



Physic Garden and Bike Shed
UK Habitat Classification Survey Report
2025

Site name: University of Suffolk Physic Garden and Bike Shed

Grid reference:

Area: the survey scope is made up of the following areas:

- a. **3x Planters at front entrance of Health and Wellbeing Building (H&W):** each planter = 195 by 75cm
- b. **3x planters at back entrance of H&W:** each planter = 195 by 75cm.
- c. **2x boarder (the 'Physic Garden'),**
 - i. **front boarder (front entrance to H&W) = 24.18m²**
 - ii. **Back boarder (back entrance to H&W) = 4.37 m²**
- d. **Bike Shed & Green roof: 15.53 m²**

Date and time of the survey: 4th June 25, 13:25 till 15:00

Weather conditions: overcast, slight wind, 17°C

Recorders: Thomas Heathwaite, and 2 BS(C) Wildlife, Ecology and Conservation Science Students, Cameron and Daniel.

Location, description, and geology of site:

The site is located on the University of Suffolk campus which is in the centre of Ipswich. Bordering the Bumblebee Buffet Area, to the east, is Alexander Park. Suffolk new college boarders just to the north of the University of Suffolk campus and the marina and Ipswich wet docks are to the south of the University of Suffolk campus. The centre of Ipswich is about 1km from the site campus.

The bedrock geology of the site consists of clay, silt, and sand (the Tharnet Formation and Lambeth Group) and the superficial deposits consist of sand and gravel (the Lowestoft formation).

Statutory and Non-statutory designations:

There are no statutory designations within a radius of 1km of the survey site.

Three non-statutory designations are present within a radius of 1km of the survey site including Nitrate Vulnerable Zones 2017 Designations (England), total catchment source protection zone and drinking water protected area (surface water) (DEFRA, 2024)

Habitats and species:

Given the Wildlife Garden is only 230.35 meters away, the finding presented within the 2022 Wildlife Garden Phase 1 Habitat Survey report is likely to be valid here too.

Methodology (terrestrial):

Before the site visit, a desktop survey consisting of 1) the geology of the site; 2) statutory and non-statutory designations and 3) a search using the NBN Atlas (2025) of all protected species recorded within a 1km radius of the survey site listed on the UK Wildlife and Countryside Act (1981), section 41 of the Natural Environment and Rural Communities Act (2006), and *The Conservation of Habitats and Species Regulations 2017* was conducted.

A visit to site was made on the 4th of June 25 to survey, with weather conditions overcast, slight wind, 17°C

To survey the Physic Garden (see figure 1 for what areas in scope), sampling, without quadrats, was used and all plants that could be seen were noted. Local frequency was not recorded due to the size of the survey areas being too small for their use. The habitats were mapped as per the UKHab, UK Habitat Classification System, V2.0 methodology (UKHab Ltd, 2025).

For the bike shed (see figure 1 for where this area is located), photos of the green roof were taken from a ladder and plants identified from these photos. Quadrats were not used, and local frequency was not recorded. The habitat was mapped as per the UKHab, UK Habitat Classification System, V2.0 methodology (UKHab Ltd, 2025).

Any species observed throughout the survey period were also noted.

Any species recorded during observations made before the survey in the spring have also been noted; and are indicated as such.

