



## MR GARY LOVE

---

### Climping Mill, Climping, West Sussex

- Preliminary Ecological Appraisal Survey
- Day-time Bat Roost Assessment

### Planning Issue

|                    |                              |
|--------------------|------------------------------|
| Prepared by        | CO                           |
| Checked by         | JJ                           |
| Date               | 30 <sup>th</sup> August 2017 |
| Document Reference | LLD1260                      |
| Revision           | 01                           |

# Contents

|                                                              | Page No.  |
|--------------------------------------------------------------|-----------|
| <b>SUMMARY</b>                                               | <b>01</b> |
| <b>1.0 Introduction</b>                                      | <b>02</b> |
| <b>2.0 Scope of the Survey</b>                               | <b>03</b> |
| <b>3.0 Methodology</b>                                       | <b>04</b> |
| <b>4.0 Results</b>                                           | <b>06</b> |
| <b>5.0 Evaluation</b>                                        | <b>14</b> |
| <b>6.0 Protected Species Conclusions and Recommendations</b> | <b>15</b> |
| <b>7.0 Ecological Enhancements</b>                           | <b>17</b> |
| <b>8.0 References</b>                                        | <b>18</b> |

## FIGURES

Figure No. 1 – Site Habitat Plan

## TABLES

Table No. 01 – Statutory Protected Sites

Table No. 02 – SNCI's within 2.0km

Table No. 03 – Summary of Findings of Day-time Bat Roost Assessment

Table No. 04 – Target Notes

Table No. 05 – Species List for Habitat Parcels

## APPENDICES

Appendix No. 1 – Site Photographs



## SUMMARY

Lizard Landscape Design and Ecology has been commissioned by Mr Gary Love to undertake a preliminary ecological appraisal survey and protected species assessment of the land proposed for development at Climping Mill, Climping (*Grid Reference: TQ 015 012— hereafter referred to as 'the site'*). A preliminary ecological appraisal (*PEA*) was undertaken of the site on 14<sup>th</sup> August 2017 to appraise the existing ecological resource within the site and the surrounding area.

Habitats within the site include amenity grassland, tall ruderal, hard/bare ground, scattered trees and hedge/trees lines. The site in general is considered to be of 'low ecological value' with only common and widespread habitat types recorded.

Areas of suitable reptile habitat (*such as tall ruderal and scattered scrub/trees*) exist around the periphery of the site, as well as surrounding log/brash piles on the site. Should development proposals seek to remove these areas a full reptile survey will be required to assess whether (*and in what numbers*) reptiles are present on site. Results of this survey will allow a mitigation strategy to be formulated (*should one be required*). Should no reptiles be found on site no mitigation works will be required.

Buildings B4 and B5 have been assessed as offering '*negligible*' bat roost suitability. The demolition of these buildings to facilitate the construction of the new dwelling on site is considered unlikely to contravene *The Conservation of Habitats and Species Regulations 2010*. No further surveys are necessary for these buildings.

Refurbishment of Building B1 and B2 has the potential to impact upon a bat roost (*should one be present*). These buildings will not be directly affected by the proposed new-build however before any refurbishment/alteration of these buildings a full bat survey will be required to assess how (*if at all*) bats are using these buildings.

The overall value of the site is considered to be 'low'. No rare or unusual plant species were recorded during the survey, with the site comprised of common and widespread habitat types. Subject to a suitable soft landscape scheme and sensitive management, it is thought that any new development on the site could improve upon the existing baseline and provide biodiversity gains.

MR GARY LOVE  
CLIMPING MILL, CLIMPING  
PRELIMINARY ECOLOGICAL APPRAISAL SURVEY  
LLD1260.ClimpingMill.PEA.Rev01.30.08.17

## 1.0 INTRODUCTION

- 1.1 Lizard Landscape Design and Ecology has been commissioned by Mr Gary Love to undertake a preliminary ecological appraisal survey and protected species assessment of the land proposed for development at Climping Mill, Climping (*Grid Reference: TQ 015 012– hereafter referred to as ‘the site’*).
- 1.2 A preliminary ecological appraisal (*PEA*) was undertaken of the site on 14<sup>th</sup> August 2017 to appraise the existing ecological resource within the site and the surrounding area. The *PEA* was comprised of a baseline survey conforming broadly to the *JNCC Ecology Phase 1 Habitat Survey protocol*, to identify the existing habitats. In addition, a protected species assessment was undertaken to identify the potential for European and nationally protected species within and adjacent to the site.
- 1.3 The field survey data and analysis contained in this report were undertaken and prepared by Catherine O'Reilly (*BSc; Project Ecologist; NE Class 2 Bat Licence Holder; Lizard Landscape Design and Ecology*). The report has been reviewed by Joe Jackson; (*Principal; Landscape Architect BA (Hons) LA DipLA CMLI; Lizard Landscape Design and Ecology*).

