LAND AT HIGHCROFT, WATERHOUSES, STAFFORDSHIRE

PRELIMINARY ECOLOGICAL APPRAISAL AND PRELIMINARY ROOST ASSESSMENT

Prepared for
Charles Hall

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1. INTRODUCTION

1.1 This report has been prepared for Charles Hall. It presents the results of a Preliminary Ecological Appraisal and Preliminary Roost Assessment at Highcroft in Waterhouses. The surveys were carried out during February 2021.

1.2 The proposal is to develop an existing barn into a holiday let. The proposals include alterations and extension to the existing building, as well as provision of a water treatment plant. Some detail along with the location and redline boundary are shown on the Plan *Proposed holiday let, Highcroft, Leek Road, Waterhouses ST10 3LH* and sent to us by your architect Rob Duncan.

1.3 Highcroft is located in a rural area off the busy A523 Leek Road in the eastern part of Waterhouses. The site sits adjacent to and around 20m south of the A523. Beyond the A523 is the River Hamps valley at around 50m distant. The river valley is wooded and provides excellent foraging resources for bats. Open areas of mainly pastoral farmland are present in all directions, with high levels of pockets of woodland and hedgerows present. Other than the River Hamps there are few water bodies within the immediate vicinity. The site is located at OS grid reference SK 09053 50046.

1.4 The report describes the methods used for the surveys and any constraints encountered, along with the results of the surveys, including a description of the habitats present, their potential to be used by protected species and any evidence of protected species found. The findings are then assessed in light of the proposals, impacts are considered and recommendations for further survey or action are given where appropriate.

1.5 The legislation relating to the protected species discussed in this report is given in Appendix I.

2. METHODOLOGY

Search of Existing Ecological Records

2.1 The local record centre, Staffordshire Ecological Record, was contacted for existing records of protected and notable species, as well as statutorily protected and local designated sites for nature conservation within 2km of the site.

2.2 The results of a record search can help to set a site into the context of its surroundings, as well as provide valuable information on the known presence of protected species in the local area.

Survey Methodology

Preliminary Ecological Appraisal

2.3 The survey was undertaken on the 26th of February 2021 by Helen Ball and Max Robinson. Both ecologists each holding over 20 years' experience working in the ecology sector.

2.4 The approach to the Preliminary Ecological Appraisal was based on *Guidelines for Preliminary Ecological Appraisal* (CIEEM Technical Guidance Series, April 2013) and follows the methods set out in *The Handbook for Phase 1 Habitat Survey* (Nature Conservancy Council (JNCC, 2010), although where relevant, mosaics of habitats were mapped in finer detail and modified habitat classifications have been used where these better describe the habitats present.

2.5 The surveyors walked slowly through the habitats, or around the edges of the habitats classifying, describing and mapping their extent. Instead of numbered target notes, descriptions of site features and habitats are included within the survey findings.

2.6 A list of plant species was compiled for the site and plant abundance was classified using the DAFOR scale[1].

2.7 Where relevant, a note was made about important and pertinent features, such as the suitability of a feature for a protected or notable species (e.g., Priority species) or presence of a notable tree. Notes were made on any other apparent ecological issues observed incidentally as part of the survey. A record of any faunal species encountered incidentally was also taken.

2.8 Preliminary Ecological Appraisal provides a means to evaluate ecological features and scope for notable species or habitats. By doing so, the baseline ecological conditions and valuable, or potentially valuable, parts of a site can be identified at an early stage, enabling potential constraints to the proposals to be highlighted and recommendations for design options to be made that avoid effects on important ecological features or ecologically sensitive areas (CIEEM, 2012). Preliminary Ecological Appraisals also identifies whether further, targeted surveys, such as for protected species are necessary.

[1] DAFOR relates to the occurrence of each species on site i.e. D = dominant; A = abundant; F = frequent; O = occasional; and R = rare

Preliminary Roost Assessment

2.9 An assessment of the parts of the building affected by the proposal in terms of the suitability to support roosting bats was carried out. Only a limited area of the building should be affected by works as shown cross-hatched in red on Figure 1.

