



**PRELIMINARY ECOLOGICAL APPRAISAL
& PRELIMINARY BAT ROOST ASSESSMENT**

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EXECUTIVE SUMMARY

A Preliminary Ecological Appraisal and concurrent Preliminary Roost Assessment in respect to bats was carried out across land at Harwoods, within the Horsham District of West Sussex on the 30th July 2024. The assessment was required in order to ascertain whether any ecological constraints could affect proposed development at the site. Proposals are for the conversion of an existing outbuilding for ancillary residential accommodation. Access will remain as existing. No trees or boundary features will require removal to facilitate the works. Proposals may also include works to alter the roof pitch of an existing porch to reduce water ingress on the main residential building. The total survey area extended over approximately 0.1 hectares (ha).

The main findings of the survey are as follows:

- * Harwoods is within a rural location in the western extent of Henfield, in West Sussex.
- * The application area extends over 0.1ha and comprises a residential dwelling with associated managed gardens and mature boundary vegetation. In the wider area, residential properties are to the north, with woodland and agricultural land extending in all other directions.
- * The site is not subject to any statutory or non-statutory designations.
- * The survey area has been assessed as being of value within the immediate vicinity of the site, with habitats and associated features having potential to support small numbers of breeding birds and bats with connectivity for more mobile species including badger to pass through the site.
- * No evidence of bats was associated with the outbuilding (Building 1) or porch (Building 3) within the application site. Based on the results of the PRA, building 1 is assessed as providing moderate potential for roosting bats during the active period due to the presence of a number of features associated with the roof tiles and eaves which provide some potential for use of the building both externally and internally by small numbers of crevice-dwelling and void-loving bats. High light levels associated with the building does serve to reduce roosting potential to some degree. In accordance with current guidelines, targeted emergence and activity surveys are recommended. The building was assessed as providing low potential for hibernation. The building was a non-classic hibernation site; with potential roosting features limited to gaps under roof tiles. In turn, targeted hibernation surveys are not considered appropriate, instead adopting a precautionary approach to elements of the works to avoid the hibernation period are considered sufficient to safeguard bats.

- * The porch associated with the main house (Building 1) had low potential to support roosting bats during the active period, and limited potential to support hibernation roosts. Potential roosting features were associated with a small number of gaps under raised roof tiles. These were at a low level and could be fully inspected and no signs of bats were found. Based on the discrete nature of the works to alter the porch, further surveys to inform this element of the works are not considered necessary, instead adopting a precautionary approach is considered sufficient and proportionate to fully safeguard bats
- * In terms of other protected species, no further surveys are required to inform the planning application, instead adopting a precautionary approach for different elements of the works in relation to breeding birds and badger is considered sufficient to fully safeguard these species groups.
- * Although the site has limited potential to support great crested newt, due to the site falling within an amber impact risk zone, precautionary measures should be implemented in order to fully safeguard this species. Based on the limited terrestrial habitat supported and the discrete nature of the works, it is not considered necessary to register the application on the District Level Licensing (DLL) Scheme which may otherwise be triggered by development. Instead, adopting a series of precautionary working measures will be sufficient to fully safeguard great crested newts and this approach is considered to be sufficient and proportionate in this situation to ensure the favourable conservation status of great crested newts is not impacted as a result of the works.
- * Details regarding further survey and mitigation to include precautionary working practices, together with habitat enhancement measures are provided in the Recommendations section of the report.

1. INTRODUCTION

Background

- 1.1 CT Ecology Limited was commissioned by Mr Hazel to undertake a Preliminary Ecological Appraisal and concurrent preliminary bat roost assessment, to inform the potential ecological constraints of proposed development within land at Harwoods in Henfield, West Sussex (hereafter referred to as “the site”).
- 1.2 This report has been compiled in accordance with current guidelines (British Standard 42020:2013 Biodiversity. Code of Practice for Planning and Development, 2013 and CIEEM, 2013 & 2016).
- 1.3 The purpose of the Preliminary Ecological Appraisal was:
 - * to classify the major habitats present;
 - * to identify the potential for any legally protected species to be present;
 - * to evaluate the nature conservation importance of the site;
 - * to recommend any additional ecological surveys and mitigation; and
 - * to provide recommendations for site enhancement.
- 1.4 This report also provides an assessment regarding the potential for the building to support roosting bats, providing information on their potential presence/absence. Potential impacts of the proposed works are identified and measures to mitigate the effects of the development on this species group is discussed, where applicable.

Development Proposals

- 1.5 Proposals are for the conversion of an existing outbuilding for ancillary residential accommodation. Access will remain as existing. No trees or boundary features will require removal to facilitate the works. Proposals may also include works to the roof of an existing porch on the main residential building in order to extend the top half of the porch and improve water drainage over the tiles. As part of this work, the top three rows of tiles on the porch will be removed and replaced with the remainder of the porch being left as existing.

Site Description

- 1.6 Harwoods is within a rural location in the western extent of Henfield, in West Sussex, accessed from West End Lane to the east. The application area comprises a residential dwelling and outbuilding with associated garden areas and mature boundary vegetation. A residential property is to the north with agricultural land and woodland blocks in all other directions. In the wider area, agricultural land and scattered farmsteads together with scattered residential properties extend in all directions.
- 1.7 The survey area extended over 0.1 hectares (ha) and is shown on the survey map in Appendix B. The British National Grid for the centre of the site is TQ194 153.

2. METHODOLOGY

Desk Study & Consultations

- 2.1 The desktop study involved conducting database searches for statutory and non-statutory designated sites, legally protected species and features of interest within a 2km radius of the site and an online search for any Protected Species Mitigation Licences (PSML) within 1km. The data search was based on information provided by Sussex Biodiversity Record Centre (SxBRC 2024); Multi-Agency Geographical Information for the Countryside (MAGIC, 2024); Ordnance Survey mapping; and aerial photography.

Field Survey and Assessment

- 2.2 An ecological survey of the site was undertaken on 30th July 2024 by Carly Teague, a suitably qualified ecologist with over 16 years' experience as a professional ecologist. The weather conditions during the survey were clear and dry with still air and no precipitation and a temperature of 18.5°C at the start of the survey.
- 2.3 The field survey comprised a walkover inspection of the land and habitats present. The survey followed the UK Habitat Classification System (Ver 2.0) (UK Habitats, 2023) and covered all accessible parts of the site, including boundary features. Habitats were assigned to either Level 3 or to Level 4 where applicable, the minimum mapping unit used was 25m² and Secondary Codes were utilised where possible. Habitats were described and mapped (Appendix B). A list of plant species was compiled, together with an estimate of abundance made according to the DAFOR scale (Appendix D).
- 2.4 This assessment provides information on the habitats in the survey area and identifies actual or potential presence of legally protected or otherwise notable species/habitats in or immediately adjacent to the site.
- 2.5 Target notes highlighting a particular feature of ecological interest are provided in Appendix A, with associated photographs.
- 2.6 Scientific names are given after the first mention of a species, thereafter, common names only are used. Nomenclature follows Stace (2010) for vascular plant species.

Protected Species Assessment

- 2.7 The potential for the site to provide habitat for protected species was assessed from field observations in conjunction with results of the desk study. The site was inspected for indications of the presence of protected species including:

- * Habitat considered suitable to support widespread reptile species including areas with a scrub/grassland mosaic and potential hibernation sites;
 - * on-site ponds offering potential breeding opportunities for great crested newt (*Triturus cristatus*) and the presence of suitable terrestrial habitat including hedgerows and rough grassland;
 - * presence of features in, and on trees, indicating potential for roosting bats *Chiroptera*, including knot and rot holes and loose bark. The presence of features on buildings including loose roof tiles, gaps in fascia boarding in addition to secondary evidence including staining, droppings and feeding remains;
 - * presence of nesting habitat for breeding birds, including mature trees, dense scrub and hedgerows and direct evidence of bird nesting including bird song, old nests etc;
 - * presence of woodland and or hedgerows providing suitable habitat to support hazel dormouse (*Muscardinus avellanarius*); and
 - * habitats considered suitable to support badger (*Meles meles*) setts, and evidence in the form of hair, pathways and latrines.
- 2.8 The potential presence for protected species is categorised as Negligible, Low, Moderate, High or Present, based on the findings of the field survey and on the evaluation of existing data.
- 2.9 The purpose of this assessment is to identify whether more comprehensive Phase 2 surveys for protected species or mitigation should be recommended.

Preliminary Roost Assessment

- 2.10 The building inspection was carried out concurrently with the PEA by Carly Teague in accordance with good practice guidelines (Collins, 2023). Carly is named as an accredited agent on Jack Kellet's survey licence (Level 2 Class Licence for bats: WML-CL18) and the assessment was carried out under guidance from Jack Kellet.
- 2.11 The interior and exterior of the outbuilding and (porch section of the residential building) were inspected closely with the aim of identifying the presence of bats and any secondary evidence together with any potential roost sites. Secondary evidence includes droppings, feeding remains, scratch marks and oil and urine staining.
- 2.12 The external inspection comprised a detailed search of all accessible architectural features for bat droppings, urine staining, scratch marks, staining around suitable crevices and feeding remains. A high-powered torch was used to illuminate internal features at height, for instance the apex of the roof and associated supporting beams, and these were inspected using close focusing binoculars when required.