### **Site Information**

- 1.4 The proposed development site is formed of a large plot covering c. 1.6Ha accessed via a long, private drive. The plot contains a total of 6 no. buildings, areas of hardstanding, gardens and hedges/trees.
- 1.5 The site is located c. 4.0 metres above sea level and is bordered by a golf course to the east, beach/dunes to the south and arable farmland to the north and west.

***Surrounding Landscape***

- 1.6 The immediate surrounding landscape is rural, with arable farmland extending for at least 1.0km to the north and west while Littlehampton Golf Course extends for 1.1km to the east, beyond which lies the town of Littlehampton.
- 1.7 There is very little woodland in the vicinity of the site, as would be expected on a coastal site such as this. 3 no. small ditches/rifes are located within 500.0 metres of the site area; no other waterbodies are located in the vicinity.

***Development Proposals***

- 1.8 The development proposals consist of the demolition of 2 no. buildings to facilitate the erection of a large new property to the west of the site, with associated refurbishment of the other buildings and new hard/soft landscape scheme.

**2.0 SCOPE OF THE SURVEY**

- 2.1 The aim of the preliminary ecological appraisal survey has been:
- *To identify and display the main habitat types and plant communities;*
  - *To provide a species list for the major habitats;*
  - *To identify habitats with potential for protected species;*
  - *To provide recommendations for surveys of protected species and / or ecological enhancement / compensation.*
- 2.2 The aims of the day-time bat roost assessment survey were:
- *To identify the potential for roosting bats;*
  - *Identify areas where future detailed survey effort would be required and should be focused;*
  - *To establish whether other habitat features for different species groups exist to warrant further investigation.*
- 2.3 This report establishes the potential ecological resource within the site and outlines where any ecological constraints may occur.

### 3.0 METHODOLOGY

- 3.1 A preliminary ecological appraisal was undertaken on 14<sup>th</sup> August 2017 and the site subjected to an ecology survey using guidelines set out in the *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit (JNCC, 2003)*. This has resulted in a Site Habitat Plan (*Figure No. 01*); Species Lists for Habitat Parcels (*Table No. 05*); and Target Notes (*Table No. 04*).
- 3.2 Habitats within the site were classified and the presence, or potential presence, of certain protected and / or notable species of flora and fauna were identified. A summary description of the habitat within the site following the ecology phase 1 habitat survey methodology is presented in *Section 4.0*.
- 3.3 Habitats within and immediately adjacent to the site were assessed for their potential for uncommon and protected fauna including mammals, birds, reptiles and amphibians. This involved identifying features that may be used by protected species, potential foraging areas and other signs of use. Water bodies were recorded wherever possible within 500 metres of the proposed development site.
- 3.4 The results are summarised and accompanied in large part by photographic evidence contained in *Appendix No. 01 – Site Photographs*. Recommendations for further investigation and survey are made in the following report.

***Day-Time Bat Roost Assessment Survey***

- 3.5 A day-time bat roost assessment survey was undertaken on 14<sup>th</sup> August 2017 by an experienced bat surveyor who undertook an internal and external examination of the existing outbuildings to the south of the site. The bat surveyor assessed the existing building visually and searched for evidence such as:

- *Staining beneath or around a hole caused by natural oils in bat fur;*
- *Bat droppings beneath a hole, roost, or resting area;*
- *Bat droppings and / or insect remains beneath a feeding area;*
- *Audible squeaking from within a hole;*
- *Insects (especially flies) around a hole;*
- *Dead bats.*

- 3.6 Trees were visually identified from the ground, using binoculars where necessary, for features that could be used by bats such as:

- *Woodpecker Holes;*
- *Knot Holes;*
- *Tear-outs;*
- *Flush Cuts;*
- *Double Leaders;*
- *Dense Ivy Covering.*