2.10 Factors considered as part of the assessment included internal conditions, presence of features suitable for use by crevice dwelling and free hanging bats, proximity to foraging habitats/cover and potential for disturbance.

2.11 A description of the building was made, and it was designated to one of the following categories according to its assessed potential to support bats:

- Bat Roost – evidence of use by bats present. Works affecting the roost would need to be undertaken under a statutory licence from Natural England, with precautionary and mitigation measures implemented as specified by the licence.

- High Potential – building exhibiting features very suitable for use by roosting bats (such as gaps between tiles and underfelt, gaps below ridge tiles, significant crevices within the walls) and offering optimal roosting opportunity. Often a number of suitable features will be present. Further survey (usually a minimum of three evening emergence and/or daw re-entry surveys) would normally be undertaken to establish use by bats and, if confirmed, the type of roost and number of bats present, etc. If no roost is identified, precautionary measures would need to be implemented during works to the building.

- Moderate Potential – building exhibiting features less suitable for roosting bats (such as superficial gaps within walls, gaps containing debris or cobwebs, limited areas of tiles or generally well-sealed tiling) and offering sub-optimal roosting opportunity. Suitable roosting opportunity may be limited to a single or small number of features that can be searched for signs of use. Further survey (usually a minimum of two evening emergence and/or daw re-entry surveys) would normally be undertaken to establish use by bats and, if confirmed, the type of roost and number of bats present, etc. If no roost is identified, precautionary measures would need to be implemented during works to the building.

- Low/Negligible Potential – building exhibiting features very unlikely to be used for roosting or no features suitable for roosting. For low potential buildings, further survey (usually a single evening emergence and/or dawn re-entry survey) would normally be undertaken to establish use by bats and, if confirmed, the type of roost and number of bats present, etc. Precautionary measures may need to be implemented during works to the building, although often no further action would be required.

2.12 A detailed visual inspection of the exterior of the building was undertaken. The inspection followed standard methodologies set out in *Bat Surveys for Professional Ecologists – Good Practice Guidelines,* Bat Conservation Trust (Collins, 2016).

2.13 Externally, a visual inspection of features such as gaps in the fabric of the building was made for evidence of bat use from ground level. Evidence searched for included droppings and staining from fur-oil and urine. The survey was undertaken from the ground and aided by the use of close-focusing binoculars and a high-powered torch where necessary.

Constraints

2.14 Preliminary Ecological Appraisals are not intended to provide comprehensive assessment of use of a site by protected or notable species and follow-up surveys targeted at specific species and groups of species may be necessary to fully assess a site and evaluate impacts.

2.15 An internal inspection of the area of the building was not possible given the nature of the building construction of lack of accessible roof void here. However, any potential roosting features on this part of the building are likely to be limited to the exterior only.

3. SURVEY FINDINGS & INTERPRETATION

Review of Existing Ecological Records

3.1 Staffordshire Ecological Record provided information on statutorily protected and locally designated sites, as well as protected and notable species, such as Priority Species that have been recorded previously in the local area.

3.2 There are six statutorily protected sites within the search area, all of these are Sites of Special Scientific Interest (SSSI). One of the SSSI is also a Special Area of Conservation (SAC). Additionally, there are 19 non-statutory sites, including 14 Local Wildlife Sites (LWS) and five retained Biological Alert Sites (retained BAS). The sites are listed in the table below.

3.3 Middlehills Farm (east of) LWS covers approximately one third of the proposed development site along its eastern boundary and includes all the land to the east of the access track. The implications of this are discussed further in the report.

