



WHIP – Woodland Habitat Improvement Project Harwell Science & Innovation Campus, Oxfordshire

Harwell Campus in partnership with Adam Frost Design Ltd & Nurture Landscapes Ltd

BIG Biodiversity Challenge Award Category: Habitat Creation - Project of the Year Award

(Small scale biodiversity enhancement of up to 0.5ha)

Project overview

The scheme, designed throughout 2021/22 with the support of Adam Frost and completed in January 2023, consisted in enhancing a small area of woodland, shrub, and grassland. It aimed at introducing colour and structural diversity with layers of seasonal planting, creating an area benefiting both nature and people.

What were the biodiversity conditions on site, prior to the enhancement?

The project aimed at improving two adjacent 'nodes' identified within Harwell Campus Biodiversity Enhancement and Implementation Strategy developed in 2021.

Area B1, a small woodland copse, was dominated by beech and horse chestnut trees with some pine interspersed between. The understorey lacked any structural complexity with sparse or little ground flora present; with the entire parcel covering 0.29ha. Area B2 consisted of introduced shrub and modified grassland with scattered trees totalling 0.17ha. The introduced shrub, dominated by snowberry, had low ecological value. Similarly, the modified grassland consisting mostly of perennial ryegrass contributed little to the biodiversity of the area.

What were the reasons behind this project?

This habitat improvement project was not the result of a planning condition, or offsetting, but delivered as part of Harwell Campus' objective to "protect the local environment and manage its estate sustainably, enhancing biodiversity whilst creating a network of green spaces for people & nature."



Log wall installed within Woodland (Area B1), December 2022. Photo by Tom Weller



Log pile installed within Woodland (Area B1), December 2022. Photo by Tom Weller Photography.

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Harwell Campus is committed to:

- Maximise biodiversity on new developments and secure a 10% net gain.
- Deliver additional biodiversity value, above and beyond statutory net gain.

This project, the first of its kind on Harwell Campus, will contribute to these targets and provide a blueprint for future habitat enhancement schemes.

What were the biodiversity measures taken?

Within Area B1, the planting of hazel, English yew, witch hazel, shrub rose, oakleaf hydrangea and Japanese snowball has increased the vertical structure of the woodland, introduced new age classes, and increased the number of shrub and tree species present.

The planting of wildflower including bluebell, wild daffodil, snowdrop, winter aconite, ramsons and cowslip among others will have created good habitat for invertebrates and the resident bee population.

This is expected to result in a net increase in biodiversity of 2.42 units (+27.89%).

Whilst not measurable in terms of biodiversity units, the area now features a 90 meters long log habitat wall made of over 1,500 linear meters of site-won timber, which represents over 18 cubic meters of wood.

Within Area B2, the planting of native English yew hedgerow has significantly increased the biodiversity of this node (+0.36 biodiversity units). The removal of snowberry and implantation of native scrub species has also increased the value of the habitat. The newly planted mixed scrub comprises of bottlebrush buckeye, river birch, cornelian cherry, flat-stalked spindle, and hydrangeas.

This is expected to result in a net increase in biodiversity of 0.13 units (+26.28%).

Overall, this project saw the planting of 26,000 bulbs, 2,500 perennial plants and 259 semi mature trees.



Access into Woodland (Area B1) through log wall, May 2023. Photo by Nurture Landscapes.



Path through Woodland (Area B1), May 2023. Photo by Nurture Landscapes.





It was delivered by Nurture Landscapes which already provides landscaping services for the Campus and will undoubtedly take great pride in its long-term management as part of the wider maintenance activities.

During his site visit, Adam Frost, as designer of the scheme, took the time to engage with the delivery team, especially with some of the newer members, in a very educational day for all involved.

Since the project was completed, other areas across Campus are being identified for biodiversity enhancement, following a similar approach.

Further information

It is important to reiterate that this project sits within a wider strategic framework for biodiversity enhancements across the Campus, allowing resources to be made available and used effectively, achieving multiple benefits, and delivering value for money. It is a well-thought design, aligned with the Campus landscape strategy, that was developed over months of collaboration and integration, delivered, and maintained by a trusted Campus-based team. It is not an 'one off' project, and it was not driven by planning condition, offset requirements, or PR purposes. People (i.e., Campus staff and visitors) and Nature were put at the heart of its development.

Building on this successful project, we have now initiated a Biodiversity Taskforce which will aim to drive the development of a Campus Biodiversity Management System, and associated Biodiversity Action Plan, aligned with the Wildlife Trust's Biodiversity Benchmark certification. This will include assessing habitats on Campus, monitoring the biodiversity impact of projects, identifying opportunities for improvement, defining long-term management objectives and reporting.

By taking this approach, we believe that Harwell Campus will be recognised as a strong advocate for Nature & Biodiversity in the Built Environment and become an example to follow within the Science & Innovation Real Estate sector.



Project delivery team during designer site visit, December 2022. Photo by Nurture Landscapes.



Designer site visit during project delivery, December 2022. Photo by Nurture Landscapes.





Project Team

• Client: Harwell Science & Innovation Campus

Design: Adam Frost Design

Delivery: Nurture Landscapes

Ecologist: RPS

What was the motivation for carrying out the enhancement?

Harwell Campus is located on the edge of the North Wessex Downs Area of Outstanding Natural Beauty (AONB), and we're committed to respect this unique landscape setting. We also recognise the health & wellbeing benefits that access to nature provide to staff and visitors and our development activities focus on offering this connection throughout the Campus. We strongly believe that our efforts, evidenced by this project, will make of Harwell Campus an even more attractive place to work.



View from Woodland (Area B1) towards staff car park, May 2023. Photo by Nurture Landscapes

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