- 3.7 Once features had been assessed, trees/buildings were then categorised in accordance with *Table 4.1 of the Bat Conservation Trust's Good Survey Guidelines (2016)*:

| <b>Category</b>   | <b>Building</b>                                                                                                                    | <b>Trees</b>                                                                                         |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <b>Negligible</b> | No suitable features identified                                                                                                    | No suitable features identified                                                                      |
| <b>Low</b>        | A structure which could be used opportunistically, however are not likely to be used on a regular basis/by a large number of bats. | Tree of sufficient size/age to support bat roost features; but with none identified from the ground. |
| <b>Moderate</b>   | A building with features which could be used regularly by a small number of bats.                                                  | Tree with features which may support a roost of low conservation status.                             |
| <b>High</b>       | A building with features suitable for use by a large number of bats on a regular basis.                                            | A tree with several potential roost sites that are suitable for use by a large number of bats.       |

## 4.0 RESULTS

### 4.1 Desk Study – Background Information

#### ***Designated Sites and Habitats***

- 4.1.1 The following section outlines the ecological context of the development site, describing any designated nature conservation sites in the vicinity of the development site. The following designated sites and habitats are not necessarily representative of the existing site's ecology, but are indicative of the ecological context of the surrounding area; a factor that may be important when assessing the presence / absence potential of certain species groups.

### **Statutory Protected Sites**

- 4.1.2 The following statutory protected sites are located within 2.0km of the proposed development site.

**Table No. 01 – Statutory Protected Sites**

| Site                | Description                                                                                                                                   | Location |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Climping Beach SSSI | A vegetated shingle beach behind which lies a sand dune system. The site is also important for over wintering birds, particularly sanderling. | 90m S    |
| West Beach LNR      | Site forms part of Climping Beach SSSI. The area includes mud flats, shingle and sand dunes.                                                  | 550m SE  |

- 4.1.3 The site is within the *Impact Risk Zone* of *Climping Beach SSSI*; any development with a net gain in residential units will require consultation with Natural England to assess its impacts upon designated sites. The small scale of this development however is not likely to be detrimental to surrounding protected sites.

### **Non-Statutory Protected Areas**

- 4.1.4 *Sites of Nature Conservation Importance (SNCI's)* are designations applied to the most important non-statutory nature conservation sites. They are recognised by the *National Planning Policy Framework (2012)* and as such are material considerations when assessing planning applications. SNCI's within 2.0km of the site are shown in Table No. 02 below:

**Table No. 02 – SNCI's with 2.0km**

| Site                                           | Location |
|------------------------------------------------|----------|
| Ar 06 – Littlehampton Golf Club and Sand Dunes | 30m E    |

- 4.1.5 The proposed developed does not seek to alter or remove any non-statutory protected site. Given the already developed nature of the site, development proposals are not considered to adversely affect SNCI's in the vicinity.

**UK Priority Habitats**

- 4.1.6 Within 2.0 kilometres of the site lie *Priority Habitats* of *deciduous woodland, sand dunes, coastal vegetated shingle, maritime cliffs and slopes, coastal and floodplain grazing marsh, mudflats and coastal saltmarsh*. It is not envisaged that development within this area would be detrimental to the *UK Priority Habitats* that surround it.

**UK Priority Species**

- 4.1.7 Numerous records of protected species exist within 2.0 metres of the site. Species most relevant to this development include building-dwelling species of bats such as serotine (*Eptesicus serotinus*), brown long-eared (*Plecotus auritus*), common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*).
- 4.1.8 All species of bats and their roosts are protected under *Regulation 41 of The Conservation of Habitats and Species Regulations 2010 (as amended)*. It is an offence for anyone to intentionally kill or injure a bat; disturb a roosting bat; damage, destroy or obstruct access to any place used by bats for shelter; and / or to significantly alter the local distribution of bats.
- 4.1.9 Reptile species including slow worm, grass snake and common lizard have been recorded within 2.0km of the site area. All species of UK reptile are protected against reckless or intentional killing or injuring under *The Wildlife and Countryside Act 1981 (As amended)*.

**4.2 Field Survey**

- 4.2.1 The following habitats and features were recorded within the development site and the extended survey area. The general site character has been described along with a brief description of the habitat's physical characteristics. These are shown on the Site Habitat Plan in *Figure No. 01*. Species Lists for Habitat Parcels are listed in *Table No. 06* and *Table No. 05* contains Target Notes.

4.2.2 Habitats within and adjacent to the development site area include:

- *Amenity Grassland*;
- *Hard/Bare Ground*;
- *Tall Ruderal*;
- *Introduced Shrub*;
- *Scattered Trees*;
- *Hedge with Trees*;

**Site Description (Refer to Appendix No. 01 – Site Photographs)**

4.2.3 The site is formed of 3 no. distinct areas: access and buildings to the east, amenity grassland to the centre and bare ground/tall ruderal to the west.