- 2.13 Where access permitted, and where present, roof voids were also inspected. This comprised a search of the floor area and other flat surfaces, including stored materials, in order to find evidence of discarded feeding remains and bat droppings. Internal features such as the roof lining were examined to assess actual or potential roost opportunities.

Caveat

Data Search

- 2.14 It is important to note that, even where data is held, an absence of records for a defined area does not necessarily mean that there is a lack of ecological interest; the area may be simply under-recorded.

Preliminary Ecological Appraisal

- 2.15 Ecological surveys are limited by factors that affect presence of plants and animals such as seasonality. Whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation of the environment.
- 2.16 The appraisal does not constitute a full botanical survey, or a Phase 2 pre-construction survey that would include accurate GIS mapping for invasive or protected plant species. This survey provides a preliminary view of the likelihood of protected species occurring on the site based on the suitability of the habitat, known distribution of the species in the local area and any direct evidence observed during the survey. It is therefore used as a tool to recommend further protected species surveys (or other species of significant nature conservation interest) if on the basis of the preliminary assessment or during subsequent surveys, it is considered reasonably likely that protected species may be present.
- 2.17 It is considered that the survey was sufficiently rigorous to assess the ecological value of the site.

Bat Survey Constraints

- 2.18 Bats are mobile animals and can move roost sites throughout the year. It is possible that a PRA carried out in July could miss roosts occupied earlier or later in the year. However, where undisturbed, it is possible to find secondary evidence of bats inside a building throughout the year, although secondary signs may be missed where they are within an area that can't be fully accessed.

- 2.19 Although minor works are proposed on the porch roof associated with Building 3, due to the discrete nature of the works, only the porch and immediate adjacent area on the northern elevation of the building were subject to the PRA, with the remainder of the building (which was subject to a full restoration in 2012) being excluded from the proposals with all other potential roosting features associated with the main building (roof tiles, potential void areas etc.) located a significant distance away from the proposed working area.

3. BASELINE CONDITIONS

Aerial Photography and OS Maps

- 3.1 The site is in a rural environment, situated in the western extent of Henfield in West Sussex. Land-use in the immediate vicinity is dominated by agricultural land together with scattered farmsteads and residential properties.
- 3.2 There are no on-site ponds and there is one pond within 250m of the site; located approximately 75m to the east.
- 3.3 Over 20 woodland blocks are present within 2km of the site, extending in all directions, the closest of which is located adjacent to the south of the site.

Protected Species Mitigation Licences (PSML)

- 3.4 No PSML's or associated licence returns for any species were returned within a 1km radius of the site.

Statutory and Non-Statutory Designated Sites

Statutory Sites

- 3.5 The site is not subject to any statutory designations and there are no statutory designated sites within a 2km radius.

Non-Statutory Sites

- 3.6 The site is not subject to any non-statutory designations. There is one non-statutory designated site within a 2km radius. The closest of which is River Adur Water Meadows & Wyckham Wood Local Wildlife Site (LWS), located approximately 680m to the south.
- 3.7 The LWS covers the floodplain of the River Adur upstream of Bramber. The low-lying fields of cattle and sheep grazed pasture and the network of ditches provide an extensive area of coastal and floodplain grazing marsh habitat. The greatest botanical interest is the network of ditches that cross the fields. Where the ditches are not shaded by scrub, they are often dominated by growth of common reed (*Phragmites australis*) or other tall emergent species. Areas of open water support a diversity of submerged, floating and emergent plants. Wyckham Wood is a small block of lowland mixed deciduous woodland at the northern end of the LWS. It is an ancient and semi-natural woodland. The LWS is particularly important for birds, with over 100 species having been recorded across the site, including 24 NERC S41 species, and it is particularly notable for wintering waterfowl and waders.

Other Habitat Classifications

Ancient woodland

- 3.8 Approximately five blocks of ancient semi-natural woodland (ASNW) are present within 2km of the site. These are all located to the south-west. The closest of which is an unnamed block of ASNW, located approximately 1.2km from the site.

Habitats

Site Summary

- 3.9 The main habitats recorded within the site are described below. Additional details are shown on the habitat survey map in Appendix B, and the target notes are listed in Appendix A.

Table 3.1: Habitat Descriptions

Habitat Type	UK Habitats Code (secondary codes in brackets)	Description	Area (ha)
Developed Land; Sealed Surface. Buildings	u1b5	A series of three buildings/structures were present within the site. A summary is provided here. More details are provided in the PRA section of the report. 1: An outbuilding (a Victorian barn) was present in the southern site extent. 2: A small greenhouse was to the south-west of building 1. 3: A residential building was in the north of the site. This was constructed from brick and flint and was fully restored in 2012.	0.01
Developed Land; Sealed Surface. Other Developed Land	u1b6	Paved areas extended around the main house (building 3).	0.006
Artificial Unvegetated, Unsealed Sealed Surface	u1c	A crushed aggregate driveway and access track extended around the northern and western site extents.	0.02

Suburban Mosaic of Developed and Natural Surface	u1d (828: Vegetated Garden)	The front and rear gardens comprised areas of managed grassland and formal planted beds. Yorkshire fog (<i>Holcus lanatus</i>) was abundant together with frequently occurring annual meadow grasses (<i>Poa annua</i>) and occasional perennial ryegrass (<i>Lolium perenne</i>) and sheep's fescue (<i>Festuca ovina</i>). Forbs were clumped and occasional throughout the sward and included creeping buttercup (<i>Ranunculus repens</i>), daisy (<i>Bellis perennis</i>), white clover (<i>Trifolium repens</i>), ground-ivy (<i>Glechoma hederacea</i>), and broad-leaved dock (<i>Rumex obtusifolius</i>). Ruderal vegetation had developed adjacent to the outbuilding, supporting a slightly taller sward. Species included common ragwort (<i>Senecio jacobaea</i>), common nettle (<i>Urtica dioica</i>), hogweed (<i>Heracleum sphondylium</i>) and willowherbs (<i>Epilobium</i> sp.). A series of raised vegetable patches were in the south-west site extent.	0.07
	(847: Introduced Shrub)	A series of mature planted beds were adjacent to the house. Species included pendulous sedge (<i>Carex pendula</i>), hydrangea (<i>Hydrangea</i> sp.), rose (<i>Rosa</i> sp.), crane's-bills (<i>Geranium</i> sp.) and bellflower (<i>Campanula</i> sp.).	
	(32: Scattered Trees)	A mix of semi-mature and mature trees were present along the north-east and south-east site boundaries and within the rear garden. Species included hornbeam (<i>Carpinus betulus</i>), ash (<i>Fraxinus excelsior</i>) and pear (<i>Pyrus communis</i>).	
	(10: Scattered Scrub)	Scattered scrub dominated by bramble (<i>Rubus fruticosus</i> agg.) together with hawthorn (<i>Crataegus monogyna</i>), field maple (<i>Acer campestre</i>), rose and elder (<i>Sambucus nigra</i>) had developed along the north-east and south-east site boundaries.	

	(50: Ditch-Dry)	A dry ditch extended part way along the north-western site boundary for approximately 19m before extending off-site to the south-west. This had remained dry for a prolonged period with the channel dominated by grasses with no aquatic vegetation evident.	
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Protected Species

Legislation

- 3.10 Legislation relating to the protected species referred to in this section is included in Appendix C.
- 3.11 The following paragraphs detail the suitability of the on-site habitats to support protected species and include information from the data search for protected, rare and otherwise notable species returned within a 2km radius.

Breeding Birds (excluding barn owl)

- 3.12 A total of three **red** and one **amber** listed Birds of Conservation Concern¹ (BoCC) were returned by the data search which may utilise habitats within the site. These include **song thrush** (*Turdus philomelos*), **house sparrow** (*Passer domesticus*), **starling** (*Sturnus vulgaris*) and **dunnock** (*Prunella modularis*).
- 3.13 The outbuilding (Building 1), the open porch associated with the house (Building 3), together with boundary trees and mature shrubbery provide opportunities for a range of widespread breeding birds (Refer to Target Note 1 on the survey map in Appendix B). An old robin (*Erithacus rubecula*) nest was present in the porch of Building 3 (Refer to Target Note 2 on the survey map in Appendix B).
- 3.14 Overall, breeding birds were confirmed as being **present** at the site.

¹ Birds of Conservation Concern status is prioritised into high concern (Red), medium concern (Amber) and low concern (Green) (Eaton et al, 2009). Red-list species are those that are globally threatened according to the IUCN criteria; those whose population or range has declined rapidly in recent years; and those that have declined historically and have not shown a substantial recent recovery. Amber-list species are those with an unfavourable conservation status in Europe; those whose population or range has declined moderately in recent years; those whose population has declined historically but made a substantial recent recovery; rare breeders; and those with internationally important or localised populations. Green-list species are those that fulfil none of the criteria.

