## 2020-2023

## University of Worcester Biodiversity Strategy







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#### 1. Context

This Strategy outlines how the University intends to meet its Sustainability Policy commitment and the UN Sustainable Development Goal for biodiversity.

The University of Worcester Sustainability Policy, 2019 commits to:

'Enhance biodiversity and incorporate biodiversity in environmental management, creating new opportunities for wildlife on campus wherever possible'

Alongside its Sustainability Policy the University of Worcester is working across campus, community and curriculum to deliver the UN's Global Sustainable Development Goals.

The UN Sustainable Development Goals are the blueprint to achieve a better and more sustainable future for all with goals covering a wide range of global challenges. Goal 15 specifically related to biodiversity on campus; Life on Land – To Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss by 2030.

The University has already made good progress in implementing its Policy commitment and the Sustainable Development Goal in relation to biodiversity. A Biodiversity Action Plan has been in place since 2008. This is regularly updated by the Strategic Biodiversity Management Group (SBMG) and implements the commitments set out in the Biodiversity Strategy as part of the University's ISO14001 Environmental Management System. A full review of the Biodiversity Strategy and BAP is undertaken every 3 years.

The SBMG meets at least twice a year to implement the Biodiversity Strategy and BAP. This includes staff from the Sustainability Department, Academic Departments, Grounds Maintenance, students from the Nature Society and external organisations. This latest version of the Biodiversity Strategy covering 2019-2021 is intended to provide a framework to set targets in the BAP in the following areas:

- x Legal compliance
- x Protecting biodiversity
- x Managing biodiversity
- x Creating new habitats

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The BAP priority for 2019-2021 is to create new habitats on the University campuses whilst also continuing to manage and improve existing biodiversity areas and features. The University will seek funding for these projects through initiatives such as Natural Networks Programme and local funds available from groups such as the RSPB.

Between 2020-2022 greater synergies will be also be sought with the Worcestershire Biodiversity Action. The 2018-2027 Worcestershire Biodiversity Action Plan (BAP) identifies 17 habitats and 26 species, or species groups, which are of particular conservation priority in the county. The University is part of the Worcestershire Biodiversity Partnership that includes local government, statutory, voluntary and public bodies committed to working together to deliver the BAP.

## 2. Why conserve biodiversity?

Biodiversity is a term used to describe the variety of all life forms on earth. It includes habitats, species and the interactions between them. Human activity has always had an impact on the natural world and its biodiversity. This has increased exponentially throughout the 20th and 21st century and now we are experiencing widespread reduction in the extent and quality of natural habitats and the number of species that depend on them. 'The State of Nature' report published in 2016 found that 56% of UK species are in decline and 165 species are considered Critically Endangered in Great Britain, i.e. the most likely to go extinct.

On a global scale there is intrinsic recognition of the value and importance of biodiversity, not just for its own sake but also to provide us with 'ecosystem services' such as raw materials, food, clean water and air. Time spent relaxing and exercising in nature has also been proven to have a significantly positive effect on health and well-being.

Although this is widely recognised, the United Nations Environment Programme (UNEP) acknowledges that 'Despite numerous government pledges, biodiversity loss is accelerating in all regions of the world.'



## 3. Business Case

Managing biodiversity on campus has a compelling business case. The EAUC Biodiversity Guide considers the following factors:

Campus planning and development new developments may be required to consider biodiversity, especially if they are to achieve BREEAM construction standards. Incorporating biodiversity into new build projects can also assist the success of planning applications.

**Legal compliance** there is extensive legislation and regulation relating to biodiversity that Universities must consider.

Reputation and image – Biodiversity projects are a key element of demonstrating that an organisation takes a sustainable approach to operations. Sustainability enhances the reputation of an organisation and is also required to achieve sustainability accreditation and awards.

Financial – Reduced intervention grounds maintenance saves money and operations for biodiversity can attract government grants. Incorporating natural features into campus developments can also reduce costs in the long term.tc









#### Hedgerow Regulations 1997

The removal of 'important' hedgerows is prohibited without having been granted with a Hedgerow Removal Notice.

#### The Environmental Damage (Previewn and Remediation) Regulations 2009

The Regulations act to prevent and repair damage to water systems, land quality, species and their habitats and protected sites from a range of activities that cause a risk of 'significant' damage or cause 'significant' damage to land, water or biodiversity.

Environmental Permitting (England and Wales) Regulations 2010 and Water Resources Act 1991

Under these Regulations it is an offence, without a relevant Permit, 'to cause or knowingly permit any poisonous, noxious m5 (n)6 (og)4J0 Tc 018 (a)4 (us1 (d )]J-0.0s)4 (v(io)8.1 ()4 (nt)(rt)6 (a)0 (rn()4 (ndew2Tw 2.28 0 Td0.3 0d[E[hi(i)14 (tih))].1e)3 (v)17 )6 (un8 (t)104 (nt)-)10 ( a)4nnsnd(4 (nt)-)10 f13 (c)28.1 (e)3 h(4



# 5. Habitats and Species at the University of Worcester

#### **5.1 The University of Worcester**

During its first sixty years, the University occupied a single site, the St John's campus. Since being awarded full university status in 2005 the University has undergone a period of significant growth and has more than doubled its student numbers. At the same time it has invested significantly to increase and improve its infrastructure and facilities, acquiring a number of major development sites.