*Amenity Grassland*

4.2.4 The central section of the site is dominated by amenity grassland which appears to be semi-regularly maintained and currently stands at a height of c. 20cm. Cocks-foot (*Dactylis glomerata*) and yorkshire fog (*Holcus lanatus*) grasses dominate with some Poa sp. and perennial rye-grass (*Lolium perenne*). Forbs present include frequent thistle (*Cirsium* sp), dandelion (*Taraxacum officinale*) and clover (*Trifolium repens*) with occasional dock (*Rumex obtusifolius*) and ribwort plantain (*Plantago lanceolata*).

*Tall Ruderal*

4.2.5 Large stands of tall ruderal have grown up around the disused former school building, to the rear of the cottage and to the site boundaries. These areas are dominated by nettle (*Urtica dioica*) with occasional Canadian fleabane (*Conyza canadensis*), hogweed (*Heracleum sphondylium*) and fat-hen (*Chenopodium album*).

4.2.6 Areas to the north of the site have been colonised by black nightshade (*Solanum nigrum*) and fat hen with occasional bittercress (*Cardamine hirsuta*), bittersweet (*Solanum dulcamara*) and nipplewort (*Lapsana communis*).

*Hard / Bare Ground*

- 4.2.7 Access and parking form the eastern section of the site, dominated by tarmac, gravel and informal grass tracks. Areas to the west of the site are dominated by areas of bare ground which have begun being colonised by tall ruderal species and arable weeds such as fat hen.

*Intact Hedge with Trees*

- 4.2.8 Boundaries of the site are formed of intact hedges with trees. The eastern boundary comprises elm and willow c. 5m tall, although recent cutting-back has resulting in a thin line of scrappy, 'leggy' vegetation of limited value which would benefit from re-enforcement. Holm oak (*Quercus ilex*) dominates the southern and eastern boundaries while the north-western boundary of the site comprises hazel (*Corylus avellana*), elm (*Ulmus* sp) and birch (*Betula pendula*) trees.

*Scattered Trees*

- 4.2.9 A line of mature oak trees (*Quercus robur*) form the north-eastern boundary vegetation while a small number of semi-mature/mature stands of elm, sycamore (*Acer pseudoplatanus*) and hazel remain to the north of the site area.

**4.3 Day-time Bat Roost Assessment - Buildings**

- 4.3.1 The following buildings were assessed as part of the day-time bat roost assessment of the site. Descriptions of these buildings and assessment of bat roost suitability can be found below.

***Building B1 – Main Mill Building***

- 4.3.2 A large building of flint and brick construction which appears to have been extended numerous times over the years. The old windmill is still present, albeit with the top section and sails removed, and is attached to the main building via a flat roofed 'sun room'. The main section of building then extends along a north-south axis with a double gable roof, one section of which is clad in clay tile while the other is slate. The northern-most end of the building appears to be most recently constructed being an 'L' shape building of brick construction with tile roof.

- 4.3.3 Internally the building contains 3 no. open roof voids. Void no. 01 measures approximately 12m x 2.5m with a height to the ridge of c. 1.5m. The void is of traditional rafter construction with a mixture of BRM and bitumen roofing felt. Numerous rat and mouse droppings were recorded throughout. A small number of brown long-eared bat and pipistrelle sp. droppings were recorded at the point where the sun room joins adjoins this area. Void no. 02 measures approximately 16m x 3m with a height to the ridge of c. 1.5m. The void was similar in construction to void no. 01. A small number of pipistrelle droppings were recorded to the south and west of the central chimney. Void no. 03 was 'L-shaped' with a height to the ridge of c. 3m. Wooden sarking was present throughout. A small number of BLE droppings were recorded to the western section of the void. The evidence found suggests that the building supports only a low number of common species (if any at all) and that any roost present is of low conservation significance.

***Building B2 – Cottage***

- 4.3.4 A small single-storey flint and brick cottage with clay tile roof. The roof is in poor condition with numerous slipped/broken tiles recorded throughout. Internally, the roof void contained a moderate amount of cobwebs as well as mouse droppings. No roofing membrane was present resulting in large amounts of debris within the void. Access was limited however a small number of droppings of a size and shape characteristic of pipistrelle sp. were recorded around the loft hatch. Similarly to Building B1, the evidence found suggests that any roost present is of low conservation significance.