Designation	Site Name	Habitat	Location
LWS	Middlehills Farm (east of)	Steep slopes with limestone outcrops and some scrub present. In the southern part of the field Meadow Saxifrage is present.	Partly on the site along the eastern side
SSSI	Brownend Quarry	Geologically important exposures of limestones formed about 335 million years.	65m north
SSSI and SAC	Hamps & Manifold Valleys	Woodland, scrub, grassland, and relict heath. Nationally important ancient semi-natural woodland containing both *Quercus robur* and *sessile oak. Q. petraea.* Grasslands varying from acid to highly calcareous with species rich sward including nationally uncommon plants. Includes nationally scarce moth species. Also, nationally important geological features.	75m north east
LWS	Rooksflat (north of)	Species rich meadow.	65m west
LWS	Milk Hill	Three adjacent sub-sites, consisting of species-rich unimproved calcareous grassland, with rocky limestone	175m south east

		outcrops and an ancient tumulus centrally located.	
Retained BAS	Three Stones (south-west of)	A section of river, lined by mature trees.	300m north west
SSSI	Caldon Dales	Regionally rare, unimproved, traditionally managed calcareous and neutral grassland. Locally scarce *Avenula pratensis – Festuca ovina* grassland community and several forb species.	550m south
LWS	Caldon Dale (grassland surrounding)	Semi-improved calcareous and neutral grasslands and hawthorn scrub. Several uncommon or rare plant species locally.	700m south
LWS	Huddale	A bank on the southern edge of a poor semi-improved field with a diverse, calcareous flora.	850m south east
SSSI	Cauldon Railway Cutting	An important reference locality for detailed geological study of the Namurian Series.	1.2km west
LWS	Broomyshaw (east of)	Small wet flushes by the stream and dry sloping banks above.	1.2km west
LWS	Yew Tree Verges	Hedge and associated bank which support species-rich semi-improved neutral grassland.	1.3km south west
LWS	Stoneylow Farm (north-east of)	Four fields with species-rich semi-improved neutral grassland which is wet in parts with species-rich hedgerows.	1.5km north west
SSSI	Caldon Low	A Carboniferous Limestone section of considerable palaeogeographic and stratigraphic significance.	1.5km south west
LWS	Dale Tor (north-west of)	Unimproved lower slopes of field, with typical calcicolous grassland community.	1.5km south east
LWS	Miles Knoll (verges south of)	A grass verge holds some diversity.	1.5km south east
Retained BAS	Redmoorlee Farm (south of)	As well as the river the site includes an area of marshy grassland between the river and Duke's Lane, areas of	1.6km west

		woodland and scrub on the southern bank and a former meander of the river. The hedge of Duke's Lane and the lane verges are also included.	
LWS	Dale Farm (north of)	Diverse calcicolous community on extensive steep bank. Also scrub, tall ruderal habitats and scattered broadleaved trees.	1.6km south east
LWS	Dale Lane (south of)	Four fields supporting species-rich unimproved calcareous, neutral, and semi-improved neutral grasslands.	1.6km south east
LWS	Middlehills Farm (west of)	Two fields of semi-improved neutral grassland and calcareous grassland.	1.7km southwest
Retained BAS	Miles Knoll (west of)	Roadside verges noted for its rich calcicolous community that includes several uncommon species.	1.7km south east
Retained BAS	Walker's Barn	A semi-improved neutral field with abundant species throughout.	1.7km south east
Retained BAS	Cauldon (west of)	A small pasture with a wet flush by a stream.	1.7km south west
Ancient & Semi-Natural Woodland	Railway Wood	Ancient semi-natural woodland, part of Hamps & Manifold Valleys SSSI and SAC, containing both *Quercus robur* and sessile oak. *Q. petraea.*	1.8km north
LWS	Honeyholes Spoil	Limestone spoil heaps with several very rare, rare or uncommon species.	1.8km south west
SSSI	Rue Hill	Several small parcels of calcicolous grassland on former quarry site including a number of nationally uncommon plants	1.9km south west

3.4 Hamps & Manifold Valleys SSSI and SAC lies to the north of the site and supports habitats and species of national importance. The proposed development site lies 75m from the boundary of the statutorily protected area separated from it by the A523 and the River Hamps. Brownend Quarry SSSI is 65m north of the proposed development although this has been designated for its geological interest.

