

Swansea University Biodiversity Action Plan 2022-2025

Introduction

From the beach and dunes of the Bay to the woodland, meadows and gardens of Singleton, Swansea University's campuses are located in beautiful and spacious settings, shared with a rich variety of wildlife. Our natural environment provides the University with a valuable resource delivering a range of ecosystem services: it helps attenuate air and noise pollution; it moderates the local climate, reducing extremes of heat, cold and wind; it provides a living lab for teaching the next generation of ecologists; and not least, it provides a healthy and relaxing environment for our community to recharge their batteries, while helping attract and retain students and staff. The campuses do not exist in isolation – they form an important part of the environment of the Swansea Bay region, connecting with the wider world and acting as stepping stones for wildlife into the city.

The decline in biodiversity has been well documented, and alongside the climate emergency is one of the great challenges facing humanity. Universities have a unique and critical role in guiding and leading the recovery through their research and teaching. But more than this, if we are to be taken seriously we have to act as an example to others - locally, nationally and internationally - by demonstrating best practice in the management of our estate.

This Biodiversity Action Plan (BAP) fulfils the requirement of s6(6) of the Environment (Wales) Act 2016 and sits alongside the management plan for Crymlyn Burrows Site of Special Scientific Interest (SSSI). It forms part of the University's Environmental Management System (EMS) through technical guidance notes and procedures to ensure that the University meets its legislative duties and is able to benefit from the opportunities presented by working with nature. Further detail and context of the environmental and legislative background to this BAP is included in our Biodiversity Framework. This is the third iteration of our BAP and includes the same objectives as the previous version, with the key difference being the inclusion of the Sketty Lane Sports Village in its scope for the first time. It is intended to be a living document to be used and updated as required to ensure that our estate remains as much a home for wildlife as it is for people.

The main risks and opportunities for our natural environment are from the direct management of our grounds and development of the University estate, and this is reflected in the plan with sections for both areas of work. The other key areas are monitoring our natural environment, promotion of our green space for teaching, research and wellbeing, and committing to working with other organisations to ensure an integrated approach to the creation and conservation of resilient ecosystems. The final section deals with reporting and administration of the plan.

Wellbeing and Climate Emergency Strategy (2021-2025) commitments

Key commitments for the management of the University's natural environment are included in the University's Sustainability and Climate Emergency Strategy and form cornerstones of this BAP, and are cross referenced in the action plan:

NE 4	Significant areas of both campuses will be managed as wildflower meadows supporting a thriving array of invertebrate life and prized by the University as an important asset
NE 5	All campus development will consider the impact and opportunities for nature gain at the outset to result in net biodiversity gain, including our first use of biodiverse living (brown) roofs
NE 6	Biodiversity Action Planning and Objectives and Targets (O&Ts) will be contained within both corporate and local (Faculty/PSU) Sustainability Action Plans (SAPs) as part of the EMS (ISO 14001)
NE 7	Biodiversity performance will be reported as part of the annual Management Review at the Corporate Responsibility (CR) Committee via the Biodiversity Working Group (informal) and the EMS (ISO 14001)
NE 9	We will deliver work experience placements (Go Wales, WoW) and internships (SPIN, year in industry research internships) for students to develop skills and employability
NE 10	Both targeted and informal staff training will increase knowledge and capacity around biodiversity and the natural environment
NE 11	Biodiversity will continue to be a key theme within SWell and other engagement initiatives, campaigns and apps
NE 12	We will run a programme of engagement activities for students and staff to raise awareness and knowledge of our wildlife, what we are doing to protect it and how they can get involved
NE 13	Carbon storage implications and opportunities will be considered when making decisions about the development and management of university greenspace and the SSSI
NE 14	We will create sustainable and resilient ecosystems is at the heart of the Biodiversity Action Plan (BAP) and SSSI management plan
NE 15	Working with external partners and stakeholders, we will ensure the conservation of the university estate complements and enhances the resilience of ecosystems in the city, region and beyond
NE 16	Appropriate long-term monitoring will identify environmental change and guide future management of the university estate
NE 17	Beach cleans, staff volunteering and other dedicated activities will form part of the University Wellbeing Strategy, Wellbeing Days at both campuses and other wellbeing and health focused activity
NE 18	We will encourage the use of the greenspace on our campuses and the SSSI to benefit the wellbeing of students and staff
NE 19	Collaborate with colleagues in Human and Health Sciences, Human Resources and Student Services to implement a formal system for staff, student and community based ecotherapy and sustainability engagement referrals contributing to the Five Ways to Wellbeing