***Building B3 – Thatch Cottage***

- 4.3.5 A single storey flint cottage with thatch roof in poor condition. Deterioration of the thatch has resulted in reasonably high light levels within the roof void. Dense cobwebs were noted throughout as well as ivy ingress. No evidence of bats was recorded internally/externally.

***Building B4 – Former School Building***

- 4.3.6 Building B4 was formerly utilised by the private school which used to own the site. The large pre-fabricated flat roofed building has fallen into a state of disrepair and now has numerous missing windows, collapsed ceilings and holes in the roof. In its current state the building is considered to be too damp, draughty and light to support a bat roost.

***Building B5 – Park Home***

- 4.3.7 A large park home located to the north-western section of the site. The buildings is of modern construction with felt and tile roof which was in good condition. PVC windows were in good condition as were the wooden soffits and fascia; no potential access points were noted. No access was available internally.

***Building B6 – Store Building***

- 4.3.8 Located to the north-eastern section of the site, the prefabricated building measures c. 15m x 5m. The roof is of a corrugated metal construction supported on breeze-block and prefabricated panel walls. All external walls, windowsills and ledges were checked for evidence of bats; none was found.

**Table No. 03 – Summary of findings of Day-time Bat Roost Assessment**

| <b>Ref.</b> | <b>External Assessment</b>                                                                                                            | <b>Internal Assessment</b>                                                                                                    | <b>Suitability</b> |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|--------------------|
| B1          | Warped/slipped/damaged roof tiles could provide access. Some missing mortar beneath ridge tiles. Small areas of lifted lead flashing. | Small number of pip sp. & Plecotus sp. droppings in void 1, Small numbers of pip sp. droppings in void 2 & 3.                 | <b>High</b>        |
| B2          | Numerous warped/missing/lifted roof tiles.                                                                                            | No roof membrane. Limited access into the roof void; small number of pipistrellus sp. droppings recorded near the roof hatch. | <b>Moderate</b>    |
| B3          | Potential access at the eaves.                                                                                                        | No evidence internally. Void considered too light to support a roost. No potential for crevice dwellers in the thatch.        | <b>Negligible</b>  |
| B4          | In very poor condition, damp and draughty throughout.                                                                                 | No roof void.                                                                                                                 | <b>Negligible</b>  |
| B5          | Recent construction, limited potential access points. These which were recorded were cobweb covered.                                  | No internal access.                                                                                                           | <b>Negligible</b>  |
| B6          | Single skin prefab building. No evidence recorded.                                                                                    | No internal access.                                                                                                           | <b>Negligible</b>  |

#### **4.4 Day-time Bat Roost Assessment - Trees**

4.4.1 Trees which may be impacted by the development were fully assessed during the course of this survey. The majority of the trees on site are semi-mature specimens and offer no discernible bat roost features.

4.4.2 A single large oak tree to the north-east of the site (*T01*) has been assessed as providing 'low' bat roost suitability. This tree holds ivy cover throughout while a large tear-out was recorded at c. 2.0m height. No direct evidence of bats was recorded.

## 5.0 EVALUATION

- 5.1 The site is dominated by grassland, hard/bare ground and tall ruderal and as such is considered to be of '*low ecological value*'. That said however there are some small areas of the site which offer the potential to support protected species (*eg. reptiles*) and therefore need to be investigated further.
- 5.2 Large areas to the centre of the site are dominated by amenity grassland which has a typically uniform sward and offers little in the way of biodiversity value. The homogenous sward is dominated by grasses, offering little of interest for invertebrates. The loss of areas of amenity grassland could easily be mitigated through the implementation of a sensitive landscape scheme which incorporates areas of wildflower lawn as well as nectar rich plants such as those listed on the RHS perfect for pollinators list.
- 5.3 Large patches of tall ruderal/rough grassland around the existing buildings and the site boundaries provide suitable reptile habitat while spoil, log and brash piles provide opportunity for hibernation, shelter and foraging.
- 5.4 Given the likely large-scale development/landscaping of the site which is likely to result in the removal of all suitable reptile habitat, full reptile presence/absence surveys are recommended to ascertain whether reptiles are currently utilising the site area. The reptile survey should consist of 7 no. site visits during suitable weather conditions (*9-18°C, sunny, dry*) and within the optimal survey season (*March-June and September*).
- 5.5 Buildings B1 and B2 have both been assessed as providing bat roost suitability. Although these buildings will not be directly impacted upon by the construction of the new dwelling, refurbishment of these buildings has the potential to disturb/damage a bat roost (*should one be present*) though noise, vibration or blocking access points.