Barn Owl

- 3.15 The data search returned a large number of recent (post 2011) records for barn owl within 2km of the site although no records were returned from within the site.
- 3.16 There are two nest boxes in the wider site; to the south and east of the application site and one of these boxes may be used periodically by barn owl. Within the application site itself however, there were no suitable nesting or foraging opportunities present, with the grassland managed through sheep grazing, and no potential nesting opportunities associated with the buildings. Overall, the application site was considered to provide **negligible** potential for barn owl.

Bats

- 3.17 At least eight species of bat have been recently recorded within 2km of the site boundary. This includes pipistrelle species (*Pipistrellus* sp.); common pipistrelle (*Pipistrellus pipistrellus*); soprano pipistrelle (*Pipistrellus pygmaeus*); natterers (*Myotis nattereri*); Whiskered/Brandt's (*Myotis mystacinus/brandtii*); serotine (*Eptesicus serotinus*); noctule (*Nyctalus noctula*); long-eared bat (*Plecotus* sp.); and brown long-eared bat (*P. auritus*). No records were returned from within the site.
- 3.18 The most frequently recorded bat species is common pipistrelle with a total of 34 records for this species.
- 3.19 The closest roost record is from 2005 for an unspecified common pipistrelle roost over 300m from the site. The closest recent (post 2011) record for foraging activity was from natterers bat, recorded approximately 1km to the west, from the site in 2016.
- 3.20 No PSML's pertaining to bats have been returned within 1km of the site.
- 3.21 Missing roof tiles and gaps associated with eaves and weatherboarding on building 1 provided potential to be used by roosting bats (Refer to Target Note 3 on the survey map in Appendix B). More information is provided in the Preliminary Roost Assessment below. The main house (Building 3) also supported features with potential for use by roosting bats (Refer to Target Note 3 on the survey map in Appendix B).
- 3.22 The garden habitats with the associated boundary shrubs and trees provided potential foraging and commuting opportunities for bats with connectivity to gardens and agricultural fields and woodland in the wider area. Overall, the site as a whole was considered to provide **high** potential for foraging and roosting bats.

Reptiles

- 3.23 The data search returned recent (post 2011) records for slow worm (*Anguis fragilis*); grass snake (*Natrix helvetica*); common lizard (*Zootoca vivipara*); and adder (*Vipera berus*) within a 2km radius however all records were over 300m from the site.
- 3.24 The site is dominated by managed garden areas which provided limited potential for reptiles. The habitat mosaic required by this species group for sheltering and basking was absent. Overall, the site was considered to provide **negligible** potential for reptiles.

Great Crested Newt (and other amphibians)

- 3.25 The data search returned one recent (post 2011) record and two historic records for great crested newt within a 2km radius, all records were over 700m from the site. The recent (2021) record is located approximately 1.4km to the south-east. No PSML's pertaining to great crested newt have been returned within 1km of the site.
- 3.26 A small number of recent records were also returned for common toad (*Bufo bufo*) and common frog (*Rana temporaria*); all of which were over 500m from the site.
- 3.27 The development area is located within an Amber Impact Risk Zone for great crested newt as part of the Horsham District Council District Level Licencing (DLL) Scheme. This risk category indicates that suitable habitat is present in the locality based on land-use and survey data held for the area.
- 3.28 There are no on-site ponds and a single pond within 250m of the site. The application site is small and dominated by managed garden areas and buildings. Although the managed nature of the site serves to provide sub-optimal conditions for this species during their terrestrial phase, the site is connected to agricultural land and woodland, providing connectivity through the landscape, however, great crested newts rely on a network of breeding ponds for survival, passing between the network of water bodies each year. An absence of a network of ponds within 250m serves to significantly reduce the potential for great crested newt to pass through the site.
- 3.29 Overall, the site was assessed as having **low** potential to support great crested newt.

Badger

- 3.30 Records are held confidentially and not disclosed by the data search.

- 3.31 No badgers or secondary evidence of badgers were present onsite or within 30m of the application areas at the time of the survey however connectivity between the site and agricultural land, woodland and gardens in all directions provides some potential for badger to pass between adjacent areas.
- 3.32 Overall, the site was considered to provide **low** potential for badger.

Hazel Dormouse

- 3.33 The data search did not return any records for this species within a 2km radius.
- 3.34 Dormice are largely arboreal and rely on blocks of diverse woodland and interconnected hedgerows for survival. Individuals rarely descend to the ground except to hibernate over winter months at the base of trees. Dormice favour a range of plant species which provide a food source throughout the year. Favoured species include an abundance of hazel and honeysuckle together with frequently occurring oak and bramble amongst other species.
- 3.35 There was no potentially suitable hazel dormouse habitat within the site. Overall, the site was considered to provide **negligible** potential for this species.

Invasive Non-Native Species (INNS)

- 3.36 No INNS were recorded on-site at the time of the survey.

Preliminary (Bat) Roost Assessment

- 3.37 A single building was subject to the current assessment. The porch associated with the main house was also included due to potential works being undertaken to this feature. The greenhouse (Building 2) was scoped out during the PEA due to an absence of any potential roosting features associated with this building. More details are provided below and illustrated on the habitat map in Appendix B.

Table 3.2: Building Descriptions

Building Reference	Description	Potential Roosting Features	Summary of Findings
1	A single storey, brick built Victorian barn with a footprint of approximately 60m² with north-south pitched roof comprising concrete roman tiles. A catslide roof extended from the northern roof pitch, serving to cover former animal enclosures on this side of the building, together with a brick wall which extended around an area of hardstanding. Moss was evident on the roof tiles although the majority of the roof tiles, where present, were tightly fitted and in good condition with no obvious gaps or potential for ingress by bats with the exception of gaps associated with lifted and missing tiles at the gable ends of the building and along the base of the catslide roof. Gaps were associated with the brickwork on the eastern and western elevations although these features were superficial and did not extend into the building. Gaps were observed around the timber framed windows and timber stable door on the eastern elevation and timber door on the western elevation, enabling ingress into the building. Timber weatherboarding was present on the eastern and western gable ends and along the northern and southern elevations. The boarding at the gable ends was showing signs of degradation with splits and gaps present along the lengths of weatherboarding and at the apex of the roof. Ivy ingress was also observed at the western gable although the ivy was dead and being managed. The eaves were open, enabling ingress by bats into the building. A small, timber clad lean-to with single pitched roof comprising single skinned, corrugated sheet metal with timber supporting framework was on the western elevation. This was open to the north. No potential roosting features were associated with this lean-to section of the building, with the cladding being widely spaced and relatively open. Internally the building was used for storage, being used regularly by the	Gaps around the window and doors, gaps associated with the open eaves and loose tiles at the eaves provides ingress for bats into the building, providing potential for bats to tuck between the tiles and associated timber framework however high light levels throughout the building serves to reduce suitability for use by bats to some degree.	No bats or secondary evidence of bats were noted within or adjacent to the survey structure. Overall the building is assessed as providing moderate potential for roosting bats during the active period. The building was a non classic hibernation site, with high light levels and temperature fluctuations likely to be experienced throughout the building reducing the suitability for overwintering bats. Overall, the building was assessed as providing low potential for hibernation; with features limited to gaps under roof tiles.

	homeowner. The building was single skinned, with a timber truss roof. The structure was subject to relatively high light levels due to windows on the eastern, western and northern elevations. The building had a mix of concrete, brick and flint floor areas. There was no void with the tiles visible internally, attached directly to the timber battening. The tiles around the main roof areas were all tightly interlocked with no potential for ingress between them. Loose tiles at the eaves of the building along with the open eaves resulted in gaps into the building visible internally. The building was in use for storage, with timber dividing walls internally to form different sections of the building. A single narrow ridge line was present. The supporting framework was well sealed and in good condition with no obvious gaps associated with the mortice and tenon joints. Small rodent droppings were present on stored materials throughout the barn.		
3 (Porch)	A single pitched roof porch, with clay roof tiles measuring 5m² was attached to the northern elevation of the house and adjoining a storage room to the west. The northern elevation comprised bricks with timber clad sections on the eastern and western elevations; adjoining the porch to the house. These sections were in good condition and tightly sealed. A small number of discrete gaps were associated with the natural clay tiles although the tiles were in good condition with no broken or missing tiles observed. The roof pitch extended to a low level and the gaps associated with the tiles could be fully inspected from ground level from the northern elevation. The porch was open on the eastern elevation, enabling pedestrian access to the front door and storage area. The porch had a timber supporting frame with bitumen roofing felt attached directly to the rafters. There was no ridge line. The timber frame and associated bitumen roof membrane were in good condition and tightly sealed. There were gaps at the eaves along the northern elevation. The brick work associated with the house in proximity to the porch as well as the porch wall itself were in good condition, tightly sealed and recently painted.	A small number of discrete gaps associated with naturally raised areas associated with the roof tiles. Limited roosting potential internally due to an absence of features.	No bats or secondary evidence of bats were noted within or adjacent to the porch and overall the building is assessed as providing low potential for roosting bats during the active period. Overall, the porch was assessed as providing limited potential for hibernation; with features limited to a very small number of gaps under roof tiles on the lower section of the roof pitch.