Action Plan

1. Management of our estate - grounds and green space						
Objective 1: To improve the management of our campuses for wildlife						
Objective 2. To create new areas of valuable wildlife habitat where appropriate						
No.	Action	Campus	Measure	Target date	Progress	Lead contact
1.1	Improve wildlife value of amenity grassland by reducing mowing where appropriate and reducing soil fertility by use of cut and collect machines where practicable (NE 4, NE 14, NE 15)	both / Sketty Lane	reduction in mowing	ongoing		Grounds Manager
1.2	Manage significant areas of both campuses as wildflower meadows supporting a thriving array of invertebrate life (NE4, NE 14, NE 15)	both	area of flower rich meadows	ongoing		Grounds Manager
1.3	Choose native and/or nectar-rich species (eg RHS "perfect for pollinators" label) as the default option in planting schemes (NE 14, NE 15)	both	proportion of wildlife-friendly plants	ongoing		Grounds Manager
1.4	Identify and maintain "scruffy" and uncultivated areas on both campuses (NE 14)	both	no net loss	ongoing		Grounds Manager
1.5	Minimise the use of pesticides on campus and sports village (see EMS 8.1.22 Plant Protection Product Management Procedure), and actively seek alternative methods of weed control, with a commitment to phase out herbicides altogether by 2025 (NE 14)	both / Sketty Lane	quantity of pesticides applied / no n/c s	Ongoing annual reduction, zero use by end of 2025		Grounds Manager
1.6	Remove / control all invasive non-native plant species (see EMS procedure) (NE 14, NE15)	both	annual reduction	ongoing		Grounds Manager
1.7	Ensure that management of the campus grounds considers and protects biodiversity and ecosystem resilience (food and shelter for wildlife, soil biodiversity etc, with specific legal protection for nesting birds and bat roosts) - consult Biodiversity Officer if unsure (see EMS procedure on tree and shrub management) (NE 14 and relevant legislation)	both / Sketty Lane	no n/c s	ongoing		Grounds Manager

1.8	Identify opportunities to enhance wildlife value of the University estate and improve resilience of ecosystems (NE 14)	both / Sketty Lane	Number of projects	At least 1 project annually		Biodiversity Officer
1.9	Carbon storage implications and opportunities will be considered when making decisions about the management of the University's green space (NE13)	both / Sketty Lane	Carbon storage potential	ongoing		Grounds Manager
1.10	Retain Green Flag status for both campuses (NE 14, NE 15, NE 18)	both	Green Flags retained	annual		Grounds Manager
1.11	Retain the University's Bee Friendly status (NE 14, NE 15)	both	Bee Friendly retained	annual		Biodiversity Officer
1.12	Retain our silver Hedgehog Friendly Campus status and aim to upgrade to gold (NE 15)	Singleton	HFC award	gold by 2023		Conservation Society (with support)
1.13	Develop an annual programme for repairing, replacing and erecting additional nest boxes, particularly working with the Swansea Swift City project to establish breeding colonies of swifts on both campuses (NE 14, NE 15)	both	number of boxes in use	First swift boxes installed on Singleton Campus 2022, then ongoing		Biodiversity Officer
1.14	Continue and where appropriate, expand the Tyfu Tawe project, growing food on campus with students and staff (NE 18)	both	number of people involved	ongoing		Biodiversity Officer / Sustainability Team

2. Management of our estate - the built environment						
Objective 1: To improve the management of our campuses for wildlife						
Objective 2. To create new areas of valuable wildlife habitat where appropriate						
No.	Action	Campus	Measure	Target date	Progress	Lead contact
2.1	All campus development will consider the impact and opportunities for nature gain at the outset to result in net biodiversity gain, including our first use of biodiverse living (brown) roofs (NE 5)	both	Net biodiversity gain	ongoing		Associate Director of Infrastructure Services
2.2	Carbon storage implications and opportunities will be considered when making decisions about campus development (NE 13)	both	Carbon storage potential	ongoing		Associate Director of Infrastructure Services
2.3	Ensure that all ongoing building maintenance considers and protects biodiversity (key risks are nesting birds and bat roosts)-consult Biodiversity Officer if unsure (see EMS procedure on roof and building maintenance) (NE 15 and relevant legislation)	both	no n/c s	ongoing		Associate Director of Infrastructure Services

3. Collaboration with external partners						
Objective 3: Ensure that conservation of campus habitats and species complements wider efforts to create resilient ecosystems - in the city, region and beyond						
No.	Action	Campus	Measure	Target date	Progress	Lead contact
3.1	Identify opportunities for collaborative and/or funded projects (eg Buglife's B-lines; LA's Margam to Mumbles Meadow) to enhance wildlife value of campuses and improve connectivity and resilience of local ecosystems (NE 15)	both	one new project annually	ongoing		Biodiversity Officer
3.2	Represent the University on the Swansea and NPT Nature Partnerships (NE 15)	N/A	number of meetings attended	ongoing		Biodiversity Officer
3.3	Represent the University on the Working with Nature working group of the Swansea PSB (NE 15)	N/A	number of meetings attended	ongoing		Biodiversity Officer
3.4	Attend other relevant meetings and workshops as appropriate (NE 15)	N/A		ongoing		Biodiversity Officer

