

# Preliminary Bat Roost and Ecological Impact Assessment

Strathmore, Main Road, Birdham

Produced for Ms Huxtable



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## Summary

Miss Huxtable has commissioned a Preliminary Bat Roost and Ecological Impact Assessment of proposals at the existing dwelling known as Strathmore, Main Road, Birdham (SZ 81928 99473, hereafter referred to as *the site*). A Preliminary Ecological Appraisal, Preliminary Bat Roost Assessment and Phase 1 Habitat Survey of the site was carried out on the 28<sup>th</sup> March 2021.

The proposal area is of negligible ecological value, with surrounding habitats mostly of low ecological value.

The proposals are not anticipated to have any significant impact upon ecology; the dwelling offers 'negligible' bat roost potential. The proposals would not result in any significant impacts upon ecology.

When mitigation and enhancements have been taken into account, the proposals are not considered to have a negative impact upon habitats or protected species in accordance with planning policy and would result in a minor net gain.

No further surveys are recommended at the site.

## 1.0 Introduction

- 1.1 Miss Huxtable has commissioned a Preliminary Bat Roost and Ecological Impact Assessment of proposals at the existing dwelling known as Strathmore, Main Road, Birdham (*SZ 81928 99473, hereafter referred to as 'the site'*).
- 1.2 A Preliminary Ecological Appraisal, Preliminary Bat Roost Assessment and Phase 1 Habitat Survey of the site was carried out on the 28<sup>th</sup> March 2021, and the following ecological impact assessment report completed by George Sayer (*BSc (Hons) Environmental Sciences, PgDip Endangered Species Recovery, MA ArborA, MCIEEM, NE Licence Holder – Bats Level 2 and GCN - Ecologist*). This appraisal consisted of a site visit to identify existing habitats on site; the habitats have been categorised broadly following the JNCC Phase 1 Habitat Survey Guidelines. In addition, an assessment of habitats and structures on the site was made to determine their potential for protected species. Following this an on-site and desktop assessment was undertaken, of the likelihood of National or European Protected Species being present on or near site, and the constraints these may pose on the development proposals.
- 1.3 Based on the results of the appraisal, recommendations for potential ecological enhancements have been provided.

### Site Description and Surrounding Area

- 1.4 The site consists of an existing detached dwelling, surrounded by access driveway, parking area, garage, and gardens. The site is on the east side of Main Road to the south of Birdham. The site is bounded by residential dwellings to all aspects. The site is outside of the Chichester Harbour AONB.
- 1.5 The immediate surroundings are that of the Birdham Village, being a mixture of small gardens, dwellings and hard surfaces. To the east and west of Birdham are arable fields and paddocks. The village sits to the east of Chichester Harbour.
- 1.6 Within 500.0 m are: Farm ponds (350.0 m W and 380.0 m NE), a village pond (330.0 m N), a balancing pond (195.0 m S), a garden pond (350.0 m SW), a land drainage pond (300.0 m SE). The nearest woodland is 420.0 m south-west of site.

## Proposals

- 1.7 The proposals are for a Householder Planning Application for:
- Rear extension
  - Dormer to front (western) aspect
  - External alterations (including replacement of a small area of hanging tiles with render)
  - Refurbishment of the garage

## 2.0 Scope of Appraisal

1. *Identify the habitats and vegetation on site and display this in a habitat plan;*
  2. *Provide lists of the vegetation species identified;*
  3. *Identify habitat which may have potential for protected species;*
  4. *Identify whether any signs of protected species are present on-site;*
  5. *Recommend whether further surveys are required, or whether there are any relevant constraints with regards to protected species;*
  6. *Identify impacts of the proposed development and set out appropriate avoidance, mitigation and compensation measures;*
  7. *Provide suggestions as to how the site and proposals could be enhanced with regards to protected species and habitats.*
- 2.1 This appraisal and assessment is deemed to be relevant for a maximum of two years due to the possibility of changes in the habitats on-site. Should the site or proposals alter, the ecologist should be consulted to confirm that the appraisal is still valid.