The University continues to grow and develop under its growth Strategy. The University now operates 4 campuses:

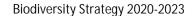
- x St John's Campus
- x City Campus
- x Severn Campus
- x Lakeside Campus

The University also has potential growth at the following sites:

- x University Park
- x University Court

The University has smaller satellite playing field sites:

- x Battenhall Playing Fields
- x The Moors Playing Field





The three main campuses of the University of Worcester.

### 5.2 St John's Campus

St John's Campus occupies 16.41 ha of land to the east of Worcester City Centre. The campus infrastructure consists of educational, social and residential facilities embedded into a leafy parkland arrangement. The landscape is predominantly hard surfaces, such as buildings, roads a





The campus includes a wide variety of trees and an extensive hedgerow network. Trees are classified by arboriculture surveys according to their rarity, ecological importance, landscape value, cultural significance and potential remaining lifespan. Some trees on campus are subject to Tree Preservation Orders (TPO's). TPOs prevent the removal, topping, lopping and wilful damage or destruction of protected trees. The University has a tree management policy



## **5.4 Severn Campus**



## **5.6 University Park**

Located approximately 1.5 miles from St John's Campus, University Park is a 47 acre 'greenfield' site

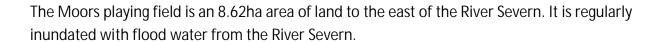




#### The Battenhall Playing Fields



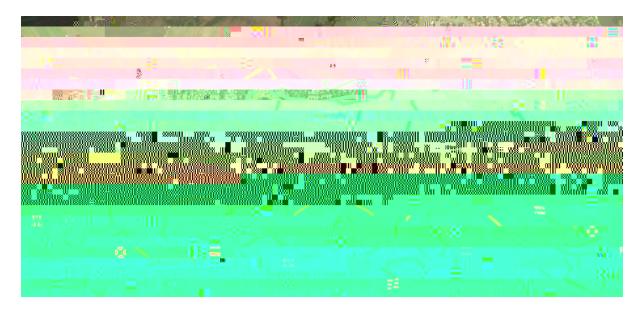
## **5.8 The Moors Playing Field**



#### Location of the Moors Playing Field

The site is dominated by improved grassland a (a4na/-)-2.333 gmev(y)4rdTd(h)-4.4-183 (ir.333 (e)-0.51 (ev) and the site is dominated by improved grassland a (a4na/-)-2.333 gmev(y)4rdTd(h)-4.4-183 (ir.333 (e)-0.51 (ev) and the site is dominated by improved grassland a (a4na/-)-2.333 gmev(y)4rdTd(h)-4.4-183 (ir.333 (e)-0.51 (ev) and the site is dominated by improved grassland a (a4na/-)-2.333 gmev(y)4rdTd(h)-4.4-183 (ir.333 (e)-0.51 (ev) and the site is dominated by improved grassland a (a4na/-)-2.333 gmev(y)4rdTd(h)-4.4-183 (ir.333 (e)-0.51 (ev) and the site is dominated by improved grassland a (a4na/-)-2.333 gmev(y)4rdTd(h)-4.4-183 (ir.333 (e)-0.51 (ev) and the site is dominated by improved grassland a (a4na/-)-2.333 gmev(y)4rdTd(h)-4.4-183 (ir.333 (e)-0.51 (ev) and the site is dominated by improved grassland a (a4na/-)-2.333 gmev(y)4rdTd(h)-4.4-183 (ir.333 (e)-0.51 (ev) and the site is dominated by improved grassland a (a4na/-)-2.333 gmev(y)4rdTd(h)-4.4-183 (ir.333 (e)-0.51 (ev) and the site is dominated by improved grassland a (a4na/-)-2.333 gmev(y)4rdTd(h)-4.4-183 (ev) and the site is dominated by improved grassland a (a4na/-)-2.333 gmev(y)4rdTd(h)-4.4-183 (ev) and the site is dominated by improved grassland a (a4na/-)-2.333 gmev(y)4rdTd(h)-4.4-183 (ev) and the site is dominated by improved grassland a (a4na/-)-2.333 gmev(y)4rdTd(h)-4.4-183 (ev) and the site is dominated by improved grassland a (a4na/-)-2.333 gmev(y)4rdTd(h)-4.4-183 (ev) and the site is dominated by improved grassland a (a4na/-)-2.333 gmev(y)4rdTd(h)-4.4-183 (ev) and the site is dominated by improved grassland a (a4na/-)-2.333 gmev(y)4rdTd(h)-4.4-183 (ev) and the site is dominated by improved grassland a (a4na/-)-2.333 gmev(y)4rdTd(h)-4.4-183 (ev) and the site is dominated by improved grassland a (a4na/-)-2.333 (ev) and the site is dominated by improved grassland a (a4na/-)-2.333 (ev) and the site is dominated by improved grassland a (a4na/-)-2.333 (ev) and the site is dominated grassland a (a4na/-)-2.333 (ev) and the site is down a (a4na/-