4. EVALUATION

- 4.1 On the basis of the information available from the habitat survey and desk study, the site has been evaluated in terms of its potential for biodiversity, support of protected species and habitats, and the contribution the area makes as part of the wider landscape. The nature conservation value of the site has been assessed following standard criteria developed by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2006) and is provided below.
- 4.2 The biodiversity value of protected species within the site is a preliminary evaluation based upon the desk study records, habitat suitability and the conservation status of the species in question. It should be noted that where European Protected Species (EPS) or species of Principle Importance for the Conservation of Biodiversity are present on-site they may be valued at a lower level/scale where it is considered likely that populations would not be of sufficient importance to justify designation at a higher level. However, regardless of their biodiversity value, such species are still subject to national and/or European legislation.
- 4.3 Key aspects of relevant planning policy regarding conservation, including an explanation of species referred to as being of 'Principal Importance for Conservation of Biodiversity' and European Protected Species and habitats, are provided in the Legislation section in Appendix C.

Geographic Evaluation

Features of International Importance

- 4.4 Features of International Importance are principally sites covered by international legislation or conventions, implemented by the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales. The Regulations mainly deal with the protection of sites with certain habitats and populations of species that are important for nature conservation in a European context, i.e., Special Areas of Conservation (SAC's) and Special Protection Areas (SPA's).
- 4.5 The site is not subject to any international statutory nature conservation designations. The closest site of International Importance is Arun Valley SAC, SPA and Ramsar, located approximately 13km to the west of the site.
- 4.6 The site does not provide any supporting habitat for Arun Valley. Due to the small scale of the proposal and distance of the development site, the construction and operational phases of the works are not considered likely to have any significant negative impacts on the designated site.

Features of National Importance

- 4.7 Features of national importance include SSSIs which are designated under the Wildlife and Countryside Act 1981 (as amended).
- 4.8 The site is not subject to any statutory designation. There are no nationally important designated sites within a 2km radius.
- 4.9 It is not considered that any habitats or populations or assemblages of species within the site would meet the criteria for the designation of a SSSI, or other nationally important site, at an appropriate geographic level².

Features of Regional Importance

- 4.10 The site does not include any features of value at this level neither is it likely to be selected as a wildlife site based on the results of the current survey.

Features of District Importance

- 4.11 The habitats supported are common and widespread in the district. The site does not support any features that were considered to be of value at this level.

Features of Local Importance

- 4.12 The site is small and dominated by a residential property and associated managed gardens and in turn does not support any features considered to be of value at this level.

Features of Value Immediate Vicinity (c. 250m) of the project

- 4.13 Boundary trees, the buildings and mature flower beds provide potential to support small numbers of breeding birds, with bird nesting confirmed at the site. Features associated with Building 1 and Building 3 provided potential for roosting bats and the boundary features provide connectivity between residential gardens woodland and agricultural fields in all directions, with some potential for more mobile species including badger and bats to pass through the site. The site is therefore of some value at this level.

² JNCC Guidelines for selection of biological SSSIs (see <http://jncc.defra.gov.uk/page-2303#download>).

Summary

- 4.14 Overall based on the survey results and the above criteria, habitats are considered to be of importance within the immediate vicinity of the site, providing habitats to support small numbers of breeding birds and roosting bats and connectivity for more mobile species including badger and bats to pass through the site.

Local Plan Evaluation

- 4.15 It is considered that the Horsham District Council Core Strategy (2017) contains nature conservation policies relevant to the site. A summary of the relevant policies is contained in the Legislation section in Appendix C.

5. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- 5.1 Harwoods is within a rural location in the western extent of Henfield, in West Sussex.
- 5.2 The application area extends over 0.1ha and comprises a residential dwelling with associated managed gardens and mature boundary vegetation. In the wider area, residential properties are to the north, with woodland and agricultural land extending in all other directions.
- 5.3 Proposals are for the conversion of an existing outbuilding for ancillary residential accommodation. Access will remain as existing. No trees or boundary features will require removal to facilitate the works. Proposals may also include minor works to alter the roof of an existing porch on the main residential building.
- 5.4 The site is not subject to any statutory or non-statutory designations.
- 5.5 The survey area has been assessed as being of value within the immediate vicinity of the site, with habitats and associated features having potential to support small numbers of breeding birds and bats with connectivity for more mobile species including badger to pass through the site.
- 5.6 No evidence of bats was associated with the outbuilding (Building 1) or porch (Building 3) within the application site. Based on the results of the PRA, building 1 is assessed as providing moderate potential for roosting bats during the active period due to the presence of a number of features associated with the roof tiles and eaves which provide some potential for use of the building both externally and internally by small numbers of crevice-dwelling and void-loving bats. High light levels associated with the building does serve to reduce roosting potential to some degree. In accordance with current guidelines, targeted emergence and activity surveys are recommended. The building was assessed as providing low potential for hibernation. The building was a non-classic hibernation site; with potential roosting features limited to gaps under roof tiles. In turn, targeted hibernation surveys are not considered appropriate, instead adopting a precautionary approach to elements of the works to avoid the hibernation period are considered sufficient to safeguard bats.
- 5.7 The porch associated with the main house (Building 1) had low potential to support roosting bats during the active period, and limited potential to support hibernation roosts. Potential roosting features were associated with a small number of gaps under raised roof tiles. These were at a low level and could be fully inspected and no signs of bats were found. Based on the discrete nature of the works to alter the porch, further surveys to inform this element of the works are not considered necessary, instead adopting a precautionary approach is considered sufficient and proportionate to fully safeguard bats.

- 5.8 In terms of other protected species, no further surveys are required to inform the planning application, instead adopting a precautionary approach for different elements of the works in relation to breeding birds and badger is considered sufficient to fully safeguard these species groups.
- 5.9 Although the site has limited potential to support great crested newt, due to the site falling within an amber impact risk zone, precautionary measures should be implemented in order to fully safeguard this species. Based on the limited terrestrial habitat supported and the discrete nature of the works, it is not considered necessary to register the application on the District Level Licensing (DLL) Scheme which may otherwise be triggered by development. Instead, adopting a series of precautionary working measures will be sufficient to fully safeguard great crested newts and this approach is considered to be sufficient and proportionate in this situation to ensure the favourable conservation status of great crested newts is not impacted as a result of the works.
- 5.10 Details regarding further survey and mitigation to include precautionary working practices, and habitat enhancement measures are provided below.

Recommendations

Bats

Building 1

- 5.11 A series of two bat emergence and activity surveys are recommended in respect to building 1 in accordance with current guidelines in order to confirm the presence/likely absence of bats. These must be undertaken between May and September inclusive. Night-vision aids (NVAs) will be required to provide visibility during low light conditions. A minimum of two survey positions are necessary to provide full coverage of the building. At the time of compiling this report, the bats surveys had been completed and the results are detailed in a separate report produced to accompany the application, together with detailed recommendations regarding timings of the works.

Building 3 (Porch)

- 5.12 The proposed porch alteration works may proceed without the need for further bat surveys however immediately prior to works commencing on the roof, a suitably licenced ecologist must inspect the roof tiles for roosting bats. Any subsequent works to remove the roof tiles (and underlying materials) must only be done when bats are active; between March and October inclusive. If any bats are found during the pre-works inspection, appropriate mitigation will need to be devised, this may involve the need to undertake additional survey work in order to obtain an appropriate licence from Natural England. Appropriate compensatory measures would also potentially need to be created at the site.
- 5.13 Once the pre-works inspection has been carried out and once the ecologist is confident that no bats are present in the working area, the roof tiles and the underlying materials can be removed. These must be removed by hand, with the contractor carefully lifting the tiles to ensure they do not scrape together, checking for bats as the tiles are removed.
- 5.14 If bats are unexpectedly discovered during the works:
- * All work must immediately stop and any machinery at the site switched off;
 - * A licensed bat ecologist be contacted as soon as possible;
 - * The bat/s must be left in-situ, if they have been uncovered, carefully replace the original covering ensuring the bat/s are not crushed. If this is not possible, the bat/s should be covered with a soft cloth or loose covering.
- 5.15 If the scope of works pertaining to the porch (and associated house) alter, the ecologist should be notified as a change in scope may require additional survey work to be undertaken. If works are likely to impact the main house, a targeted PRA in relation to the house will be required to ascertain whether targeted bat surveys will be required.

Great Crested Newt

- 5.16 It is recommended that adopting a series of precautionary working measures will be sufficient to fully safeguard great crested newts that may pass through semi-natural habitats adjacent to the working area. These measures should include the following:

Site Storage

- * All materials and machinery will be stored on existing areas of hardstanding/the gravel driveway to the north-west of the existing building. The potential for migration by great crested newts is considered reduced through this area which is already subject to regular disturbance;
- * no barrier effects are predicted and any great crested newts can travel freely through the area should they choose to do so;
- * in addition, all stored materials will be raised off the ground on pallets or skids to further remove any refuge potential for great crested newts; and
- * aggregates such as gravel and sand must be delivered in bulk bags and stored on pallets rather than piled on site to create potentially suitable 'refuge piles'.