### 3.0 Planning Policy and Legislation

#### National Planning Policy

- 3.1 The National Planning Policy Framework (NPPF) 2019 sets out the government planning policies for England and how they should be applied. 'Chapter 15: Conserving and Enhancing the Natural Environment' states that development should be 'minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.'
- 3.2 The Government Circular 06/2005, which is referred to by the NPPF, provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.

#### Local Planning Policy

- 3.3 The site is within the Chichester District; the proposals should be assessed against the Chichester District Local Plan – Key Policies 2014-2029.
- 3.4 Policy 49 covers Biodiversity; the following criteria must be met for planning applications to be supported:
1. *The biodiversity value of the site is safeguarded;*
  2. *Demonstrable harm to habitats or species which are protected or which are of importance to biodiversity is avoided or mitigated;*
  3. *The proposal has incorporated features that enhance biodiversity as part of good design and sustainable development;*
  4. *The proposal protects, manages and enhances the District's network of ecology, biodiversity and geological sites, including the international, national and local designated sites (statutory and non-statutory), priority habitats, wildlife corridors and stepping stones that connect them;*
  5. *Any individual or cumulative adverse impacts on sites are avoided;*
  6. *The benefits of development outweigh any adverse impact on the biodiversity on the site. Exceptions will only be made where no reasonable alternatives are available; and planning conditions and/or planning obligations may be imposed to mitigate or compensate for the harmful effects of the development.*
- 3.5 Given the scale and nature of the site, 2 is the only relevant criterion. The proposals should seek to avoid harm to any protected or rare species. This report details how this shall be undertaken.

### Legislation

- 3.6 Legislation relating to wildlife and biodiversity of particular relevance to this EclA includes:
- The Conservation of Habitats and Species Regulations 2017;
  - The Wildlife and Countryside Act 1981 (as amended);
  - The Natural Environment and Rural Communities (NERC) Act 2006;
  - The Hedgerow Regulations 1997;
  - The Protection of Badgers Act 1992;
  - The Protection of Mammals Act 1996.
- 3.7 All species of bat and their roosts are protected under The Conservation of Habitats and Species Regulations 2017 and The Wildlife and Countryside Act 1981. It is an offence to intentionally kill, injure or handle a bat, to possess a bat (live or dead), disturb a roosting bat, or sell or offer a bat for sale without a licence. It is also an offence to damage, destroy or obstruct access to any place used by bats for shelter, whether they are present or not.
- 3.8 All UK bird species are protected against disturbance whilst occupying a nest under the Wildlife and Countryside Act 1981. Developments that could predictably disturb, kill or injure nesting birds could result in an offence. Furthermore, a number of bird species are targets of UK and Local Biodiversity Action Plans and listed as Species of Principle Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. This obligates local authorities to have regard to the purpose of conserving biodiversity with particular emphasis on targeted species.
- 3.9 All other mammals receive general protection against cruelty, inhumane killing or injuring under the Protection of Mammals Act 1996. Common toads and hedgehogs are Species of Principle Importance in England under the Natural Environment and Rural Communities (NERC) Act 2006 Section 41.

## **4.0 Methodology**

### Desktop Study

- 4.1 A desktop study was conducted using the government 'MAGIC' Map GIS tool; a search was carried out for all statutory sites within 10.0 km of the site, and non-statutory designated sites and priority habitats within 2.0 km of the site. These have been summarized below and their significance considered in the context of the development proposals. A search was also carried out to identify features of ecological interest in the area, such as water bodies and ancient woodland. Given the overall scale and nature of the site and the proposals, a full data search from SxBRC was not considered appropriate. This is in accordance with CIEEM current guidance for such projects.