3.5 Middlehills Farm (east of) LWS has an area of 6.07h. It encroaches onto the proposed development site along its entire eastern boundary covering circa 382m^2 of the site and overlaps up to the unmetalled access track.

3.6 Middlehills Farm (east of) LWS comprises of bands of calcareous grassland running north to south across the site on its west and east facing slopes. Semi-improved grassland is also found on flatter areas. Towards the north where the slope is steeper common rock-rose, common milkwort and eyebrights, common knapweed, lady's bedstraw, betony, salad burnet, small scabious and cowslips are present. Sheep's fescue and wild thyme are also prominent amongst rocky outcrops. Scattered hawthorn scrub and bramble grow in places on the slopes. The southern end of the west-facing slope has a greater abundance of grasses and sedges including common bent, crested dog's-tail, quaking-grass, meadow oat-grass, creeping bent, Yorkshire-fog and sweet vernal-grass. Common knapweed and betony are abundant within the sward with frequent small scabious, harebell and selfheal with more localised stands of common bird's-foot-trefoil, salad burnet, lady's bedstraw, black medick and tormentil. Fairy flax, hoary plantain, burnet-saxifrage, lady's-mantle and mouse-ear hawkweed are more occasional. Early-purple orchids and common spotted-orchid are also recorded at the site. The east facing slope has poorer abundance and richness of forbs species with cock's-foot abundant in the sward.

3.7 Bats have been recorded within 2km of the site on 15 occasions, with three species known to be present: common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *P. pygmaeus* and a single record of an unidentified Myotis bat. Several of the records relate to bats unidentified to species level. Four roosts are present in the search area. The nearest of these to site is a common pipistrelle roost 75m to the north east of the site. Bat droppings thought to belong to pipistrelle were identified circa 300m to the northeast of site. The nearest record to site is of common pipistrelle 37m from the north of the site and describes breeding as possible in association with a retaining wall. Other pipistrelle roosts are located 1.3km to the northwest and 1.6km east. The remaining records are of bats recorded in flight, either foraging or commuting.

3.8 Great crested newts *Triturus cristatus* have been recorded on five occasions in the local area. The two closest of these relate to a retaining wall 37m northeast of the proposed development (on the opposite side of the A523) where a single female was noted on two occasions during April 2012. Three further records have been returned from within Manifold and Hamps SSSI during 2012 and all of these are located at a small water body 170m to the northeast where either one or two adults were noted.

3.9

3.10 Polecat *Mustela putorius* have been recorded three times in the Waterhouses Parish, although none have specific location two describe road deaths. The closest record to site is circa 300m to the east.

3.11 The remaining records are of birds, the majority of these have less defined locations, however they are representative of the habitats found in the local area. Species include

kingfisher *Alcedo atthis*, short-eared owl *Asio flammeus*, hen harrier *Charadrius dubius,* peregrine *Falco peregrinus,* hobby *Falco subbuteo*, brambling *Fringilla montifringilla*, red kite *Milvus milvus*, golden plover *Pluvialis apricaria*, redwing *Turdus iliacus*, fieldfare *Turdus pilaris*, and barn owl *Tyto alba*. Many of these birds are 'red' or 'amber' listed species of conservation concern whose populations have declined significantly in recent years (Stanbury *et. al*, 2021). The site is likely to be used by several bird species at least for foraging and nesting.

Survey Findings

Preliminary Ecological Appraisal

3.12 Descriptions of the habitats present are given below, and a list of the plants recorded is given in Table 1. The site is depicted in the Plates and are Figure 1.

3.13 The site supports a range of habitats, with unsealed surface dominating the northern part of the site, and a building and a large swathe of bare earth dominating the southern part of the site. There are also several small patches of grassland and tall herb present on the edges of disturbed areas.