Construction/Renovation Phase

- * Grassland adjacent to the building (within the proposed working area for the building works) should be managed at ground level in the lead up to construction commencing in order to ensure the working area remains unsuitable for great crested newts;
- * excavations, trenches etc. must be back-filled overnight, if this isn't possible then earth ramps must be left in the trench(es) to allow animals, including great crested newts, to easily climb out;
- * the contractor must inspect any excavations each morning to check that great crested newts are not present;
- * if any newts are found during the construction phase, then all activities must cease immediately and the project ecologist contacted for advice. An appropriate working methodology will need to be devised and this may include the need to register the site on the DLL to enable activities to lawfully continue; and
- * any other species found during the works will be removed from the site and relocated to suitable cover in the wider site.

Widespread Breeding Birds

- 5.17 Building 1, the porch (Building 3) and boundary tree and mature boundary shrubs provide suitable nesting habitat for a range of bird species. Trees and shrubbery are being retained however a precautionary approach will be required in relation to nesting birds in respect to works on the structures in order to fully safeguard this species. Where possible, works commencing on the roof areas, to include the porch roof and removing/replacing the roof on building 1, should be undertaken outside the main bird nesting season which runs from March to August inclusive³. However, in accordance with recommendations made in respect to bats in the section above (and subject to further recommendations made in the bat survey report in relation to Building 1), works on the roof areas should also avoid the bat hibernation period therefore limiting this window for commencement of roof works to between September and October.
- 5.18 Where this is not feasible, with works to the roof areas required within the bird nesting period, a re-inspection of the structures should be carried out prior to works to ensure birds are not nesting at this time. In the event that a nest is found, an exclusion zone around the nest would be established. Works would have to cease within this buffer area until the young birds have fledged. The old nest present in the porch could be removed over the winter period to reduce the potential for birds to re-occupy this nest the following season.

Badger

- 5.19 Badgers receive protection under the Protection of Badgers Act 1992. The potential for badgers to pass through the site must be taken into account during works. Materials must be stored safely at night with lids securely fitted. If trenches are required, these must be closed over night or ramps installed to enable badgers, and other mammals, to escape. The ramps must be substantial enough for badgers to use therefore these should comprise planks of wood or similar.

Habitat Retention

- 5.20 The boundary trees should be protected in accordance with British Standards (BS 2012) 5837:2012 Trees in Relation to Design, Demolition and Construction.

³ It should be noted that this is the main breeding period. Breeding activity may occur outside this period (depending on the particular species and geographical location of the site) and thus due care and attention should be given when undertaking potentially disturbing works at any time of year.

- 5.21 Suitable fencing should be installed around the perimeter of the working area to ensure materials and machinery do not encroach into adjacent retained habitats including boundary features.

Biodiversity Net Gain

- 5.22 It is understood that the scheme will be exempt from requiring a targeted Biodiversity Net Gain Assessment as it is a householder application. Extensive landscaping has however already been undertaken throughout the wider site which provide biodiversity enhancements. More details are provided below.

Habitat Enhancement

- 5.23 New development offers the opportunity for biodiversity net gain in accordance with national and local planning policy. Extensive landscaping has already been undertaken throughout the wider site which provide biodiversity enhancements which can be applied to this scheme. Landscaping has included restoration of an existing pond to the south-east to increase its ecological value, plating a 34-tree orchard and planting native species-rich hedges around two of the wider site boundaries.

Post Development Landscaping

- 5.24 If any additional landscaping is required as part of the scheme, the landscaping should continue to be carefully designed with biodiversity in mind.
- 5.25 Wildlife planting should be integral to any soft landscape plans and should include native species and/or species of recognised wildlife value⁴. The use of nectar-rich and berry producing plants will attract a wider range of insects, birds and mammals. Species should be carefully selected to ensure they are suitable for the area. Some species of known wildlife value are listed in Appendix E.
- 5.26 Good horticultural practice should be utilised, including the use of peat-free composts, mulches and soil conditioners, native plants with local provenance and avoidance of the use of invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

⁴ For example, The Royal Horticultural Society (RHS) Perfect for Pollinators Scheme <https://www.rhs.org.uk/science/conservation-biodiversity/wildlife/encourage-wildlife-to-your-garden/plants-for-pollinators> and the joint RHS/Wildlife Trust's Gardening with Wildlife in Mind Database <http://www.joyofplants.com/wildlife/home.php>

- 5.27 As it develops over time, the new hedgerow planting around the wider site will continue to enhance the existing connectivity between the wider site and the wider landscape for more mobile species including hedgehog, great crested newt, bats and badger. The hedgerows will also be managed for wildlife; being cut into an 'A' frame to provide habitats for breeding birds and invertebrates while providing ground cover for a range of species. More native species shrub, tree and hedgerow planting is also planned for the wider site.

Bats and Lighting

- 5.28 Different species of bat have been found to react differently to night-time lighting however research has found that generally, all species of bats are sensitive to artificial lighting and that excessive lighting can delay bats from emerging, thus shortening the time available for foraging, as well as causing individuals to move away from suitable foraging grounds or roost sites, to alternative dark areas (Jones, 2000). Bats can also become isolated from their foraging grounds if the linear features they use for commuting are suddenly illuminated, creating a light barrier (Fure, 2006). New lighting should be devised in accordance with accepted best practice measures (Institute of Ecology and Environmental Management 2006, Institute of Lighting Engineers 2023).
- 5.29 Currently the site receives a degree of intermittent light spill from safety lighting on the existing dwelling (building 3). If any new lighting is required as part of the proposals this should seek to minimise any increased levels of light spill. It is understood lighting will be kept to a minimum, with safety lighting limited to the entrance/access of the refurbished building however outline recommendations are provided below. More details will be provided following the bat surveys.
- * The level of artificial lighting including flood lighting should be kept to a minimum, with light spill limited on adjacent trees;
 - * recent LED technology should be utilised where possible. LED lights do not emit UV radiation, towards which insects are attracted, drawing them away from bat foraging areas in the surrounding landscape. All lights should be directed at a low angle with minimal light spillage wherever possible; and
 - * the site boundaries should be kept dark at bat emergence (0-1 hour after sunset) and during peak bat activity periods (e.g., 1.5 hours after sunset and 1.5 hours before sunrise). Therefore, where possible, the lighting should be installed with the light directed down onto the entrance/access wherever possible and lighting should be controlled through the use of PIR and/or timers.

Bird Boxes

- 5.30 Additional bird nesting provision could be incorporated into new design proposals. It is anticipated that bird nesting features will be integrated into the refurbished building design to include a ledge to enable installation of a barn owl box on the southern gable together with features for use by barn swallow. Any integrated barn swallow house should include the following; a box or platform shape with an open front; interior perches for adults and young; rough interior surface for nest attachment; entrance hole(s) measuring 2-2.5 inches across; ventilation and drainage holes and a removable roof or side for monitoring and cleaning. The interior floor space should be approximately 6 inches by 6 inches or larger. The box/feature should be at least 8 inches deep from front to back.
- 5.31 If integration of these features within the building is not possible however, alternative bird nesting provision could comprise external bird boxes installed on suitable mature or semi-mature trees around the site margins. There are a range of bird boxes on the market and various types are suitable for the site. Models selected should be suited for use by a range of garden birds. These should be located at a height of at least 3m, ideally with a south-east or south-west facing aspect. A barn owl box could also be sited on a suitable mature or semi-mature tree in the wider site. This should be located close to an open field/grassland area, at a height of at least 4m and located away from overhanging branches to enable a clear flight path into the box in order to maximise the potential for uptake by barn owl.

Bat Boxes

- 5.32 Bat boxes could also be incorporated into new design proposals. More details should be provided once the bat surveys are complete.

Other

- 5.33 It is recommended that an update assessment is undertaken if more than 18 months have elapsed between the survey and the point at which any development decisions have been made at the site.

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Appendix A
Target Notes and Photographs

Target Note (TN)	Feature	Photograph of Feature
1, 2	Photograph 1: A view west towards the outbuilding (building 1) subject to the proposed restoration / conversion works. The greenhouse (building 2) is in the left of the photograph. Features associated with building 1 provide potential for use by breeding birds and roosting bats.	
1	Photograph 2: Looking west within the rear garden towards the main house (building 3). Boundary scrub and trees provide potential for breeding birds and foraging bats.	
1, 3	Photograph 3: Looking east within the front garden. Boundary shrubs and trees provide potential for breeding birds.	

Target Note (TN)	Feature	Photograph of Feature
1, 3	Photograph 4: Looking west towards the eastern elevation of building 1. Loose and missing tiles are visible on the roof near to the gable and the eaves are open, providing ingress opportunities for bats and birds.	 A photograph showing the exterior of a building with a dark, gabled roof. The roof shows signs of damage, with missing tiles and open eaves. The building is surrounded by greenery and a blue sky is visible in the background.
1, 3	Photograph 5: A view within building 1. The roman tiles were tightly interlocked and securely attached to the battening along the majority of the roof pitches. The supporting frame was in good condition with no obvious gaps. The building was subject to high light levels.	 A photograph showing the interior of a building, focusing on the roof structure. The roof is made of wooden beams and tiles, which appear to be in good condition. A ladder is visible, leaning against the roof structure.
1, 3	Photograph 6: Building 1 was used for storage at the time of the survey. Open eaves provided ingress by bats and birds into the structure.	 A photograph showing the interior of a building, which appears to be a storage area. The floor is cluttered with various items, including bags, boxes, and other debris. The walls are made of brick and the ceiling is made of wooden beams.