### Site Visit

- 4.2 A site visit was conducted on 28<sup>th</sup> March 2021, and habitats on-site were categorized in a manner broadly conforming to the JNCC Phase 1 Habitat Survey Guidelines. These habitats have then been drawn onto the associated Site Habitat Plan (Reference: GS025.StrathmoreBirdham.SHP).
- 4.3 During the survey any constraints with regard to protected species were considered; the site was considered for their potential for protected species even when signs of these species were not noted at the time of survey.
- 4.4 Points of interest for protected species have been plotted into the Site Habitat Plan (Reference: GS025.StrathmoreBirdham.SHP).
- 4.5 Trees were inspected for features conducive to bat and bird roosting, including knot holes, limb failures, cavities and heavy ivy cover; any identified bird nests have been recorded.
- 4.6 The property was assessed by an experienced, licenced bat surveyor for its potential to hold roosting bats; roof voids were assessed where relevant, and access points identified. Any evidence of bats such as grease marks, bat droppings, urine splashes were noted. The bat roost assessment was conducted following the Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines (2016).
- 4.7 Due to the site visit being carried out over one day, it is possible that some signs of protected species may not be apparent within this short timeframe. This is a constraint recognised within the Phase 1 Habitat Survey Guidelines and all reasonable effort has been made to identify evidence of protected species.

### Ecological Impact Assessment

- 4.8 The methodology for Ecological Impact Assessment (EclA) follows best practice guidelines set by the Chartered Institute of Ecology & Environmental Management (CIEEM): 'Guidelines for Ecological Impact Assessment' (CIEEM, 2018). This includes identifying the baseline conditions on the site and subsequently rating the potential effects of the development based on the sensitivity and value of the resource affected, combined with the magnitude, duration and scale of the impact (or change). This is initially assessed without mitigation measures, and then assessed again after allowing for the proposed mitigation measures; this provides the residual effects. The assessment is divided into construction effects and longer-term operational effects.



4.9 Each ecological feature within the site has been considered within a defined Geographic context such as:

- International and European;
- National;
- Regional;
- County;
- District;
- Local;
- Site Level;
- Negligible.

4.10 Based upon CIEEM guidance, value was determined with reference to the following factors:

- Its inclusion as a Designated Site or other protected area;
- The presence of habitat types of conservation significance, e.g. Habitats of Principal Importance (NERC 2006);
- The presence (or potential presence) of species of conservation significance e.g. Species of Principal Importance (NERC 2006);
- The presence of other protected species e.g. those protected under The Wildlife and Countryside Act 1981;
- The sites social and economic value.

## 5.0 Baseline Ecological Conditions and Protected Species Assessment

### Desktop Study

#### *Designated Sites and Habitats within 10.0km*

5.1 The following is a summary of all protected and notable wildlife sites, with sites of local and national importance recorded within 2.0km of the site and sites of international importance within 10.0 km. These are divided into statutory and non-statutory; those with full legal protection and those without, but which the Local Planning Authority should still consider when deciding on planning policy and applications. These sites are summarized in tables 1 and 2 below. A description of locally designated sites is also made below.

5.2 This information is included so that the site can be considered within the ecological context of the surrounding area, guiding decisions related to habitat change and protected species; these sites are not necessarily representative of the habitat on or surrounding the site and may not be influenced by the proposals.

- 5.3 The site is located within the Impact Risk Zone of Chichester and Langstone Harbours SSSI, however the proposals do not meet the criteria which would require consultation with Natural England. The proposals do not increase the accommodation on-site and therefore would not require any contribution to the strategic management of the SSSIs. The site is within a Nitrate Vulnerable Zone (Eutrophic Water) – the proposals do not alter the drainage of the property and would not impact upon the nearby River Ems.
- 5.4 Having considered the designated sites below and the local context of the site, it is not considered that the proposals will have any negative impact upon protected sites. The site is already used as a residential dwelling, and the proposals do not significantly alter the nature or the scale of development and do not significantly increase the extent of hard surfacing. The proposals would not significantly increase indirect pressures on local designated sites, as the overall scale and use of the site is not being altered.