3.14 The patches of grassland on site grow rankly in places but are likely rabbit grazed in others. The grassland patches are likely remnant of grassland meadows that are still present in adjacent areas. Species present include the grasses red fescue, creeping bent and Yorkshire fog, with herbs of cowslip, creeping and meadow buttercup, ox-eye daisy and pignut. Other species present include forget-me-not, cut-leaved cranesbill and false-oat grass all species that will readily colonise disturbed ground. The likelihood is that the grassland patches are remnants of semi-improved grassland prior to it becoming a part of the Highcroft landholding, with colonisation of ruderal species with disturbance.

3.15 On the areas of limestone hardcore unsealed surface, few plants are present (creeping thistle and hairy bittercress) and are species that tend to colonise bare ground and are resistant to large changes in environmental conditions such as ground drying out. The unsealed surface has a high level of disturbance from vehicular and pedestrian traffic. On the edges of the unsealed surface are small patches of grassland and tall herb.

3.16 There is small patch of tall-herb just below a small 'cliff' has appeared on the west side of the access track. Tall-herb species present here include, broad-leaved dock, common nettle, cow parsley, hogweed and common ragwort.

Scrub edges the eastern edge of the access track all the way to the building. There is also a small area of scrub at the far south of the site at the southern end of the bare ground at the south end of the site. Species present in the scrub include, blackthorn,
3.17 elder, hawthorn and hazel. Ground flora includes lords and ladies and wood avens.

3.18 The southern half of the site comprises a large area of bare ground; at the time of survey this had recently been disturbed, probably by rotavating. Along with the bare ground is a small single building. Within the bare ground was a small area of scrub.

Preliminary Roost Assessment

3.19 The preliminary roost assessment was undertaken as the small building is to be converted to a holiday let. The building is single storey, built from cinder blocks with a single skin wall and concrete lintels above doors and windows.

3.20 The building has a wooden mono-pitch roof with shallow fall gradient and is clad in bituminised roofing felt. The eaves areas are open but have been meshed (likely to deter nesting birds) although some of the meshing has fallen away.

3.21 The end elevations of the building (the gable ends) have wooden panel cladding at the tops. These are very well sealed with no gaps present that provide any access and suitable roost opportunity.

3.22 During the building inspection a disused was recorded in the southwest corner of the building. The bird's nest was active in 2020.

Assessment of Site and Potential for Protected Species

3.25 The habitats on site are low in ecological value in terms of botanical interest and support an array of common and widespread species. The main habitats on site are unsealed and mainly unvegetated surface and highly disturbed bare ground. The areas of tall herb, grassland and scrub were small and thinly vegetated in some places, particularly the scrub and tall herb.

3.26 The site is likely used extensively by bats for foraging and commuting given the habitats present in the local area and proximity to the River Hamps valley. The record search has shown that a number of bat species are present in the area and the varied habitats especially the habitats associated with the river corridor and local woodland areas are likely important foraging and commuting habitats for bats roosting locally. Consideration of bats in relation to the proposal will be necessary, as set out in the following chapter.

3.27 No evidence of use by bats was recorded and the building provides minimal opportunity for roosting. The building is deemed to have negligible potential for use by bats.

3.28 Great crested newts are known to be present in the local area. The site is, however, separated from the nearest known great crested newt pond location (on the opposite side of the River Hamps and A523) by around 170m in a straight line. This distance is greater (possibly 200m) when the River Hamps is considered as a barrier to movement and any connectivity to its southern banks. The 200m distance is a considerable distance for great crested newts to disperse from a breeding pond and this movement is further restricted to the bottlenecks of bridge crossings of the River Hamps. Their dispersal is further compromised by a busy road (A523). There are few still-water waterbodies present in the local area that may be used for breeding. When the habitat loss to the site proposals is factored into and used in the Rapid Risk Assessment tool from Natural England, habitat loss is restricted to between 100m-250m distant from the breeding pond 170m north. This returns a GREEN: OFFENCE UNLIKELY result (See below). In light of this, it is considered unlikely that great crested newts make use of the site or would be affected by the proposals.