Target Note (TN)	Feature	Photograph of Feature
1, 3	Photograph 7: A view towards the porch on the northern elevation of building 3. Natural gaps under the roof tiles provide potential for use by roosting bats. The open elevation provided potential for ingress by birds.	
N/A	Photograph 8: A view within the porch on the northern elevation of building 3. The felt was in good condition and tightly attached to the rafters. Areas of cladding was well-sealed with no obvious gaps.	
2	Photograph 9: A disused bird's nest was on a timber joist along the northern roof pitch.	

Appendix B

Survey Maps



Figure 1: Harwoods Habitat Survey Map

Drawn by: CT
Date: 26/11/2024
Scale: See Map

Appendix C

Legislation

LEGISLATIVE FRAMEWORK

This section contains information pertaining to the legislation and planning policy applicable in Britain. This information is not applicable to Northern Ireland, the Republic of Ireland the Isle of Man or the Channel Islands. Information contained in the following appendix is provided for guidance only.

Species

The objective of The Conservation of Habitats and Species Regulations 2017 (as amended) (formerly The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) and The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended) is to conserve plants and animals which are considered to be rare across Europe.

The Wildlife and Countryside Act 1981 (as amended) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and also implements the obligations set out for species protection from the Council Directive 2009/147/EC (formerly 79/409/EEC) on the Conservation of Wild Birds (EC Birds Directive) in Great Britain.

Various amendments have been made since the Wildlife & Countryside Act came into force in 1981. Further details pertaining to alterations of the Act can be found on the following website: www.opsi.gov.uk. Key amendments have been made through the Countryside and Rights of Way (CROW) Act (2000) and Nature Conservation (Scotland) Act 2004.

There are a number of other legislative Acts affording protection to species and habitats. These include

- * Countryside and Rights of Way (CROW) Act 2000
- * Deer Act 1991
- * Natural Environment & Rural Communities (NERC) Act 2006
- * Protection of Badgers Act 1992
- * Wild Mammals (Protection) Act 1996

Badger

Badgers and their setts are protected under the Protection of Badgers Act (1992), which consolidated and added to the previous Badger Acts of 1973 and 1991. Under this legislation it is an offence to:

- * cruelly ill-treat a badger, including use of tongs and digging;
- * intentionally or recklessly cause a dog to enter a badger sett;

- * intentionally or recklessly damage, destroy or obstruct access to a badger sett¹ or any part thereof;
- * intentionally or recklessly disturb² a badger when it is occupying a badger sett;
- * possess or control a dead badger or any part of a badger;
- * sell or offers for sale, possesses or has under his control, a live badger; and
- * wilfully kill, injure, take, or attempt to kill, injure or take a badger.

A Development Licence will be required from Natural England for any development works affecting an active badger sett, or to disturb badgers while individuals are occupying the sett. Depending on the nature of the works and the specifics of the sett, badgers could be disturbed by work near the sett even if there is no direct interference or damage to the sett itself. Natural England has issued guidelines on what constitutes a licensable activity. There is no provision in law for the capture of badgers for development purposes and therefore it is not possible to obtain a licence to translocate badgers from one area to another.

Bats

Bats are protected under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). This act protects individuals from:

- * intentional or reckless disturbance (at any level);
- * intentional or reckless obstruction of access to any place of shelter or protection; and
- * selling, offering or exposing for sale, possession or transporting for purpose of sale

In addition, all species of bat are fully protected under The Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2. Regulation 41 prohibits:

- * deliberate killing, injuring or capturing of Schedule 2 species (all bats);
- * deliberate disturbance of bat species as to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young; and
 - (ii) to hibernate or migrate.

¹ A badger sett is defined in the legislation as "*any structure or place which displays signs indicating current use by a badger*". This includes seasonally used setts. Natural England (2009) have issued guidance on what is likely to constitute current use of a badger sett: www.naturalengland.org.uk/Images/WMLG17_tcm6-11815.pdf

² For guidance on what constitutes disturbance and other licensing queries, see Natural England (2007) Badgers & Development: A Guide to Best Practice and Licensing. www.naturalengland.org.uk/Images/badgers-dev-guidance_tcm6-4057.pdf, Natural England (2009) Interpretation of 'Disturbance' in relation to badgers occupying a sett www.naturalengland.org.uk/Images/WMLG16_tcm6-11814.pdf, Scottish Natural Heritage (2002) Badgers & Development. www.snh.org.uk/publications/online/wildlife/badgersanddevelopment/default.asp and Countryside Council for Wales (undated) Badgers: A Guide for Developers. www.ccw.gov.uk.

- * deliberate disturbance of bat species as to affect significantly the local distribution or abundance of the species;
- * damage or destruction of a breeding site or resting place; and
- * keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

A Protected Species Mitigation Licence (PSML) issued by Natural England will be required for works liable to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake activities listed above. A licence is required to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and monitored.

Breeding Birds

Under the Wildlife & Countryside Act, 1981 (as amended), a wild bird is defined as any bird of a species that is resident in or is a visitor to the European Territory of any member state in a wild state. Game birds, however, are not included in this definition (except for limited parts of the Act). They are covered by the Games Acts, which fully protect them during the closed season.

Under the Wildlife & Countryside Act, 1981 (as amended), all birds, their nests and eggs are protected under Sections 1-8 of the Act and it is an offence, with certain exceptions, to:

- * intentionally (or recklessly in Scotland) kill, injure or take any wild bird;
- * intentionally (or recklessly in Scotland) take, damage or destroy (or, in Scotland, otherwise interfere with) the nest of any wild bird while it is in use or being built
- * intentionally take or destroy the egg of any wild bird;
- * have in one's possession or control any wild bird, dead or alive, or any part of a wild bird, which has been taken in contravention of the Act;
- * have in one's possession or control any egg or part of an egg which has been taken in contravention of the Act;
- * use traps or similar items to kill, injure or take wild birds;
- * have in one's possession or control any bird (dead or alive) unless registered, and in most cases ringed, in accordance with the Secretary of State's regulations; and
- * in Scotland only, intentionally or recklessly obstruct or prevent any wild bird from using its nest.

Certain rare species receive additional special protection under Schedule 1 of the Act. This affords them protection against:

- * intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young;

- * intentional or reckless disturbance of dependent young of such a bird;
- * in Scotland only, intentional or reckless disturbance whilst lekking; and
- * in Scotland only, intentional or reckless harassment.

The British Trust for Ornithology (BTO) has a list of birds that are Species of Conservation Concern. These birds are not legally protected but where they are found on site they should be given planning consideration. The criteria for birds listed as amber (medium conservation concern) include:

- * historical population decline during 1800-1995, but recovering: population has more than doubled over last 25 years;
- * moderate (25-49%) decline in UK breeding population over last 25 years;
- * moderate (25-49%) contraction of UK breeding range over last 25 years;
- * moderate (25-49%) decline in UK non-breeding population over last 25 years;
- * species with unfavourable conservation status in Europe (Species of conservation Concern);
- * five year mean of breeding pairs in the UK;
- * $\geq 50\%$ of UK breeding population in 10 or fewer sites.
- * $\geq 50\%$ of UK non-breeding population in 10 or fewer sites;
- * $\geq 20\%$ of European breeding population in UK; and
- * $\geq 20\%$ of NW European (wildfowl), East Atlantic Flyway (waders) or European (others) non breeding populations in UK.

Hazel Dormouse

The hazel dormouse (*Muscardinus avellanarius*) is fully protected under The Conservation of Habitats and Species Regulations 2017 through its inclusion on Schedule 2. Regulation 41 prohibits:

- * deliberate killing, injuring or capturing;
- * deliberate disturbance as to impair its ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young; and
 - (ii) to hibernate or migrate.
- * deliberate disturbance as to affect significantly the local distribution or abundance of the species;
- * damage or destruction of a breeding site or resting place; and
- * keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part of this species.

The hazel dormouse is also currently protected under the Wildlife and Countryside Act 1981 (as amended) through its inclusion on Schedule 5. Under this Act, this species is additionally protected from:

- * intentional or reckless disturbance;
- * intentional or reckless obstruction of access to any place of shelter or protection; and
- * selling, offering or exposing for sale, possession or transporting for purpose of sale.

A Protected Species Mitigation Licence (PSML) issued by Natural England will be required for works liable to affect dormouse breeding or resting places (N.B. this is usually taken to mean dormouse 'habitat') or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above. The licence will allow derogation from the relevant legislation but will also to enable appropriate mitigation measures to be put in place and monitored.

Herpetofauna (Reptiles and Amphibians)

The following species receive full protection under The Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2.

- * sand lizard (*Lacerta agilis*);
- * smooth snake (*Coronella austriaca*);
- * natterjack toad (*Epidalea calamita*);
- * great crested newt (*Triturus cristatus*); and
- * pool frog (*Pelophylax lessonae*).