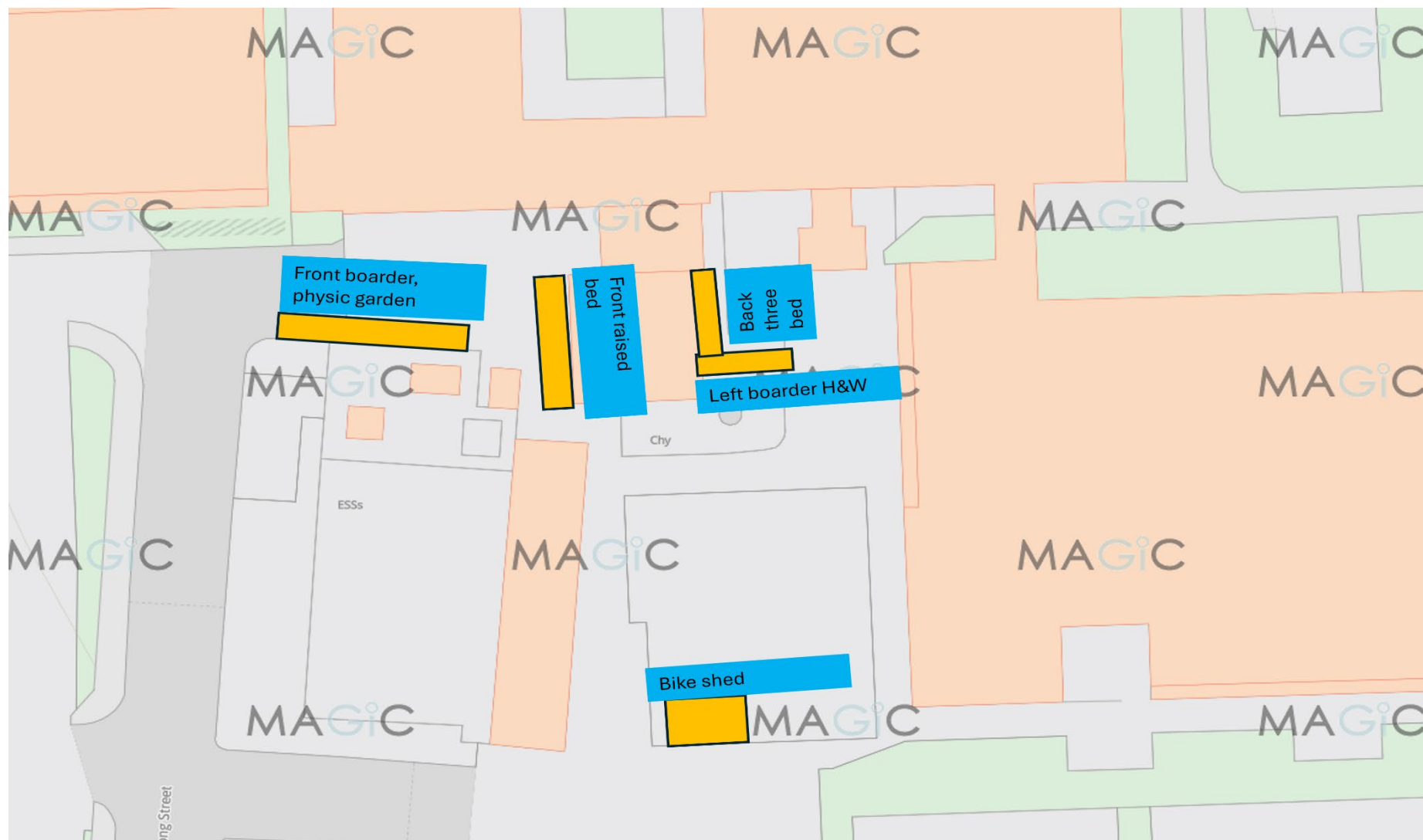


Figure 1, a diagram showing the survey sites and their locations. The orange indicated the survey sites, the blue labels describe each site's name and are referred to in plant tables 1 to 4
Image produced using the Magic Map application (DEFRA, 2024)

Results – Physic Garden:

The habitats are described below. Figure 2 shows the habitats present at the survey site, their codes. Tables 1, 2, 3 and 4 shows that species were present within each area of the Physic Garden, the essential and additional secondary codes and photos, if taken (figures 3 and 4).

Total species richness (plants and animals combined) for Physic Garden is estimated at 32 species, including those seen in the spring.