Table 2: Statutory Protected Designated Sites

<i>Site Name</i>	<i>Reason for designation</i>	<i>Distance from site</i>
<i>Chichester and Langstone Harbours RAMSAR, SSSI, SPA, Solent Maritime SAC, (Dorset and Solent Coast potential SPA also included)</i>	<i>Areas of marine habitats including mudflats, grazing marsh. Shingle and seagrass, noted for its importance for over wintering birds including brent goose, curlew and a number of tern species.</i>	<i>1.25 km NW</i>
<i>Pagham Harbour SSSI, SPA, RAMSAR</i>	<i>The estuarine basin is made up of an extensive central area of saltmarsh and intertidal mud-flats, surrounded by lagoons, shingle, open water, reed swamp and wet permanent grassland. The mud-flats are rich in invertebrates and algae, and provide important feeding areas for the many bird species that use the site.</i>	<i>4.0 km SE</i>

5.5 The following non-statutory designated sites are within 2.0 km of the proposal site.

Table 3: Statutory Protected Designated Sites

<i>Site Name</i>	<i>Reason for designation</i>	<i>Distance from site</i>
<i>Birdham Pool SNCI</i>	<i>A large marina with wet meadow and saline lagoon.</i>	<i>1.4 km NE</i>
<i>Chichester Canal SNCI</i>	<i>A 6-mile leisure waterway linking Chichester to the sea. The canal forms an important aquatic and terrestrial wildlife corridor.</i>	<i>1.85 km NE</i>

### Habitats

#### *Desk Study*

5.6 Within 2.0km of the site there are Priority Habitats of; coastal saltmarsh; coastal and floodplain grazing marsh; saline lagoons; mudflats; lowland meadows; coastal foreshore (sand, mud and gravel); ancient and semi-natural woodland, and deciduous woodland. There are several ponds and chalk streams locally which are also Priority Habitats. These habitats are not present on or adjacent to the site.

#### *Site Assessment*

5.7 The site is given over to the existing dwelling and garden, habitats of **low value** which are discussed further below.

#### *Buildings and Structures*

5.8 The structures affected by the proposals consists of a detached dwelling of brick construction with a clay tiled, double-pitched gabled roof, and a brick, flat-roofed garage within the garden. The building is in reasonable condition and offers **negligible ecological value** in a broader sense. The potential for the buildings to support protected species is discussed in the preliminary bat roost assessment below.

#### *Hard Surfaces*

5.9 The property is surrounded by hard surfaced access paths and gravel drive of **negligible ecological value**.

### *Amenity Grassland*

- 5.10 The garden is mostly given over to amenity grassland. The sward is fine and dominated by perennial ryegrass (*Lolium perenne*) with areas of red fescue (*Festuca rubra*). The grass is underlain by springy turf-moss (*Rhytidiadelphus squarrosus*). No significant forb growth was noted. The habitat is of **low ecological value** at the **site level** only.

### *Introduced Shrubs*

- 5.11 The garden contains a small number of boundary shrubs, herbaceous plants and small trees. These consist of a small number of Rhododendron (*Rhododendron ponticum*) which are listed on Schedule 9 of the Wildlife and Countryside Act (*as amended*) 1981. Shrubs form a frontage with juniper (*Juniperus sp.*) bay laurel (*Laurus nobilis*) and false cypress (*Chamaecyparis pisifera*). The habitat is of **low ecological value** at the **site level** only.

### *Defunct, species-poor hedge*

- 5.12 A garden privet (*Ligustrum ovalifolium*) hedge lines part of the northern boundary. The hedge provides a minor boundary feature but is heavily constrained by hard surfaces. The hedge is a garden boundary and therefore not protected by the *Hedgerow Regulations 1997*. The habitat is of **low ecological value** at the **site level** only.

### *Scattered Trees*

- 5.13 Several semi-mature sycamores (*Acer pseudoplatanus*) and willows (*Salix sp.*) are present to adjacent gardens, and a small ash (*Fraxinus excelsior*) is present to the rear of the garden.

## 6.0 Protected Species Assessment

### Bats

#### *Desk Study*

- 6.1 Common pipistrelle bats (*Pipistrellus pipistrellus*), soprano pipistrelle bats (*Pipistrellus pygmaeus*) brown long-eared bats (*Plecotus auratus*) are present within the local area. The habitats of the Chichester Harbour are suitable for a number of species of bat, especially those which forage over water (*such as Daubenton's bat, Myotis daubentonii*) and grassland.