Under this legislation, Regulation 41 prohibits:

- * deliberate killing, injuring or capturing of species listed on Schedule 2;
- * deliberate disturbance of any Schedule 2 species as to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young; and
 - (ii) to hibernate or migrate.
- * deliberate disturbance of any Schedule 2 species as to affect significantly the local distribution or abundance of the species;
- * deliberate taking or destroying of the eggs of a Schedule 2 species;
- * damage or destruction of a breeding site or resting place; and
- * keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part of a species.

With the exception of the pool frog, these species are also currently listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this Act, they are additionally protected from:

- * intentional or reckless disturbance (at any level);
- * intentional or reckless obstruction of access to any place of shelter or protection; and
- * selling, offering or exposing for sale, possession or transporting for purpose of sale.

Other native species of herpetofauna are protected solely under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). These species include:

- * adder (*Vipera berus*);
- * grass snake (*Natrix natrix*);
- * common lizard (*Zootoca vivipara*); and
- * slow-worm (*Anguis fragilis*).

Under this legislation, for these species it is prohibited under Section 9(1) & (5) to:

- * intentionally (or recklessly in Scotland) kill or injure these species
- * sell, offer or expose for sale, possess or transport for purpose of sale these species, or any part thereof.

The following species are listed in respect to Section 9(5) of Schedule 5 of the Wildlife & Countryside Act 1981 (as amended) which only affords them protection against sale, offering or exposing for sale, possession or transport for the purpose of sale:

- * common frog (*Rana temporaria*);
- * common toad (*Bufo bufo*);
- * smooth newt (*Lissotriton vulgaris*); and
- * palmate newt (*L. helveticus*).

Water Vole

The water vole (*Arvicola amphibius*) (=terrestris) is fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to:

- * intentionally kill, injure or take (capture) this species;
- * intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection;
- * intentionally or recklessly disturb water voles while they are occupying a structure or place used for shelter or protection; and

- * sell, offer or expose for sale, or have in his possession or transport for the purpose of sale, any live or dead water vole or part of this species.

Where development works are liable to affect habitats known to support water voles, Natural England must be consulted. All alternative design options must have been explored and communicated to Natural England in order to demonstrate that works have tried to avoid contravening the legislation e.g. the use of alternative sites, appropriate timing of works to avoid times of the year in which water voles are most vulnerable etc. Conservation licences for the capture and translocation of water voles may be issued by Natural England for the purpose of development activities if it can be shown that the activity has been properly planned and executed and thereby contributes to the conservation of the population.

Otter

Otters (*Lutra lutra*) are fully protected under The Conservation of Habitats and Species Regulations 2017 through their inclusion on Schedule 2. Regulation 41 prohibits:

- * deliberate killing, injuring or capturing of otters
- * deliberate disturbance as to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young; and
 - (ii) to hibernate or migrate.
- * deliberate disturbance as to affect significantly the local distribution or abundance of the species;
- * damage or destruction of a breeding site or resting place; and
- * keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part of this species.

Otters also receive protection under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- * intentional or reckless disturbance (at any level);
- * intentional or reckless obstruction of access to any place of shelter or protection; and
- * selling, offering or exposing for sale, possession or transporting for purpose of sale.

A Protected Species Mitigation Licence (PSML) issued by Natural England will be required for works liable to affect breeding or resting places or for activities likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above. The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and monitored.

Red Squirrel

The red squirrel (*Sciurus vulgaris*) is fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to:

- * intentionally (or recklessly in Scotland) kill, injure or take (capture) red squirrels;
- * intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection;
- * intentionally or recklessly disturb this species while they are occupying a structure or place used for shelter; and
- * sell, offer or expose for sale, or have in his possession or transport for the purpose of sale, any live or dead red squirrel or part of this species.

White Clawed Crayfish

The white clawed crayfish (*Austropotamobius pallipes*) receives partial protection under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). This species is protected under Sections 9(1) and 9(5), making it an offence to:

- * intentionally take/capture white-clawed crayfish; and
- * sell, offer or expose for sale, have in possession or transport for the purpose of sale, any live or dead white clawed crayfish or part of this species.

A conservation licence for the capture and translocation of crayfish may be issued for the purpose of development activities if it can be demonstrated that the activity has been carefully planned and this species considered. The activity must also demonstrate that it contributes to the conservation of the population.

Wild Mammals

All wild mammals are protected against intentional acts of cruelty under the Wild Mammals (Protection) Act 1996. Under this legislation it is an offence 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.

To avoid possible contravention of this legislation, due care and attention should be taken when carrying out works that have the potential to impact any wild mammal as described above.

Plants

Wild plants are protected under the Wildlife and Countryside Act 1981 (as amended) which makes it an offence for an 'unauthorised' person to intentionally (or recklessly in Scotland) uproot wild plants. An authorised person can be the owner of the land on which the action is taken, or anybody authorised by them.

Some rare plant species also receive full protection under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). This prohibits:

- * intentionally (or recklessly in Scotland) picking, uprooting or destruction of any wild Schedule 8 species (or seed or spore attached to any such wild plant in Scotland only); and
- * selling, offering or exposing for sale, or possessing or transporting for the purpose of sale, any wild live or dead Schedule 8 plant species or parts.

In addition to the legislation outlined above, several plant species are fully protected under Schedule 5 of The Conservation of Habitats and Species Regulations 2017. Regulation 45 makes it an offence to:

- * deliberately pick, collect or destroy a wild Schedule 5 species; and
- * be in possession of, or control, transport, sell or exchange any wild live or dead Schedule 5 species or anything derived from it.

A Protected Species Mitigation Licence (PSML) issued by Natural England will be required for works liable to affect species of plant listed under The Conservation of Habitat and Species Regulations 2017.

Invasive Plant Species

Certain plants are listed on Part II of Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) in respect to Section 14(2). Species include:

- * Japanese knotweed (*Fallopia japonica*);
- * giant hogweed (*Heracleum mantegazzianum*);
- * Himalayan balsam (*Impatiens glandulifera*);
- * certain species of rhododendron (*Rhododendron* sp.); and
- * certain species of cotoneaster (*Cotoneaster* sp.).

Species listed are non-natives whose establishment or spread in the wild may be detrimental to native wildlife. Inclusion on Part II of Schedule 9 therefore makes it an offence to:

- * plant or otherwise cause these species to grow in the wild.

This legislation makes it is an offence to cause species listed to grow in the wild. Therefore, if they are present on site and development activities have the potential to cause the further spread of these species to new areas, it will be necessary to ensure appropriate measures are in place to prevent this.

HABITATS

International Statutory Designations

- * Special Protection Areas (SPAs): Terrestrial SPA's are afforded protection by The Conservation of habitats and Species Regulations 2017 (as amended) an offshore SPA's are afforded protection under The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended).
- * Special Areas of Conservation (SACs): These areas are designated under the same regulations as detailed for SPA's.
- * Ramsar sites: These areas are wetlands designated under the Convention on Wetlands of International Importance (1971). Wetlands can include areas of marsh, fen, water or peatland and may be natural or artificial, permanent or temporary. Ramsar sites are underpinned through prior notification as Sites of Special Scientific Interest (SSSIs) and as such receive statutory protection under the Wildlife & Countryside Act 1981 (as amended) with further protection provided by the Countryside and Rights of Way (CROW) Act 2000.

National Statutory Designations

- * Sites of Special Scientific Interest (SSSIs): These sites are designated by the countryside agencies (for example Natural England) under the Wildlife & Countryside Act 1981 (as amended). Prior to 1981 these were designated under the National Parks and Access to the Countryside Act 1949. Improved mechanisms for the protection of SSSIs have also been introduced by the Countryside and Rights of Way Act 2000 (in England and Wales).
- * National Nature Reserves: These sites are also designated by the countryside agencies under the Wildlife & Countryside Act 1981 (as amended).

Local Statutory Designations

- * 1949 Local Nature Reserves (LNRs): These sites are designated by local authorities under the National Parks and Access to the Countryside Act 1949. These are sites recognised for their wildlife or geological interest at a local level and are managed for nature conservation.

Non-Statutory Designations

- * Local Wildlife Sites: Areas of local conservation interest may be designated by local authorities. The terminology for these sites varies depending on the county. They can be called Sites of Nature Conservation Importance (SNCI's), Sites of Importance for Nature Conservation (SINCs), County Wildlife Sites (CWS), Listed Wildlife Sites (LWS), Local Nature Conservation Sites (LNCS), Sites of Biological Importance (SBIs). The designation criteria may vary between counties. Local Wildlife Sites are of material consideration when planning applications are being determined.
- * The Hedgerow Regulations 1997: These have been compiled to protect 'important' countryside hedgerows from damage or removal. A hedgerow is considered important if (a) has existed for 30 years or more; and (b) satisfies at least one of the criteria listed in Part II of Schedule 1 of the Regulations. Under the Regulations, it is against the law to remove or destroy certain hedgerows without permission from the local planning authority. Hedgerows covered by these regulations include those on or adjacent to common land, SSSIs (including all terrestrial SACs, NNRs and SPAs), LNRs, land used for agriculture or forestry and land used for the keeping or breeding of horses, ponies or donkeys.