4. Promotion of our natural environment						
Objective 4: To ensure all relevant stakeholders have sufficient training to enable them to play their part in managing biodiversity on campus						
Objective 5: To increase educational opportunities, raise awareness of the role our campus plays in supporting wildlife and encourage appreciation of the benefits of biodiversity and green space for health and wellbeing						
No.	Action	Campus	Measure	Target date	Progress	Lead contact
4.1	Communicate objectives of the BAP to all grounds management staff through team meetings to raise awareness of biodiversity issues and projects (NE 10, NE 14)	both	number of meetings attended	termly		Biodiversity Officer
4.2	Identify and deliver any biodiversity related training required for other staff as required for the Environmental Management System (include in annual report) (NE 10, NE 14)	both	training delivered	annual - July		Biodiversity Officer
4.3	Deliver work experience placements (Go Wales, WoW) and internships (SPIN, YiR) for students to develop skills and employability (NE 9)	both	number of placements	ongoing		Biodiversity Officer
4.4	Review and replace (if necessary) the Nature Trail interpretation boards (possibly incorporate into Wellbeing Trail) (NE 18)	Singleton		July 2023		Biodiversity Officer / BWG
4.5	Develop and deliver a programme of guided walks, campus growing and other interpretative events to raise awareness of the University's biodiversity with staff and students (NE12, NE 14, NE 18)	both	number of events	Ongoing		Biodiversity Officer / Biosciences
4.6	Use social media to communicate key biodiversity messages - aim for at least one per month (NE 18)	n/a	number of posts	ongoing		Biodiversity Officer / Sustainability Team
4.7	Promote the use of campus green and growing space to benefit health and wellbeing of staff and students, supporting the campus Wellbeing Groups, Corporate Health Standard and SWell programme (NE 12, NE 18)	both	use of campuses for wellbeing	ongoing		Biodiversity Officer / Sustainability Team
4.8	Promote volunteering opportunities for staff and students (NE 9, NE 12, NE 17, NE 18)	both	number of volunteers	ongoing		Biodiversity Officer

5. Survey, monitoring and data management						
Objective 6: To implement efficient and robust data and information management to ensure that biodiversity action is based on the best available information.						
No.	Action	Campus	Measure	Target date	Progress	Lead contact
5.1	Maintain the biodiversity record hub (currently on Sharepoint - migrate it to Teams) (NE 16)	n/a		Ongoing		Biodiversity Officer
5.2	Carry out a baseline survey of both campuses (including mapping invasive species, veteran trees, "scruffy" uncultivated areas, flower-rich grassland and key species) to incorporate into campus master plans (NE 16)	both	report	31/07/2022		Biodiversity Officer / work experience student
5.3	Produce an annual target list for survey priorities for bioscience students and interns (NE 9, NE 16)	both	list produced	Annual - August		Biodiversity Officer / BWG
5.4	Record all gains and losses to biodiversity on campus as a result of management, development, incidents and projects and include in annual report (NE 16)	both	report	Ongoing		Biodiversity Officer
5.5	Maintain a record of all wildlife survey and monitoring work taking place on campus and include in annual report (NE 16)	both	report	Ongoing		Biodiversity Officer / BWG

6. Administration and reporting						
Objective 7: To ensure structured, multi-stakeholder management, monitoring and reporting of biodiversity issues on campus.						
No.	Action	Campus	Measure	Target date	Progress	Lead contact
6.1	Publish BAP	n/a		31/01/2022		Biodiversity Officer
6.2	Maintain the Biodiversity Working Group as a mailing group and set up a Biodiversity Group in Microsoft Teams	n/a		31/07/2022 (and ongoing)		Biodiversity Officer
6.3	Report annually on implementation of the BAP, wildlife gains and losses, research and monitoring undertaken and engagement and interpretation undertaken (NE 16)	n/a	report	annual -July		Biodiversity Officer
6.4	Ensure that the Grounds Management Plan and Biodiversity Action Plan are fully aligned	n/a	No contradictions	When updated		Biodiversity Officer / Grounds Manager
6.5	Report on biodiversity actions to Welsh Government every 3 years (Env (Wales) Act s6(7))	n/a	report	December 2022 and 2025		Biodiversity Officer
6.6	Carry out an annual review of the BAP, updating action plan as necessary	n/a	review	annual - July		Biodiversity Officer
6.7	Carry out a full review of the BAP every 4 years	n/a	review	October 2025		Biodiversity Officer