Component	**Likely effect** **(select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)**	**Notional offence probability score**
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	0.01 - 0.1 ha lost or damaged	0.01
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	No effect	0
	Maximum:	0.01
Rapid risk assessment result:	**GREEN: OFFENCE HIGHLY UNLIKELY**	

3.29

3.30 Bird use of the site was recorded incidentally during the survey, a nest likely from 2020 was recorded within the building. Species recorded whilst on site included wren *Troglodytes troglodytes*, dunnock *Prunella modularis*, blackbird *Turdus merula*, nuthatch *Sitta europaea*, great tit *Parus major* and wood pigeon *Columba palumbus*,. The dunnock is a bird of conservation concern with a population having declined significantly in recent years (Stanbury, *et al*. 2021). Birds will make use of the habitats on site for nesting, foraging and shelter.

4. RECOMMENDATIONS

Habitats

4.1 It is recommended that the scrub along the site edges is retained where possible. If this is lost to the development, then compensation planting should be included in any plans. This would provide some foraging resource for various species including invertebrates and birds. The retention of scrub, particularly on the eastern boundary will provide some connectivity around the site and some level of screening to the adjacent LWS. Any planting should be of native species recorded locally and preferably of local provenance. Species could include blackthorn, hawthorn elder and hazel.

Protected Species

Great Crested Newt

4.2 Given the low likelihood of great crested newt being present on site (See Para. 3.28) this species is not considered in need of further survey.

Bats

4.3 No evidence of use of the building and no opportunity for roosting by bats was recorded. Thus, the building here is deemed negligible for use by bats and no further survey or assessment of this area of the building is necessary.

Lighting

4.4 Bats will use the local area and any lighting proposals for the development will need to take account of the requirements of bats, with consideration given to the external lighting of the building, access track and car parking. Light spill can cause impacts in dark sky areas. There should be no light spill onto the adjacent Local Wildlife Site as well as the general area, attempting keep the site as dark as possible and remaining a 'dark zone'.

4.5 If external lighting is to be introduced to the site the use of low lux intensity lighting possibly coupled with, for example, low-level bollards can reduce light spill. Maximising the use of dimmers and timers, motion sensors, etc., to avoid lights being on continuously (i.e., lit when needed) is also advised. Light source choice is important as it affects colour rendering and appearance, with blue/green light having a high deleterious impact on bats.

4.6 Implementation of these measures would help reduce impacts not only on bats from lighting associated with the development, but also other species, which are also averse to well-lit areas.

4.7

Birds

4.8 Works to the building, the clearance and disturbance of scrub and other vegetation that could be used by birds for nesting (such as dense ground vegetation) would need to take account of the presence of nesting birds. The presence of nesting birds can be avoided as a constraint to the proposals by timing such works to avoid the bird nesting season. Should the works need to be carried out during the bird nesting season then a watching brief would need to be carried out to check for the presence of nesting birds.

4.9 The findings of the surveys and watching brief would be used to ascertain the best method to proceed to avoid impacting upon nesting birds. The bird nesting season is generally deemed to run from March to July/August inclusive, although some species can nest outside this period.

The proposals will result in the loss of suitable nesting and foraging habitat, including within the building and in scrub. Compensatory planting of shrubs, etc., is advised to off-set loss of habitat, coupled with the installation of woodcrete (or similar) bird boxes in a range of styles to cater for a broad suite of species.

