	planted?
<i>Erigeron acer</i>	Blue Fleabane	
<i>Erodium cicutarium</i>	Common Storksbill	
<i>Erophila verna agg.</i>	Common Whitlowgrass	
<i>Escallonia macrantha</i>		ornamental
<i>Eschscholtzia californica</i>		planted?
<i>Euphorbia helioscopia</i>	Sun Spurge	
<i>Euphorbia lathyris</i>	Caper Spurge	
<i>Euphorbia peplus</i>	Petty Spurge	
<i>Fatsia japonica</i>		ornamental
<i>Festuca rubra agg.</i>	Red Fescue	
<i>Ficaria verna subsp. verna</i>	Lesser Celandine	
<i>Foeniculum vulgare</i>	Fennel	
<i>Fragaria vesca</i>	Wild Strawberry	
<i>Fraxinus excelsior</i>	Ash	
<i>Fumaria officinalis</i>	Common fumitory	
<i>Galanthus nivalis</i>	Snowdrop	
<i>Galega officinalis</i>	Goat's Rue	
<i>Galium aparine</i>	Cleavers	
<i>Galium mollugo</i>	Hedge Bedstraw	
<i>Galium verum</i>	Lady's Bedstraw	

<i>Geranium dissectum</i>	Cut-leaved Cranesbill	
<i>Geranium molle</i>	Dovesfoot Cranesbill	
<i>Geranium pratense</i>	Meadow Cranesbill	
<i>Geranium pusillum</i>	Small-flowered Cranesbill	
<i>Geranium pyrenaicum</i>	Hedgerow Robert	
<i>Geranium robertianum</i>	Herb Robert	
<i>Geum urbanum</i>	Herb Bennet	
<i>Glechoma hederacea</i>	Ground Ivy	
<i>Hedera helix</i>	Ivy	
<i>Helleborus foetidus</i>	Stinking Hellebore	
<i>Helminthotheca echioides</i>	Bristly Oxtongue	
<i>Heracleum sphondylium</i>	Hogweed	
<i>Hirschfeldia incana</i>	Hoary Mustard	
<i>Holcus lanatus</i>	Yorkshire Fog	
<i>Hordeum murinum</i>	Wall Barley	
<i>Hyacinthoides x massartiana</i>		
<i>Hyacinthoides non-scripta</i>	Bluebell	
<i>Hypericum androsaemum</i>	Tutsan	
<i>Hypericum calycinum</i>	Rose of Sharon	ornamental
<i>Hypericum perforatum</i>	Perforate St. John's Wort	
<i>Hypochaeris radicata</i>	Catsear	
<i>Ilex aquifolia</i>	Holly	
<i>Iris foetidissima</i>	Stinking Iris	
<i>Lamiastrum galeobdolon</i> <i>subsp. montanum</i>	Yellow Archangel	
<i>Lamium album</i>	White Dead-nettle	
<i>Lamium purpureum</i>	Red Dead-nettle	
<i>Lapsana communis</i>	Nipplewort	
<i>Larix decidua</i>	European Larch	
<i>Lathyrus latifolius</i>	Broad-leaved Everlasting Pea	
<i>Lathyrus pratensis</i>	Meadow Vetchling	
<i>Lavandula sp.</i>		ornamental
<i>Leontodon hispidus</i>	Rough Hawkbit	
<i>Lepidium campestre</i>	Field Pepperwort	

<i>Lepidium didymus</i>	Lesser Swine-cress	
<i>Lepidium draba</i>	Hoary Cress	
<i>Leucanthemum vulgare</i>	Ox-eye Daisy	
<i>Linaria purpurea</i>	Purple Toadflax	
<i>Lobularia maritima</i>	Sweet Alison	planted?
<i>Lolium perenne</i>	Perennial Ryegrass	
<i>Lonicera nitida</i>	Wilson's Honeysuckle	ornamental
<i>Lonicera periclymenum</i>	Honeysuckle	
<i>Lotus corniculatus</i>	Birdsfoot Trefoil	
<i>Luzula campestris</i>	Field Wood-rush	
<i>Lythrum salicaria</i>	Purple Loosestrife	
<i>Mahonia sp.</i>		ornamental
<i>Malcolmia maritima</i>	Virginia stock	planted?
<i>Malva moschata</i>	Musk Mallow	
<i>Malva sylvestris</i>	Common Mallow	
<i>Malus pumila</i>	Cultivated Apple	ornamental
<i>Malus sylvestris</i>	Crab Apple	
<i>Matricaria chamomilla</i>	Scented Mayweed	
<i>Matricaria discoidea</i>	Pineappleweed	
<i>Medicago arabica</i>	Spotted Medick	
<i>Medicago lupulina</i>	Black Medick	
<i>Medicago sativa</i>	Lucerne	planted?
<i>Melilotus officinalis</i>	Ribbed Melilot	
<i>Melissa officinalis</i>	Balm	
<i>Mercurialis perennis</i>	Dog's Mercury	
<i>Mimulus guttatus</i>		ornamental, spreading
<i>Moehringia trinervia</i>	Tree-nerved Sandwort	
<i>Muscari armeniacum</i>	Garden Grape-hyacinth	planted?
<i>Myosotis arvensis</i>	Field Forgetmenot	
<i>Myosotis sylvatica</i>	Wood Forgetmenot	
<i>Narcissus pseudonarcissus</i>	Wild Daffodil	
<i>Nigella damascena</i>		planted?
<i>Ophrys apifera</i>	Bee Orchid	