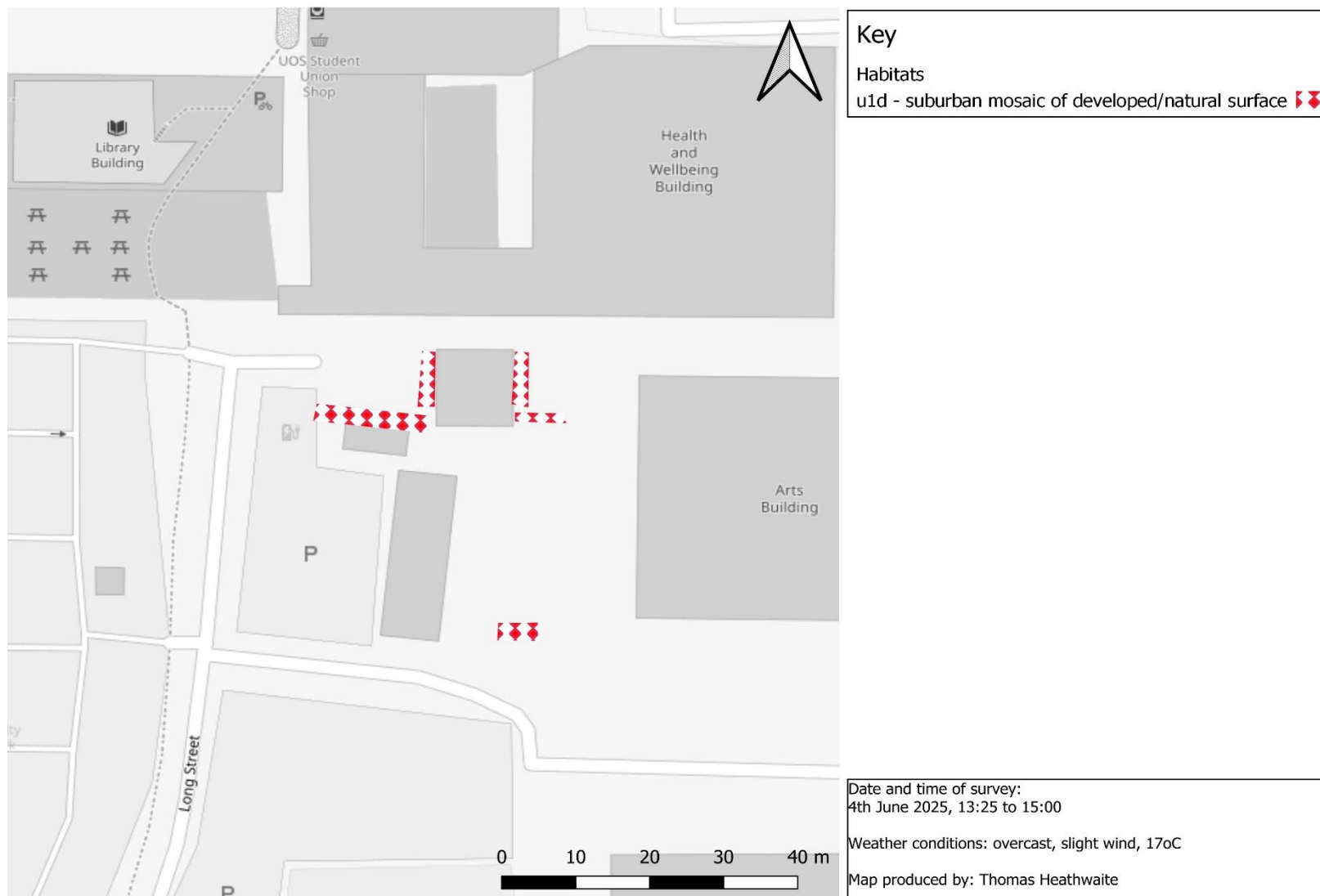


Figure 2 a habitat map of the University of Suffolk's Physic Garden and Bike Shed, Ipswich, OS Grid Reference:TM1711144224 using UK Habitat Classification methodology (UKHab Ltd, 2023)

Table 1, showing the plants species present in the boarder to the left of the front entrance of Health and Wellbeing Building (see maps, figures 1 and 2), the essential and additional secondary codes (UKHab Ltd, 2023) for each site and a photo if taken. The habitat classification is shown in figure 2 (UKHab Ltd, 2023).


Boarder to left of front entrance of H&W			
Species name	Essential secondary codes	Additional Secondary codes	Photo?
Bloody crane's bill (<i>Geranium sanguineum</i>)	10 scatted scrub.	828 – vegetated garden. 814 – education premises open space.	
Common dogwood (<i>Cornus sanguinea</i>)	61 – re created habitat.	813 – educational building (as Health and Wellbeing is located next to survey site).	
Siberian dogwood (<i>Cornus alba</i>)		526 – accessible green space	
European mountain ash (<i>Sorbus aucuparia</i>)		516 – active management.	
Sweet violet (<i>Viola odorata</i>)		201 – young trees, planted.	
Holm oak (<i>Quercus ilex</i>)		117 – laid hedgerow?	
English oak (<i>Quercus robur</i>)			

Figure 3, common dogwood

Table 2, showing the plants species present in the front three raised planter planters, Health and Wellbeing Building (see maps, figures 1 and 2), the essential and additional secondary codes (UK Hab Ltd, 2023) for each site and a photo if taken. The habitat classification is shown in figure 2 (UK Hab Ltd, 2023).