4.10

5. REFERENCES

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Table I. List of Plant Species Recorded During Survey

Common name*	Latin binomial*	Unsealed surface	Tall herb	Grassland	Scrub
Blackthorn	*Prunus spinosa*				F
Bramble	*Rubus fruticosus*		F		
Broad-leaved dock	*Rumex obtusifolius*		O		
Bush vetch	*Vicia sepium*			VLO	
Cleaver	*Galium aparine*		F		
Common nettle	*Urtica dioica*		F		
Common ragwort	*Jacobaea vulgaris*		O		
Cow parsley	*Anthriscus sylvestris*		O		
Cowslip	*Primula veris*			R	
Creeping bent	*Agrosits stolonifera*			O	
Creeping buttercup	*Ranunculus repens*			O	
Creeping thistle	*Cirsium arvense*	O	O		
Cut-leaved crane's-bill	*Geranium dissectum*			R	
Dandelion	*Taraxacum* sp.			LF	
Elder	*Sambucus nigra*				O
False oat-grass	*Arrhenatherum Elatius*			LF	
Forget-me-not	*Myosotis sp.*			R	
Germander speedwell	*Veronica chamaedrys*			R	
Greater burdock	*Arctium lappa*		O		
Hairy bittercress	*Cardamine hirsuta*	O-LF			
Hawthorn	*Crataegus monogyna*				F
Hazel	*Corylus avellana*				O
Hogweed	*Heracleum sphondylium*		O		
Lesser celandine	*Ficaria verna*			VLF	
Lords-and-ladies	*Arum maculatum*				O
Meadow buttercup	*Ranunculus acris*			R	
Male fern	*Dryopteris filix-mas*		R		
Ox-eye daisy	*Leucanthemum vulgare*			LO	
Pignut	*Conopodium majus*			VLO	
Red fescue	*Festuca rubra*			O	
Self-heal	*Prunella vulgaris*			O	
Spear thistle	*Cirsium vulgare*	O	R		
Wood avens	*Geum urbanum*				O
Yorkshire fog	*Holcus lanatus*			O	

* Nomenclature follows Stace, C., Thompson, H. and Stace, M. (2019). New flora of the British Isles. 4th ed. C & M Floristics.

DAFOR:
D - Dominant
A - Abundant
F- Frequent
V - Very
O - Occasional
R - Rare
L - Locally

PLATES



Plate I. Hard-standing and tall herb to the north of the site.



Plate II. Bare ground and scrub towards the south of the site.



Plate III. Building on site with block walls and felt roof.



Plate IV. Internal view of the building.



Plate V. Sett 1 (off-site).



Plate VI. Sett 2 along the western boundary.

Figure 1. Layout of Site and Habitats



APPENDIX I - LEGISLATION RELATING TO PROTECTED SPECIES DISCUSSED IN THE REPORT

The information below is intended only as guidance to the legislation relating to these species and relates solely to England. It is recommended that the legislative documents be referred to for the full legal wording.

Birds

All wild birds, their nests and eggs are protected by law under the Wildlife and Countryside Act 1981 (as amended). It is, therefore, an offence (subject to certain exceptions) to:

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird whilst it is in use or being built;
- take or destroy the egg of any wild bird.

In addition to the above, in accordance to amendments of the Wildlife and Countryside Act by the Countryside and Rights of Way Act 2000, it is an offence to:

- intentionally or recklessly disturb any species listed on Schedule 1 of the Wildlife and Countryside Act whilst building a nest, or whilst it is on, in or near a nest containing eggs or young; and
- disturb the dependant young of a Schedule 1 bird.

For example, barn owl is protected under Schedule 1 of the Wildlife and Countryside Act, protecting them from intentional or reckless disturbance during the breeding season (which is normally considered the time from when the female makes the first nest 'scrape' and lays the first egg until the time when the last dependent young stops returning to the nest (English Nature, 2002/3)).

Bats

There are seventeen different species of bat in the UK; some are very rare whilst others are widespread. However, because the populations of most species have declined in past decades, all British bats have been protected by law.

Bats are protected under the Conservation (Natural Habitats and Wild Fauna and Flora (92/43/EEC)) Regulations 1994 (Statutory Instrument No. 2716 known as the Habitats Regulations), which have been amended by the Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007 (Statutory Instrument No. 1843). The amended regulations largely came into force on the 21st August 2007. Due to their inclusion on Schedule 2 of the Habitats Regulations, bats are considered 'European Protected Species'

In summary, this legislation makes it an offence to:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats in such a way as to be likely to significantly affect –

(i) the ability of any significant group of bats to survive, breed or rear or nurture their young; or
(ii) the local distribution or abundance of that species of bat;

- damage or destroy a breeding site or resting place of any bat;
- possess a bat (alive or dead) or any part of a bat.