### *Site Assessment*

- 6.2 The dwelling contains two roof spaces; the main loft of the larger east-west roof, and a walk-in crawl space of the small northern gable. The main roof will not be impacted by the proposals, but was assessed to determine whether construction phase disturbance would have any impact. The loft was only partially accessible, but no evidence of bats such as droppings was found within. The loft is tightly sealed with timber sarking likely preventing bat access into the loft. Externally, the roof is covered in flat tiles and appears in reasonable condition with the only significant gap being a raised ridge tile at the apex. No evidence of bat use was found at this point, which because of the raised tile is significantly damp. The roof soffits and fascias are wood but appear in good condition,
- 6.3 The northern loft space will be altered to include a dormer window. This roof space is a walk-in storage area, which is largely open to the roof. The roof contains tightly-sealed timber sarking, preventing access into the space. No evidence of bats such as droppings, feeding remains or dead bats was noted. Externally the roof consists of flat clay tiles, in good condition with no discernible access points for bats.
- 6.4 An area of hanging tiles to the frontage is proposed for replacement. The tiles are flat clay tiles in fair condition. No tiles are slipped or missing. Whilst several gaps are noted to the sides of the tiles, these gaps do not lead into any batten-space behind, and the flat nature of the tiles do not create suitable crevices beneath individual tiles. Overall, the building is of **negligible potential** to bats.
- 6.5 The garage consists of a brick single-storey building, with a flat felt roof on a timber frame. The timber fascias and roof are in good condition being relatively recent. No evidence of bats was recorded internally or externally and no significant roost opportunities are present. The building is of **negligible potential** to bats.
- 6.6 The garden offers some limited potential for foraging by common bats, but is hemmed in by other properties with street lighting outside. Better habitats exist further south and east but are not functionally connected to the site. The site is considered of **low value** to bats.

### Birds

#### *Desk Study*

- 6.7 Numerous bird species are present in the local area, including a number of water bird species which likely use the nearby Chichester Harbour, and birds which may use nearby grasslands. Birds relevant to the proposals which are present locally include swallow (*Hirundo rustica*) and house sparrow (*Passer domesticus*).

*Site Assessment*

- 6.8 No evidence of nesting birds was noted in or on the building, which is too well-sealed to allow birds access. No evidence of nests of birds such as house martin were noted to the eaves. The garden contains shrubs and small trees offering some potential for garden birds. Overall the site is of **low value** to birds.

*Other*

- 6.9 No potential for or evidence of any other protected species such as badger, water vole, dormouse, reptile or protected amphibian was recorded. The garden is surrounded by walls and fences preventing many species from entering. The grassland is a small, maintained lawn unsuitable for reptiles. There is **low potential** for hedgehogs and common toads to be present. Hedgehogs and Common Toads are Species of Principle Importance in England under the Natural Environment and Rural Communities (NERC) Act 2006 Section 41 and therefore should be given consideration during the planning process.

## 7.0 Evaluation of Impacts and Mitigation

Designated Sites

*Potential Impacts*

- 7.1 No direct impacts upon designated sites would occur, given the intervening distances, and the nature of the proposals. Indirect impacts from traffic pollution during construction would be minimal, with no increase in such impacts arising in the future. No increase in the number of dwellings or amount of accommodation is proposed, and as such no increase in recreational disturbance of local protected sites is predicted.

*Mitigation and Compensation*

- 7.2 No increase in the number of dwellings or amount of accommodation is proposed; therefore, no contribution to the strategic management and monitoring of the Chichester and Langstone Harbours SPA Bird Aware scheme is required.

*Residual Impacts*

- 7.3 Once mitigation is taken into account, the impacts will be negligible and non-significant.

## Habitats

### *Potential Impacts*

- 7.4 The proposals would only impact areas of hard surface. It is assumed some areas of amenity grassland and introduced shrubs may be temporarily damaged by the proposals. In the absence of mitigation, the proposals would include dust, noise and light pollution of adjacent garden habitats. Inappropriate disposal of the rhododendron may result into its spread in the wild, causing an offence and potentially degrading local habitats. Impacts are of **minor magnitude** at no more than **site level**.