- 5.6 Full bat surveys of these buildings are recommended before any works such as roof repair/replacement, repair/replacement of ceilings (which form the base of the loft void), erection of scaffolding which may block access points, demolition of walls etc takes place. Neither of these buildings are suggested to support a roost of high conservation value (*if at all*) and, subject to survey results, suitable mitigation measures could easily be incorporated into the scheme at a later date.
- 5.7 A single tree (*T01*) has been assessed as providing some bat roost suitability. This tree has been assessed as providing 'low' bat roost suitability. This tree is recommended for retention; should removal be required the tree should be soft-felled under ecological supervision.
- 5.8 Lighting of the scheme should be carefully designed so as to avoid light spill onto any ecologically sensitive areas such as hedge / tree lines. Any lighting used within the scheme should be angled down and away from these areas to allow their continued ecological functionality.
- 5.9 The overall value of the site is considered to be '**low**'. No rare or unusual plant species were recorded during the survey, with the site comprised of common and widespread habitat types. Subject to a suitable soft landscape scheme and sensitive management, it is thought that any new development on the site could improve upon the existing baseline and provide biodiversity gains.

## 6.0 PROTECTED SPECIES – CONCLUSIONS AND RECOMMENDATIONS

### ***Reptiles***

- 6.1 Should development proposals seek to remove areas of suitable reptile habitat a full reptile survey will be required to assess whether (*and in what numbers*) reptiles are present on site. The reptile survey should consist of 7 no. site visits during suitable weather conditions (*9-18°C, sunny, dry*) and within the optimal survey season (*March-June and September*). Results of this survey will allow a mitigation strategy to be formulated (*should one be required*). Should no reptiles be found on site no mitigation works will be required.

MR GARY LOVE  
CLIMPING MILL, CLIMPING  
PRELIMINARY ECOLOGICAL APPRAISAL SURVEY  
LLD1260.ClimpingMill.PEA.Rev01.30.08.17

**Bats**

- 6.2 Buildings B1, B2 and B3 will not be directly affected by the proposed new-build property. Refurbishment of Buildings B1 and B2 however has the potential to impact upon a bat roost (*should one be present*). Before any works which may affect the roof/void of these buildings (*including erection of scaffolding, works to upstairs ceilings, re-roofing, extensive upstairs wall removal etc*) a full bat survey will be required.
- 6.3 Building B1 should be subject to 3 no. survey visits while Building B2 will require 2 no. survey visits. Survey visits should be undertaken during the optimal survey season (*May-September, with at least 2 no. surveys for Building B1 and 1 no. survey for Building B2 undertaken during the peak months of May-August*) and in optimal weather conditions (*+10°C, calm, dry*) in accordance with best practice guidelines (*Bat Surveys for Professional Ecologists: Good Practice Guidelines (BCT, 2016)*).
- 6.4 Buildings B4 and B5 have been assessed as offering '*negligible*' bat roost suitability. The demolition of these buildings to facilitate the construction of the new dwelling on site is considered unlikely to contravene *The Conservation of Habitats and Species Regulations 2010*. No further survey work of these buildings is recommended.

**Birds**

- 6.5 All active birds' nests are protected against damage / destruction under *The Wildlife and Countryside Act 1981 (as amended)* therefore it is advised that clearance of any trees/dense shrubs take place outside of the bird nesting season (*Season: March-August*) or after careful inspection to ensure no active birds' nests are present.

**Others**

- 6.6 No habitat suitable for supporting other protected species was noted on site. No rare / unusual / protected flora was recorded on this site.

## 7.0 ECOLOGICAL ENHANCEMENTS

7.1 The design of the proposed development should consider ecological enhancements for the benefit of wildlife in line with the *National Planning Policy Framework* and *Local Planning Policy*. Recommendations for ecological enhancements that could be considered as part of development proposals could include:

- *The use of flowering shrubs as listed within the RHS 'Perfect for Pollinators' plant list to provide year-round interest for invertebrates;*
- *The provision of nesting boxes for a variety of bird species and the incorporation of open fronted areas / access holes to outbuildings to allow swallow access;*
- *The provision of bat boxes within existing mature trees;*
- *Use of a sympathetic lighting scheme across the site, with lighting angled down and away from hedge/tree lines;*
- *Holes of 13cmx13cm should be left at the base of new walls / fencing to allow free movement of hedgehogs across the site.*
- *Incorporation of areas of wildflower grassland or the use of flowering lawn mix.*
- *Compost/log piles where space allows. Where this is not possible the placement of bug hotels eg. NHBS Bee and Bug Biome or similar will provide additional habitat for invertebrates.*
- *Native species-rich hedge planting to re-enforce the existing hedgerows around the site. Species could include hazel, hawthorn, dogwood, spindle, viburnum, yew and holly.*
- *The use of pale and night-scented species around the site will increase bat foraging potential. Species could include jasmine, Michaelmas daisy and evening primrose.*