National Planning Policy

The National Planning Policy Framework (2024) replaces the former NPPF and PPS9 documents and emphasises the need for sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and priority species. An emphasis is also made for the need for ecological networks through preservation, restoration and re-creation. The protection and recovery of priority species is also included as a requirement of planning policy. In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from adverse harm; appropriate mitigation or compensation measures are in place where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

Regional and Local Planning Policy

The Horsham District Core Strategy (2017) contains the following Nature Conservation Policies that are relevant to the site.

Horsham District Core Strategy (2017).

- * Policy CP1: Landscape and Townscape Character

'The landscape character of the district will be maintained and enhanced. Activities which may influence the character should only take place where:

- * *The landscape and townscape character is protected, conserved or enhanced taking into account key landscape and settlement characteristics;*
- * *Protected landscapes, habitats and species are properly protected, conserved and enhanced; and*
- * *The biodiversity of the District is conserved and enhanced.'*

Regional and Local BAPs

Many local authorities in the UK have produced a local Biodiversity Action Plan (LBAP) at the County or District level. The Sussex Biodiversity Action Plan is based on the UK list of Species and Habitats of Principal Importance and contains 1,149 species and 65 habitats.

Appendix D
Plant Species List

Scientific nomenclature follows Stace (2010) for vascular plant species and British Bryological Society (BBS) Special Volume No. 5 *English Names for British Bryophytes* for bryophyte species. Vascular plant common names follow the Botanical Society of the British Isles 2003 list, published on its web site, www.bsbi.org.uk. The plant species list was generated as part of a Phase 1 Habitat survey and does not constitute a full botanical survey.

Abundance was estimated using the DAFOR scale as follows:

D = dominant, A = abundant, F = frequent, O = occasional, R = rare.

Key to qualifiers: c=clumped, e=edge only, g=garden origin, p=planted, y = young, s=seedling or sucker, t=tree, h=hedge, w=water. L = locally i.e. LD=locally dominant.

COMMON NAME	SCIENTIFIC NAME	ABUNDANCE	QUALIFIER
Annual meadow-grass	<i>Poa annua</i>	F	
Ash	<i>Fraxinus excelsior</i>	R	T
Bellflower	<i>Campanula sp.</i>	R	P
Bramble	<i>Rubus fruticosus agg.</i>	O	LF
Broad-leaved dock	<i>Rumex obtusifolius</i>	O	
Buddleia	<i>Buddleja davidii</i>	R	P
Cabbage	<i>Brassica oleracea</i>	R	P
Cleavers	<i>Galium aparine</i>	R	
Common nettle	<i>Urtica dioica</i>	O	C
Common ragwort	<i>Senecio jacobaea</i>	R	C
Corkscrew moss	<i>Bryum capillare</i>	O	C
Crane's-bill	<i>Geranium sp.</i>	O	P
Creeping buttercup	<i>Ranunculus repens</i>	F	LA, C
Creeping thistle	<i>Cirsium arvense</i>	O	
Crocuses	<i>Crocus spp.</i>	O	P
Daisy	<i>Bellis perennis</i>	F	
Elder	<i>Sambucus nigra</i>	O	
Fennel	<i>Foeniculum vulgare</i>	R	P
Field maple	<i>Acer campestre</i>	O	

Field-rose	<i>Rosa arvensis</i>	R	
Green alkanet	<i>Pentaglottis sempervirens</i>	R	
Ground-ivy	<i>Glechoma hederacea</i>	O	
Hawthorn	<i>Crataegus monogyna</i>	O	
Herb-Robert	<i>Geranium robertianum</i>	O	
Hoary willowherb	<i>Epilobium parviflorum</i>	R	
Hogweed	<i>Heracleum sphondylium</i>	R	C
Hollyhock	<i>Alcea rosea</i>	R	P
Hornbeam	<i>Carpinus betulus</i>	R	T
Hydrangea	<i>Hydrangea sp.</i>	O	P
Lavender	<i>Lavandula sp.</i>	O	P
Lillies	<i>Heimerocallis sp.</i>	R	P
Pear	<i>Pyrus communis</i>	R	T
Pendulous sedge	<i>Carex pendula</i>	R	P
Perennial rye-grass	<i>Lolium perenne</i>	O	
Potato	<i>Solanum tuberosum</i>	R	P
Rose	<i>Rosa sp.</i>	O	P
Rosebay willowherb	<i>Chamerion angustifolium</i>	R	C
Runner bean	<i>Phaseolus coccineus</i>	R	P
Scaly male-fern	<i>Dryopteris affinis</i>	R	
Sheep's-fescue	<i>Festuca ovina</i>	O	
Spear thistle	<i>Cirsium vulgare</i>	O	
Stonecrop	<i>Sedum sp.</i>	R	P
Thyme	<i>Thymus vulgaris</i>	R	P
White clover	<i>Trifolium repens</i>	F	LA, C

Willowherbs	<i>Epilobium sp.</i>	O	C
Yew	<i>Taxus baccata</i>	R	P
Yorkshire-fog	<i>Holcus lanatus</i>	A	

Appendix E
Suggested Compensatory Planting

This section provides a list of plants which are of proven value to wildlife. The list is not exhaustive and merely provides a guide for suggested planting for wildlife value. Planting should be tailored on a site by site basis. The list includes some native and ornamental species however the emphasis should always be on the use of predominantly native species.

N = Native, NN = Non-native.

This list includes species that may be harmful if handled or ingested. Schedule 9 (Part 2) of the Wildlife and Countryside Act, 1981 (as amended) includes a list of invasive plants, including aquatic species, that should always be avoided in planting schemes.

Large Shrubs

Hedge veronica/Hebe (*Veronica* spp.) NN

Hawthorn (*Crataegus monogyna*) N

Blackthorn (*Prunus spinosa*) N

Rose: dog rose (*Rosa canina*), field rose (*R. arvensis*), burnet rose (*R. pimpinellifolia*) N

California lilac (*Ceanothus* spp.), (*C. arborea*) NN

Wild privet (*Ligustrum vulgare*) N

Common holly (*Ilex aquifolium*) N

Barberry (*Berberis* spp.) (*B. darwinii*), (*B. thunbergii*), (*B. x stenophylla*) NN

Daisy Bush (*Olearia* spp.), (*O. x hastii*), (*O. macrodonta*) and (*O. traversii*) NN

Firethorn (*Pyracantha coccinea*) NN

Hazel (*Corylus avellana*) N (*C. maxima*) NN

Viburnum (*Viburnum* spp.), wayfaring tree (*V. lantana*) N, guelder rose (*V. opulus*) N, laurustinus (*V. tinus*) E Note: *V. lantana* can become invasive in more open habitats.

Butterfly bush (*Buddleja* spp.), (*B. alternifolia*), (*B. globosa*) NN

Dogwood (*Cornus sanguinea*) N

Broom (*Cytisus scoparius*) N

Escallonia (*Escallonia macrantha*) NN

Hardy fuchsia (*Fuchsia magellanica*) NN

Buckthorn (*Rhamnus cathartica*) N

Spindle (*Euonymus europaeus*) N

Tutsan (*Hypericum androsaemum*) N

Yew (*Taxus baccata*) N

Trees

Cherry (*Prunus* spp.), wild cherry (*P. avium*), bird cherry (*P. padus*), domestic plum (*P. domestica*) N or cherry plum (*P. cerasifera*) NN

Ash (*Fraxinus excelsior*) N

Apple (*Malus* spp.), edible apple (*M. domestica*), crab apple (*M. sylvestris*) N

Pear (*Pyrus* spp.), edible pear (*P. communis*) NN

Small-leaved lime (*Tilia cordata*) N
Silver birch (*Betula pendula*) N
Yew (*Taxus baccata*) N
Black poplar (*Populus nigra*) N
Foxglove tree (*Paulownia tomentosa*) NN
Beech (*Fagus sylvatica*) N

Climbers

Jasmine (*Jasminum* spp.), summer jasmine (*J. officinale*), winter jasmine (*J. nodiflorum*) NN
Ivy (*Hedera helix*) N
Climbing hydrangea (*Hydrangea anomala* ssp. *petiolaris*) NN
Honeysuckle (*Lonicera* spp.) (*L. periclymenum*) N
Clematis (*Clematis* spp.) NN
Hop (*Humulus lupulus*) N
Firethorn (*Pyracantha atalantioides*) NN
Nasturtium (*Tropaeolum majus*) NN

Bulbs

English bluebell (*Hyacinthoides non-scripta*) N
Squill species (*Scilla* spp.) N/NN
Snowdrop (*Galanthus nivalis*) N
Winter aconite (*Eranthis hyemalis*) E
Crocus species (*Crocus* spp.) NN
Wild Daffodil (*Narcissus pseudonarcissus*) N
Onion species (*Allium* spp.) N/NN. N.B. *Allium triquetrum* (three cornered leek) and *Allium paradoxum* (few-flowered leek) are Schedule 9 invasive plant species.
Wood anemone (*Anemone nemorosa*) N
Lesser celandine (*Ficaria verna*) N