The University Court development site(t) in relation to the St John's Campus (right)

## 6. Protecting Biodiversity

As a priority, the University will protect its existing biodiversity features by undertaking surveys to ascertain the biodiversity value of each campus and site. Prior to any major redevelopment work on any of the university sites, the Capital Projects Team undertakes a project risk assessment including the assessment of biodiversity features. Any nationally or locally rare and protected habitats and species are be given particular consideration. Where it is not possible to protect existing biodiversity features, as the campus develops, mitigation measures will be put in place. The University is committed to implementing BS 42020 - a code of practice for biodiversity in planning and development.

The University avoids the unnecessary removal of trees and specimens are protected, wherever possible. Mature trees and those protected by Tree Protection Orders are given particular consideration. The University will implement mitigation measures where trees must be removed and is committed to following BS 5837:2012 - Trees in relation to design, demolition and construction.



The University will only remove trees in the following circumstances:

- z If they are creating a hazard to people.
- z If they are damaging essential services.
- z If they are growing in unsuitable areas; in close proximity to buildings or roads etc.
- z When they need to be cleared for new development and no other option exists.

## 7. Managing Biodiversity

The University defines biodiversity management objectives in its Biodiversity Action Plan that are regularly reviewed and updated by the Strategic Biodiversity Management Group. This includes a summary of objectives that are distributed to relevant staff within the University including grounds maintenance staff.

#### 7.1 Trees

The University has a documented Tree Policy which applies to all trees including those within boundary hedgerows, on all sites. The University also carries out regular tree surveys, to maintain the health and biodiversity value of all trees on their land. All tree management interventions are carried out by qualified persons, to a high standard.

On-going tree maintenance is carried out for the following reasons:

- z To improve safety by removing damaged or weighty limbs
- z To remove branches which have become in contact with buildings
- z To improve shape
- z To maintain the health of the tree
- z To improve sight lines on corners or access routes
- z To improve security



All tree management activities are carefully timed to occur outside the breeding season of bird species (early March to late August), wherever possible, to minimise the impact on breeding birds and other associated species. Where possible, deadwood is allowed to remain







## 8.2 Tree Planting

The University regularly seeks opportunities to plant new trees on their sites. A number of factors are considered before tree planting is undertaken including the position and suitability of the proposed species type. The following objectives are considered to improve biodiversity when tree planting is carried out:

- x To increase habitat connectivity
- x To impraving the quality and size of existing habitats

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#### 8.6 Bats boxes

The hedgerows and trees on St John's Campus, Battenhall and The Moors Playing fields may already offer good foraging and shelter sites for bats. It is recognised that other University buildings may also provide roosting opportunities for bats.

In order to increase the number of roosting sites, the University has placed artificial bat habitat boxes at various sites and will continue to identify new sites and fund the placing of bat boxes.

#### 8.7 Compost heaps and wood piles

The University creates and manages compost heaps to provide habitats for species that require deadwood, fungus and shelter. These include insects, invertebrates and worms, potentially along with the local priority species, the slow worm (Anguis fragilis)

Decaying wood piles support many fungi, bacteria and lichen species, and provide habitat, food and shelter for a variety of vertebrate and invertebrate species including worms, snails, millipedes, centipedes, spiders, mites and other insects. These provide food for many bat and biaaparulaansnap, (t)6. (.083(rm [\$]aparulaasa]534(s)\_Fi45(0)25(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa]575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaasa)575(aparulaa







Monitoring activities have mainly focused on the St John's campus. Opportunities will be identified to expand monitoring programs to other campuses whilst also developing the dataset at the St John's Campus. The University will also continue to undertake tree surveys and will undertake hedgerow surveys with a view to assessing their composition, quality and 'connectivity' and to inform management practices.

#### 10.2 Data Management

The University uses the information provided by professional surveys alongside data that is gathered by staff and students, through their work and studies, to create a comprehensive inventory of species diversity and biodiversity trends at a finer scale. The recording system that the University will be reviewed in order to improve data accessibility for a wide variety of users.

# 11. Partnerships, Communication and Training

Working in partnership with local organisations, raising awareness and maintaining and enhancing skills for biodiversity is essential to ensure the effective implementation of this Strategy and its associated Biodiversity Action Plan.

#### 11.1 Partnerships

The University is committed to working in partnership with local and regional groups to benefit from their knowledge, experience and support whilst also supporting wider biodiversity objectives.

Over the coming three years a key focus will be on developing the links with the Worcestershire Biodiversity Partnership that includes local government, statutory, voluntary and public bodies committed to working together to deliver the regional BAP. The University will continue to consult and engage groups such as the Worcestershire Wildlife Trust and RSPB on its projects.