## 8.0 REFERENCES

*JNCC: Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit; (2003)*

*Collins J (ed): Bat Surveys for Professional Ecologists: Good Practice Guidelines (3<sup>rd</sup> ed.) The Bat Conservation Trust (2016)*

*Mitchell-Jones and McLeish: Bat Workers Manual; JNCC, 3<sup>rd</sup> Edition (2004)*

*Streeter, D.: The Most Complete Guide to the Flowers of Britain and Ireland; Harper Collins, London (2010)*

*[www.magic.gov.uk](http://www.magic.gov.uk)*

**Table No. 4 – Target Notes (TN) for Ecology Phase 1 Habitat Survey and Protected Species Assessment**

| <b>TN</b>           | <b>Description</b>                                                                                                                                                                         | <b>Protected Species</b>                         | <b>Potential</b>         |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------|
| <b><i>TN 01</i></b> | Location of small numbers of BLE and pipistrelle droppings found within Void 01.                                                                                                           | <b><i>Bats</i></b>                               | <b><i>‘High’</i></b>     |
| <b><i>TN 02</i></b> | Location of small numbers of pipistrelle droppings found to the south and west of a chimney in void 02.                                                                                    | <b><i>Bats</i></b>                               | <b><i>‘High’</i></b>     |
| <b><i>TN 03</i></b> | Location of a small number of BLE droppings found within void 03.                                                                                                                          | <b><i>Bats</i></b>                               | <b><i>‘High’</i></b>     |
| <b><i>TN 04</i></b> | Log/brash piles which may offer potential for reptile hibernation, foraging and shelter. Potential for reptiles to be present on site is reduced by the high levels of recent disturbance. | <b><i>Reptiles</i></b>                           | <b><i>‘Moderate’</i></b> |
| <b><i>TN 05</i></b> | Line of mature oak trees which are likely to provide good foraging/commuting habitat for bats and birds.                                                                                   | <b><i>Bat</i></b><br><b><i>Nesting Birds</i></b> | <b><i>‘Moderate’</i></b> |

**Table No. 05 – Species List - Preliminary Ecological Appraisal Survey**

**Amenity Grassland**

| <b>Common Name</b> | <b>Scientific Name</b>       | <b>DAFOR</b> |
|--------------------|------------------------------|--------------|
| Cocks-foot         | <i>Dactylis glomerata</i>    | <b>A</b>     |
| Daisy              | <i>Bellis perennis</i>       | <b>F</b>     |
| Dandelion          | <i>Taraxacum officinale</i>  | <b>F</b>     |
| Dock               | <i>Rumex obtusifolius</i>    | <b>O</b>     |
| Fescue sp.         | <i>Festuca sp.</i>           | <b>O</b>     |
| Field Mustard      | <i>Sinapis arvensis</i>      | <b>R</b>     |
| Hogweed            | <i>Heracleum sphondylium</i> | <b>O</b>     |
| Perennial Ryegrass | <i>Lolium perenne</i>        | <b>D</b>     |
| Poa                | <i>Poa sp.</i>               | <b>O</b>     |
| Prickly Sowthistle | <i>Sonchus asper</i>         | <b>R</b>     |
| Ribwort Plantain   | <i>Plantago lanceolata</i>   | <b>F</b>     |
| Thistle            | <i>Cirsium sp.</i>           | <b>F</b>     |
| Yarrow             | <i>Achillea millefolium</i>  | <b>O</b>     |
| Yorkshire Fog      | <i>Holcus lanatus</i>        | <b>A</b>     |