Bats are also protected under the Wildlife and Countryside Act 1981 (as amended), which has also been amended by the Countryside and Rights of Way (CRoW) Act, 2000.

In summary, this legislation makes it an offence to:

- intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection;
- intentionally or recklessly obstruct access to any structure or place which any bat uses for shelter or protection.

Great Crested Newt

Great crested newts are protected in England and Wales under European Legislation via the Conservation (Natural Habitats and Wild Flora and Fauna (92/43/EEC)) or 'The Habitats Directive'. The Directive is transposed into UK law via the Conservation of Habitats and Species Regulations 2010 (Statutory Instrument 2010/0490 known as the Habitats Regulations), which came into force on the 1st April 2010. The Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") consolidate and update the Conservation (Natural Habitats, &c.) Regulations 1994 (Statutory Instrument 1994/2716) and amendments. Due to their inclusion on Schedule 2 of the Habitats Regulations, bats are considered 'European Protected Species'.

- deliberately capture, injure or kill a great crested newt;
- deliberately disturb a great crested newt;
- damage or destroy a breeding site or resting place of any great crested newt;
- possess a great crested newt (alive or dead) or any part of a great crested newt.

Disturbance of great crested newts includes in particular any disturbance which is likely:
(a) to impair their ability:
(i) to survive, to breed or reproduce, or to rear or nurture their young; or
(ii) to hibernate or migrate; or
(b) to affect the local distribution or abundance of the species to which they belong.
Great crested-newts are also protected under the Wildlife and Countryside Act 1981 (as amended), which has also been amended by the Countryside and Rights of Way (CRoW) Act, 2000.
In summary, this legislation makes it an offence to:

- intentionally or recklessly disturb a great crested-newt while it is occupying a structure or place which it uses for shelter or protection;
- intentionally or recklessly obstruct access to any structure or place which any great crested-newt uses for shelter or protection.

In addition, the great crested newt is a Priority Species within the UK Biodiversity Action Plan with a Species Action Plan aimed at maintaining the existing range and population status, as well as increasing the number of populations through re-colonisation.

NERC ACT AND BIODIVERSITY

A number of UK habitats and species are also included on the list of habitats and species which are of principal importance for the conservation of biodiversity in England as required under Section 41 of the Natural Environment and Rural Communities (NERC) Act. The NERC Act came into force on 1st Oct 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The list has been drawn up in consultation with Natural England, as required by the Act.

The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of NERC Act to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

Fifty-six habitats of principal importance are included on the S41 list. These are all the habitats in England that were identified as requiring action in the UK Biodiversity Action Plan (UK BAP) and continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework. They include terrestrial habitats such as upland hay meadows to lowland mixed deciduous woodland, and freshwater and marine habitats such as ponds and subtidal sands and gravels.

There are 943 species of principal importance included on the S41 list. These are the species found in England which were identified as requiring action under the UK Biodiversity Action Plan and which continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework. In addition, the Hen Harrier has also been included on the list because without continued conservation action it is unlikely that the Hen Harrier population will increase from its current very low levels in England. In accordance with Section 41(4) the Secretary of State will, in consultation with Natural England, keep this list under review and will publish a revised list if necessary.

The impact that this legislation has on the Planning system is also outlined in ODPM 06/2005 Government Circular: Biodiversity and Geological Conservation – Statutory obligations and their Impact within the Planning System. This states:
The presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat. Local authorities should consult English Nature [now Natural England] before granting planning permission. They should consider attaching appropriate planning conditions or entering into planning obligations under which the developer would take steps to secure the long-term protection of the species. They should also advise developers that they must comply with any statutory species' protection provisions affecting the site concerned.