### *Mitigation and Compensation*

- 7.5 All construction will be undertaken in accordance with best practice advice with regards to control of dust, noise and emissions. Any chemicals or fuel shall be stored appropriately and on existing hard surfaces. Ornamental planting and amenity grassland lost will be replaced post-construction. Any rhododendron removed will be cut manually, carefully bagged and taken to the nearest green recycling facility for composting.

### *Residual Impacts*

- 7.6 Once mitigation is taken into account, the impacts will be negligible and non-significant.

## Bats

### *Potential Impacts*

- 7.7 The roof fallen within the proposals is considered to offer 'negligible' bat roost potential. There is no significant risk of disturbing roosting bats. In the absence of mitigation, impacts would include dust, noise and light pollution onto surrounding vegetation causing disruption of bat commuting corridors and foraging habitats. Given the nature of the proposals, impacts to this habitat would be of very minor magnitude and highly unlikely to occur.

### *Mitigation and Compensation*

- 7.8 All construction will be undertaken in accordance with best practise advice with regards to control of dust, noise and emissions. All tiles should be manually removed with care. In the highly unlikely event that any evidence of bats is found, works shall cease until the ecologist has determined an appropriate manner in which to proceed (which may involve further surveys and / or licence). Construction phase external lighting shall not be used. Any new external lighting shall be designed in accordance with the BCT/ILP Guidance Note 08/18, avoiding uplighting or lightspill onto surrounding vegetation.

### *Residual Impacts*

- 7.9 The overall impact of the scheme will be negligible.

### Nesting Birds

#### *Potential Impacts*

- 7.10 No evidence of nesting birds was noted within the building. In the absence of mitigation, proposals for the parking area may disturb a bird's nest in garden shrubs.

#### *Mitigation and Compensation*

- 7.11 No mitigation required for the building. Any shrubs being removed shall be cut down outside of the bird nesting season (*March-August inclusive*) or following a check by a suitably qualified ecologist prior to removal to ensure no active bird nests are present.

#### *Residual Impacts*

- 7.12 The overall impact of the scheme will be negligible.

### Other Species

#### *Potential Impacts*

- 7.13 There is no potential for impacts upon badgers, water voles, dormice, reptiles, rare amphibians or invertebrates. There is low potential for individual hedgehogs and toads to be harmed by inappropriate clearance.

#### *Mitigation and Compensation*

- 7.14 Any shrubs or piles of debris being cleared shall be checked for hedgehogs and toads at the base prior to clearance to ensure hedgehogs and toads are not harmed. Replacement habitats in the form of new shrubs and either compost piles or toad/hedgehog houses shall be installed post-construction.

#### *Residual Impacts*

- 7.15 The overall impact of the scheme will be negligible.



## 8.0 Ecological Enhancements

- 8.1 Because of the scale and nature of the proposals, ecological enhancement opportunities within the construction zone are limited. The following have been agreed to provide a net biodiversity gain to the proposals, in accordance with Policy 49 of the Chichester District Local Plan:
- Addition of a bird box to the dwelling or garden. Species to be considered include swift; swallow; house martin or house sparrow;
  - Addition of a bat box or bat access tile to the dwelling. This could come in the form of: bat box installed to southern aspect wall; bat tile integrated into either southern-facing roof; bat crevice created behind one of the replacement hanging slate tiles.

## 9.0 Conclusions

- 9.1 Overall the proposals are considered to represent a 'negligible' impact upon ecology and no further surveys are recommended. The construction area is of low ecological value. There is 'negligible' potential for protected species of bat to be present within the building, and the potential for bats to be present in areas subject to alteration or disturbance is deemed to be 'low'. Basic mitigation methods have been proposed to avoid the risk of disturbing bats. There is potential for nesting birds, and very minor potential for hedgehogs and common toads to be disturbed by the parking arrangements. Mitigation has been proposed to avoid this harm.
- 9.2 Once avoidance and mitigation measures have been taken into account, the impacts of the planned development upon biodiversity will be negligible, with proposed ecological enhancements resulting in a minor net gain in biodiversity in line with local and national planning policy guidance, most specifically Local Plan Policy 49.