<i>Ornithogalum umbellatum?</i>	Star-of-Bethlehem	planted?
<i>Oxalis articulata/debilis</i>	Pink Sorrel	
<i>Papaver dubium</i>	Long-headed Poppy	
<i>Papaver pseudoorientale</i>	Oriental Poppy	planted?
<i>Papaver rhoeas</i>	Common Poppy	
<i>Pentaglotis sempervirens</i>	Green Alkanet	
<i>Persicaria sp.</i>		
<i>Phleum bertolinii</i>	Smaller Catstail	
<i>Phleum pratense</i>	Timothy	
<i>Pilosella officinarum</i>	Mouse-ear Hawkweed	
<i>Plantago lanceolata</i>	Ribwort Plantain	
<i>Plantago major</i>	Greater Plantain	
<i>Platanus x hispanica</i>	London Plane	ornamental
<i>Poa angustifolia</i>	Narrow-leaved Meadow-grass	
<i>Poa annua</i>	Annual Meadow-grass	
<i>Poa nemoralis</i>	Wood Meadow-grass	
<i>Poa pratensis</i>	Smooth Meadow-grass	
<i>Poa trivialis</i>	Rough Meadow-grass	
<i>Polygonum aviculare</i>	Knotgrass	
<i>Potentilla reptans</i>	Creeping Cinquefoil	
<i>Poterium sanguisorba subsp. balearica</i>	Salad Burnet	sown?
<i>Primula veris</i>	Cowslip	
<i>Primula vulgaris</i>	Primrose	
<i>Primula x polyantha</i>		planted
<i>Prunella vulgaris</i>	Self-heal	
<i>Prunus avium</i>	Wild Cherry	
<i>Prunus spinosa</i>	Blackthorn	
<i>Pteridium aquilinum</i>	Bracken	
<i>Pulicaria dysenterica</i>	Common fleabane	
<i>Pyrus salicifolia</i>		ornamental
<i>Quercus robur</i>	Pedunculate Oak	
<i>Ranunculus acris</i>	Meadow Buttercup	
<i>Ranunculus bulbosus</i>	Bulbous Buttercup	

<i>Ranunculus repens</i>	Creeping Buttercup	
<i>Reseda luteola</i>	Weld	
<i>Rhinanthus minor</i>	Yellow Rattle	
<i>Ribes sanguineum</i>	Flowering Currant	
<i>Ribes uva-crispa</i>	Gooseberry	
<i>Rosa canina</i>	Dog Rose	
<i>Rubus armeniacus</i>		
<i>Rubus fruticosus</i> agg.	Bramble	
<i>Rubus idaeus</i>	Raspberry	
<i>Rumex acetosa</i>	Common Sorrel	
<i>Rumex crispus</i>	Curled Dock	
<i>Rumex obtusifolius</i>	Broad-leaved Dock	
<i>Rumex sanguineus</i>	Wood Dock	
<i>Sagina procumbens</i>	Procumbent Pearlwort	
<i>Salix caprea</i>	Goat Willow	
<i>Salix caprea/cinerea</i>	Goat/Grey Willow	
<i>Sambucus nigra</i>	Elder	
<i>Sarcococca</i> sp.		ornamental
<i>Saxifraga granulata</i>	Meadow Saxifrage	unknown origin
<i>Scorzonoides autumnalis</i>	Autumn Hawkbit	
<i>Scrophularia nodosa</i>	Common Figwort	
<i>Sedum album</i>	White Stonecrop	
<i>Sedum rupestre</i>	Large Rock Stonecrop	
<i>Senecio erucifolius</i>	Hoary Ragwort	
<i>Senecio jacobaea</i>	Common Ragwort	
<i>Senecio squalidus</i>	Oxford Ragwort	
<i>Senecio vulgaris</i>	Groundsel	
<i>Sherardia arvensis</i>	Field Madder	
<i>Silene dioica</i>	Red Campion	
<i>Silene latifolia</i>	White Campion	
<i>Sinapis arvensis</i>	Charlock	
<i>Sison amomum</i>	Stone Parsley	
<i>Sisymbrium officinale</i>	Hedge Mustard	
<i>Solidago canadensis/gigantea</i>		