Front three raised beds, Health and Wellbeing Building.			
Species name	Essential secondary codes	Additional secondary codes	Photo?
Ribwort plantain (<i>Plantago lanceolata</i>)	10 scatted scrub.	125 – flower forage abundant 516 – active management	
Rosmary (<i>Salvia rosmarinus</i>)		813 – education building (as	
Lemon balm (<i>Melissa officinalis</i>)	61 – re	Health and Wellbeing is	
Cotton lavender (<i>Santolina chamaecyparissus</i>)	created habitat.	located next to survey site 814 – education premises	
English lavender (<i>Lavandula angustifolia</i>)		open space. 828 – vegetated garden.	
Woodland sage (<i>Salvia nemorosa</i>)			
Bristly oxtongue (<i>Helminthotheca echioides</i>)			
Common thyme (<i>Thymus vulgaris</i>)			

Table 3, showing the plants species present in the left boarder of Health and Wellbeing Building (see maps, figures 1 and 2), the essential and additional secondary codes (UKHab Ltd, 2023) for each site and a photo if taken. The habitat classification is shown in figure 2 (UKHab Ltd, 2023).


Left boarder of Health and Wellbeing Building			
Species name	Essential secondary codes	Additional secondary codes	Photo?
Green mullein (<i>Verbascum thapsus</i>)	10 scattered	125 – flower forage abundant	
Rosmary (<i>S. rosmarinus</i>)	scrub.	516 – active management	
Cleaver (<i>Galium aparine</i>)		813 – education building (as	
English lavender (<i>L. angustifolia</i>)	61 – re	Health and Wellbeing is	
Cotton lavender (<i>S. chamaecyparissus</i>)	created	located next to survey site)	
Hyssop (<i>Hyssopus officinalis</i>)	habitat.	814 – education premises	
Sweet woodruff (<i>Galium odoratum</i>)		open space.	
Greater plantain (<i>Plantago major</i>)		828 – vegetated garden.	
Sweet violet (<i>V. odorata</i>)			
Lemon Balm (<i>M. officinalis</i>)			
Corn poppy (<i>Papaver rhoeas</i>)			
Purple cornflower (<i>Echinacea purpurea</i>)			
Rose-of-Sharon (<i>Hibiscus syriacus</i>)			
Common thyme (<i>T. vulgaris</i>)			
Common sow-thistle (<i>Sonchus oleraceus</i>)			
Gorse (<i>Ulex europaeus</i>)			
Jacob's ladder (<i>Polemonium caeruleum</i>)			
Yarrow (<i>Achillea millefolium</i>)			
Echinacea (genus echinacea)			

Figure 4, cotton lavender

Table 4, showing the plants species present in the boarder to the left of the front entrance of Health and Wellbeing Building (see maps, figures 1 and 2), the essential and additional secondary codes (UKHab Ltd, 2023) for each site and a photo if taken. The habitat classification is shown in figure 2 (UKHab Ltd, 2023).

Back three raised bed, Health and Wellbeing Building.			
Species name	Essential secondary codes	Additional secondary codes	Photos
English lavender (<i>L. angustifolia</i>)	61 – re	828 – vegetated garden.	
Common vervain (<i>Verbena officinalis</i>)	created habitat.	814 – education premises open space.	
Common sow thistle (<i>S. oleraceus</i>)		813 – educational building (as	
Purple cornflower (<i>E. purpurea</i>)		Health and Wellbeing is	
Lambsquarters (<i>Chenopodium Album</i>)		located next to survey site).	
Lemon balm (<i>M. officinalis</i>)		526 – accessible green space	
		516 – active management.	

During the spring before the survey and during the survey, the following animal species were recorded:

1. Wasp species (suborder Apocrita) found – back boarder entrance to H&W
2. Black garden ant (*Lasius niger*) found at the back boarder entrance to H&W.
3. Brimstone (*Gonepteryx rhamni*) flying around physic garden, during spring.

Results – Bike Shed:

The habitats are described below. Figure 2 shows the habitats present at the survey site, their codes. Table 5 shows the species which were present within this habitat, the essential and additional secondary codes and photos, if taken (figures 5 and 6).

Total species richness (plants and animal combined) for Bike Shed is estimated at 11 species, including those seen in the spring.