## 10.0 References

MAGIC Interactive Map Tool (Accessed 17<sup>th</sup> October 2020): [www.magic.gov.uk](http://www.magic.gov.uk)

Bat Conservation Trust (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines. Third Edition. Available online:

<http://www.bats.org.uk/pages/batsurveyguide.html>

Joint Nature Conservation Committee (JNCC 2010). Handbook for Phase 1 habitat survey - a technique for environmental audit. Available online:

<http://jncc.defra.gov.uk/page-2468>

CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM (2018) Guidelines for Ecological Impact Assessment, 1st edition. Chartered Institute of Ecology and Environmental Management, Winchester.

## 11.0 Table No. 04 – Species Lists

### *Amenity Grassland*

<i>Common Name</i>	<i>Scientific Name</i>	<i>DAFOR</i>
<i>Cocksfoot</i>	<i>Dactylis glomerata</i>	<i>R</i>
<i>Daisy</i>	<i>Bellis perennis</i>	<i>R</i>
<i>Dandelion</i>	<i>Taraxacum officinale</i>	<i>R</i>
<i>Perennial Ryegrass</i>	<i>Lolium perenne</i>	<i>D</i>
<i>Red Fescue</i>	<i>Festuca rubra</i>	<i>D</i>
<i>Springy Turf-moss</i>	<i>Rhytidiadelphus squarrosus</i>	<i>A</i>

### *Introduced Shrubs*

<i>Common Name</i>	<i>Scientific Name</i>	<i>DAFOR</i>
<i>Bay Laurel</i>	<i>Laurus nobilis</i>	<i>A</i>
<i>Cherry Plum</i>	<i>Prunus laurocerasus</i>	<i>R</i>
<i>Elaeagnus</i>	<i>Elaeagnus sp.</i>	<i>O</i>
<i>Escallonia</i>	<i>Escallonia sp.</i>	<i>R</i>
<i>Juniper</i>	<i>Juniperus sp.</i>	<i>LD</i>
<i>Rhododendron</i>	<i>Rhododendron ponticum</i>	<i>A</i>
<i>Rose</i>	<i>Rosa sp.</i>	<i>R</i>
<i>Stag Horn Sumac</i>	<i>Rhus typhina</i>	<i>O</i>
<i>Stinking Iris</i>	<i>Iris foetidissima</i>	<i>R</i>

### *Hedges and Trees*

<i>Common Name</i>	<i>Scientific Name</i>	<i>DAFOR</i>
<i>Ash</i>	<i>Fraxinus excelsior</i>	<i>R</i>
<i>False Cypress</i>	<i>Chamaecyparis pisifera</i>	<i>R</i>
<i>Garden Privet</i>	<i>Ligustrum ovalifolium</i>	<i>LD</i>
<i>Hawthorn</i>	<i>Crataegus monogyna</i>	<i>R</i>
<i>Sycamore</i>	<i>Acer pseudoplatanus</i>	<i>O</i>
<i>Willow</i>	<i>Salix sp.</i>	<i>O</i>

*DAFOR Scale - D (Dominant) A (Abundant) F (Frequent) O (Occasional) R (Rare) L (Locally)*

12.0 Appendix 1 – Site Photos

Photo 1 - View of the dwelling from the west. The dormer window is proposed to be pitched roof to the left, whilst hanging tiles to the main building would be replaced.



Photo 2 - View of the dwelling from the east, where a new extension is proposed.



Photo 3 - View of the garage building.



Photo 4 - View inside the main loft of the dwelling, with tight timber sarking.



Photo 5 - The walk-in roof space to the north of the dwelling.



Photo 6 -View of the garden area looking south-east. Sparse introduced shrubs and trees are visible.



Photo 7 -Defunct, species-poor hedge to north of site.



### 13.0 Site Habitat Plan