<i>Sonchus arvensis</i>	Corn Sow-thistle	
<i>Sonchus asper</i>	Rough Sow-thistle	
<i>Sonchus oleraceus</i>	Smooth Sow-thistle	
<i>Sorbaria sp.</i>		ornamental
<i>Sorbus aria agg.</i>	Whitebeam	planted
<i>Sorbus aucuparia</i>	Rowan	
<i>Stachys sylvatica</i>	Hedge Woundwort	
<i>Stellaria graminea</i>	Lesser Stitchwort	
<i>Stellaria holostea</i>	Greater Stitchwort	
<i>Stellaria media</i>	Common Chickweed	
<i>Symphoricarpos albus</i>	Snowberry	ornamental
<i>Symphoricarpos x chenaultii</i>		
<i>Tanacetum parthenium</i>	Feverfew	
<i>Taraxacum agg.</i>	Dandelion	
<i>Tilia x europaea</i>	Common Lime	planted
<i>Torilis japonica</i>	Hedge Parsley	
<i>Tragopogon pratensis</i>	Goatsbeard	
<i>Trifolium campestre</i>	Hop Trefoil	
<i>Trifolium dubium</i>	Lesser Trefoil	
<i>Trifolium pratense</i>	Red Clover	
<i>Trifolium repens</i>	White Clover	
<i>Tripleurospermum inodorum</i>	Scentless Mayweed	
<i>Trisetum flavescens</i>	Yellow Oat-grass	
<i>Tristagma uniflorum</i>	Ipheion	planted
<i>Tulipa sp.</i>		ornamental
<i>Tussilago farfara</i>	Coltsfoot	
<i>Ulmus glabra</i>	Wych Elm	
<i>Urtica dioica</i>	Common Nettle	
<i>Urtica urens</i>	Small Nettle	
<i>Valerianella carinata</i>	Keeled-fruited Cornsalad	
<i>Verbascum thapsus</i>	Great Mullein	
<i>Verbena bonariensis</i>	Vervain	planted
<i>Veronica arvensis</i>	Wall Speedwell	
<i>Veronica chamaedrys</i>	Germander Speedwell	

<i>Veronica filiformis</i>	<i>Slender Speedwell</i>	
<i>Veronica hederifolia</i> subsp. <i>lucorum</i>	<i>Ivy-leaved Speedwell</i>	
<i>Veronica montana</i>	<i>Wood Speedwell</i>	
<i>Veronica officinalis</i>	<i>Heath Speedwell</i>	
<i>Veronica persica</i>	<i>Common Field Speedwell</i>	
<i>Veronica polita</i>	<i>Grey Field Speedwell</i>	
<i>Veronica serpyllifolia</i>	<i>Thyme-leaved Speedwell</i>	
<i>Veronica x franciscana</i>	<i>Hedge Veronica</i>	ornamental
<i>Viburnum lantana</i>	<i>Wayfaring-Tree</i>	
<i>Viburnum tinus</i>		ornamental
<i>Vicia sativa</i>	<i>Common Vetch</i>	
<i>Vicia sepium</i>	<i>Bush Vetch</i>	
<i>Vicia tetrasperma</i>	<i>Smooth Tare</i>	
<i>Vinca major</i>	<i>Greater Periwinkle</i>	
<i>Viola odorata</i>	<i>Sweet Violet</i>	
<i>Viola reichenbachiana</i>	<i>Wood Dog Violet</i>	
<i>Viola riviniana</i>	<i>Common Dog Violet</i>	
<i>Viola tricolor</i>	<i>Wild Pansy</i>	
<i>Vulpia bromoides</i>	<i>Squirrel-tail Fescue</i>	
<i>Vulpia myuros</i>	<i>Ratstail Fescue</i>	