**Tall Ruderal**

| <b>Common Name</b> | <b>Scientific Name</b>       | <b>DAFOR</b> |
|--------------------|------------------------------|--------------|
| Bittercress        | <i>Cardamine hirsuta</i>     | <b>O</b>     |
| Bittersweet        | <i>Solanum dulcamara</i>     | <b>LD</b>    |
| Black Nightshade   | <i>Solanum nigrum</i>        | <b>LD</b>    |
| Canadian Fleabane  | <i>Conyza canadensis</i>     | <b>O</b>     |
| Fat Hen            | <i>Chenopodium album</i>     | <b>A</b>     |
| Hogweed            | <i>Heracleum sphondylium</i> | <b>F</b>     |
| Mallow             | <i>Malva sylvestris</i>      | <b>O</b>     |
| Nettle             | <i>Urtica dioica</i>         | <b>D</b>     |
| Nipplewort         | <i>Lapsana communis</i>      | <b>O</b>     |
| Prickly Sowthistle | <i>Sonchus asper</i>         | <b>O</b>     |
| Purple Deadnettle  | <i>Lamium purpureum</i>      | <b>O</b>     |
| White Campion      | <i>Silene latifolia</i>      | <b>O</b>     |

**Intact Hedge with Trees**

| <b>Common Name</b> | <b>Scientific Name</b>     | <b>DAFOR</b> |
|--------------------|----------------------------|--------------|
| Bramble            | <i>Rubus fruticosus</i>    | <b>LD</b>    |
| Elm                | <i>Ulmus sp.</i>           | <b>F</b>     |
| Hazel              | <i>Corylus avellana</i>    | <b>F</b>     |
| Holm Oak           | <i>Quercus ilex</i>        | <b>A</b>     |
| Sycamore           | <i>Acer pseudoplatanus</i> | <b>O</b>     |
| Willow             | <i>Salix caprea</i>        | <b>A</b>     |

**DAFOR SCALE:**

**D – Dominant; A – Abundant; F – Frequent; O – Occasional; R – Rare; L – Locally**

**Scattered Trees**

| <b>Common Name</b> | <b>Scientific Name</b>     | <b>DAFOR</b> |
|--------------------|----------------------------|--------------|
| Elm                | <i>Ulmus sp.</i>           | <b>F</b>     |
| Hazel              | <i>Corylus avellana</i>    | <b>F</b>     |
| Holm Oak           | <i>Quercus ilex</i>        | <b>LD</b>    |
| Oak                | <i>Quercus robur</i>       | <b>LD</b>    |
| Silver birch       | <i>Betula pendula</i>      | <b>O</b>     |
| Sycamore           | <i>Acer pseudoplatanus</i> | <b>O</b>     |

**DAFOR SCALE:**

**D – Dominant; A – Abundant; F – Frequent; O – Occasional; R – Rare; L – Locally**

## **Appendix No. 1 – Site Photographs**

MR GARY LOVE  
CLIMPING MILL, CLIMPING  
PRELIMINARY ECOLOGICAL APPRAISAL SURVEY  
*LLD1260.ClimpingMill.PEA.Rev01.30.08.17*

## APPENDIX NO. 1 - SITE PHOTOGRAPHS



Photograph No. 1 - View of Building B1, assessed as providing High bat roost suitability.



Photograph No. 2 - Building B2, assessed as providing moderate bat roost suitability.

MR GARY LOVE  
CLIMPING MILL, CLIMPING  
PRELIMINARY ECOLOGICAL APPRAISAL SURVEY

LLD1260. ClippingMill.PEA.Rev00.30.08.17

## APPENDIX NO. 1 - SITE PHOTOGRAPHS



Photograph No. 3 - Building B3, assessed as providing negligible bat roost suitability.



Photograph No. 4 - Building B4, assessed as providing 'negligible' bat roost potential.

MR GARY LOVE  
CLIMPING MILL, CLIMPING  
PRELIMINARY ECOLOGICAL APPRAISAL SURVEY

LLD1260. ClimpingMill.PEA.Rev00.30.08.17

## APPENDIX NO. 1 - SITE PHOTOGRAPHS



Photograph No. 5 - Building B5, assessed as providing 'negligible' bat roost potential.



Photograph No. 6 - View of the western section of the site looking towards the north.

MR GARY LOVE  
CLIMPING MILL, CLIMPING  
PRELIMINARY ECOLOGICAL APPRAISAL SURVEY

LLD1260. Climping Mill. PEA. Rev00.30.08.17

## APPENDIX NO. 1 - SITE PHOTOGRAPHS



Photograph No. 7 - View across the western section of the site looking towards the south-east.



Photograph No. 8 - Tree T01 which was assessed as providing 'low' bat roost suitability.

MR GARY LOVE  
CLIMPING MILL, CLIMPING  
PRELIMINARY ECOLOGICAL APPRAISAL SURVEY

LLD1260. ClimpingMill.PEA.Rev00.30.08.17