Table 5, showing the plants species present in the boarder to the left of the front entrance of Health and Wellbeing Building (see maps, figures 1 and 6), the essential and additional secondary codes (UKHab Ltd, 2023) for each site and a photo if taken. The habitat classification is shown in figure 6 (UKHab Ltd, 2023).



Bike shed			
Species name	Essential Secondary codes	Additional secondary codes	Photo?
Red campion (<i>Silene dioica</i>)	10 – scatted scrub.	521 – unmanaged	
Thistle (species unknown)			
Feverfew (<i>Tanacetum parthenium</i>)	87 – biodiverse green roof.	522 – native.	
English lavender (<i>L. angustifolia</i>)		813 – educational building (as Arts building located close by).	
Crested Dog’s tail (<i>Cynosurus cristatus</i>)			
Common sorrel (<i>Rumex acetosa</i>)			
Common thyme (<i>T. vulgaris</i>)			
Sage leavd rock-rose (<i>Cistus salviifolius</i>)			
Oxeye Daisy (<i>Leucanthemum vulgare</i>)			

Figure 6, sage leaved rock rose

Figure 5, oxeye daisy

During the spring, before the survey, the following animals species were spotted:

1. Great tit (*Cyanistes caeruleus*) nesting in Bike Shed, during spring.
2. Speckled wood (*Parus major*) – flying around bike shed, during spring.

Discussion and Recommendations:

Physic Garden:

This is the first year that a survey of the physic garden has been undertaken, and it is pleasing to see a species richness of 32 species in the three areas.

The planting scheme of the Physic Garden is to simultaneously showcase and explore the medicinal plants which also have biodiversity benefits which have been used throughout the centuries. The recommendations, therefore, for this area will be tailored to this concept.

Cleavers, (*G. aparine*) are known to be invasive and out-compete other plants. Therefore, removal of these is a top priority over the next year, potentially through the use of yellow rattle (*Rhinanthus minor*), which is parasitic to grasses (Rowntree and Craig., 2018).

Recommendations for this site that will complement the existing planting scheme include planting common evening primrose (*Oenothera biennis*) whose oil has been shown to treat skin disorders e.g diabetes, mastalgia,, hydration and barrier function of the skin, amongst others (Sharifi et al., 2024) and is beneficial to moths, bees and butterflies (Sumara et al., 2023; The Wildlife Trust, n.d).

Additionally, chamomile (*Matricaria chamomilla*), is known to have many medicinal properties including calming effects, digestive issues, relieving stress, and skin irritation amongst others and also is beneficial to bees and flies (Polcaro et al., 2025) would also be beneficial for this site, particularly in the back entrance to Health and Wellbeing.

Bike Shed:

The bike shed acts a living example of how the competing needs of traveling and biodiversity can mingle and coexist together, with a number of benefits. Not only does the Bike Shed provide secure storage for your bike, it also is home to a relatively large species richness of plants and insects thriving on the green roof, as part of our "Bigger, Better, More Joined Up" (Lawton, 2010) nature corridor.

A variety of wildflower species which have been shown to have a multitude of biodiversity benefits have been recorded in this survey, including Common sorrel (*R. acetosa*) is the food plant of the small copper (*Lycaena phlaeas*), a widespread butterfly; Oxeye daisy (*L. vulgare*) and red campion (*S. dioica*) are both beneficial to a wide range of bees, hoverflies and butterflies (Plantlife, 2025a, Plantlife, 2025b). Finally, thistles are the foodplant of painted lady (*Vanessa cardui*), a migrant to the UK from North Africa, Southern Europe and Middle East during the summer (UK Butterflies, 2025 and Butterfly Conservation, n.d).

Moreover, the bike shed provides nesting material and bird boxes for nesting birds to use, as well as nesting cavities for solitary and bumblebees to occupy. Great tits (*P. major*), for the first time this year, nested in one of the nest boxes. Solitary bees have also been seen nesting, though identification of the species have not been identified.

Recommendations for this site are to continue to not irrigate the green roof as this helps biodiversity beneficial plants to thrive, and also to continuing surveying the site and not withstanding a decrease in species richness, active management of the site is not recommended.

The species recorded here are, like with any site, a snapshot in time, but also a snapshot of what could be seen from the ladder and, due to a lot of the flowers turning to seed by the survey date, a

product of what could be identified. These limitations notwithstanding, the results show a positive sign and trend of how both how travel and biodiversity can live in harmony.

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