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Inspection & Assessment in relation to Bats & Breeding Birds

February 2023

The Manor Care Home
Chatburn
Clitheroe
BB7 4AW

National Grid Ref: SD76904408

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Executive Summary

As part of a proposed planning application at The Manor Care Home, Tyrer Ecological Consultants Ltd carried out a daytime preliminary roost assessment in relation to bats with an inclusive inspection for breeding birds in February 2023. The survey was commissioned by PAB Architects Ltd; proposals are understood to involve the construction of a roof top dormer extension on the western elevation.

Detailed methods, findings, conclusions and recommendations are presented throughout the report; however, the reader should be aware of the following **Key** points:

Bats: Based upon the findings of the survey covered through section 6.0 – 7.0 in the report, The Manor Care Home is determined to offer "**Moderate**" bat roost potential in accordance with current Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016).

Table 7.3 Recommended minimum number of survey visits for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).

Low roost suitability	Moderate roost suitability	High roost suitability
One survey visit. One dusk emergence or dawn re-entry survey[a] (structures). No further surveys required (trees).	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey.[b]	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third visit could be either dusk or dawn.[b]

It is recommended that two dusk and/or dawn emergence/re-entry surveys are conducted at the site during the active season of bats (May - August, extending into September), in order to establish if/how the building is being used by bats, and if so, identify the species present, abundance, roost locations and flight lines around the site following emergence/re-entry.

Breeding Birds: In relation to common birds both the building and adjacent trees present could offer small birds nesting habitat, particularly during the breeding bird season, with evidence of house sparrow using accessible gaps beneath the ridge tiles and a historic house martin nest encountered during the survey.

In the interests of potential impact avoidance, it is recommended that proposed works should be undertaken outside of the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive (peak period March-August). For works within the breeding bird season, any areas that can support nesting birds should be checked by a professional Ecologist for nesting birds within 48 hours or less prior to works commencing. If birds are found nesting any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally, for example via the implementation of an appropriate buffer zone (species dependent) around the nest in which no disturbance is permitted until the nest is no longer in use.

Biodiversity Enhancement: As a means of enhancement and aiding the design of the scheme in keeping with local and national planning policy considering biodiversity net-gain principles, the proposals may consider incorporating wildlife friendly provisions (see **Appendix II** for further details).

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1.0 Introduction & Reasons for Survey

1.1 As part of a proposed planning application at The Manor Care Home (see **Figure 1.1**), Tyrer Ecological Consultants Ltd carried out a daytime preliminary roost assessment in relation to bats with an inclusive inspection for breeding birds in February 2023.

Figure 1.1 – Existing & proposed site plan (Source: PAB Architects, 2023)

1.2 The survey was commissioned by PAB Architects Ltd; proposals are understood to involve the construction of a roof top dormer extension on the western elevation.

1.3 The aim of the survey was to ascertain if the building was of value to bats whilst an assessment for birds was also carried out. If any potential roost features (PRF's) were found to be suitable for bats, or signs of use were observed, then more detailed surveys would be recommended i.e. dusk/dawn emergence/re-entry surveys during the main active season of bats which is May – August (extending into September).

1.4 If additional surveys are required following the initial site visit this report will outline the details of those further requirements.

1.5 If it was determined that bat(s) or their roost/place of rest/shelter will be subsequently impacted by the works then a European Protected Species Mitigation Licence (EPSML) would be legally required to proceed with the development.

1.6 If evidence indicated breeding birds may be impacted by proposals, tailored recommendations would be made accordingly, species pending.

1.7 As part of the local authority's planning policies and obligations to the Planning Framework, ecological surveys are generally required prior to planning permission being granted where protected/priority habitats and species are, or may be present, that could be affected by the proposals for which the application seeks consent. Where more detailed surveys are

recommended by the ecologist, following an initial daytime investigation, then Local Planning Authorities (LPA) on the advice of their ecological advisors, will not grant permission until such time that all relevant information is gathered.

1.8 In accordance with *Biodiversity Net Gain: Good practice principles for development* (CIEEM *et al*, 2019) the site visit also aims to identify enhancement opportunities for biodiversity in line with national and local planning policy.

2.0 Protected Species & Their Requirements

Bats

2.1 All British bats and their **roosts are afforded full protection under the Wildlife & Countryside Act (1981) (as amended) and are listed in Schedule 2 of the Conservation of Habitats and Species Regulations (2019) (EU Exit). When dealing with cases where a European Protected Species (all UK bats) may be affected, a planning authority is a competent authority within the meaning of the Regulation 7 of the Regulations, that has a statutory duty as the local authority to have due regard to the provisions of the Regulations in the exercise of its functions.

2.2 Use of Buildings by Bats

a) Summer breeding roost (May-August)
b) Hibernation roost (October-March)
c) Transitional or temporary roost (other months)

2.3 Roost selection is often closely correlated to suitable foraging habitat within a reasonable commuting distance from the roost and different sites are used depending upon insect densities and abundance; climatic conditions can also affect their ability to successfully forage. All British bats are insectivorous.

*** The term roost is generically referred to as a place that bat/s use for the any of the above reasons, however it should be noted that under the Conservation of Habitats and Species Regulations (2019) (EU Exit) (Regulation 43 (d) the term roost is not used but refers to "a breeding site or resting place of such an animal" and is afforded legal protection. The roost, breeding site or resting place of bats, which ever terminology is used, is legally protected whether or not bats are in occupation.*

Birds

2.4 All wild birds, no matter how common, their eggs, young and nests, whilst being built or occupied, are protected under both the Wildlife and Countryside Act (WCA 1981) and Natural Environment and Rural Communities Act (NERC Act 2006). Birds listed on Schedule 1 of the WCA 1981, for example Barn owl (*Tyto alba*), are afforded a greater level of protection and are protected also from disturbance.

2.5 Any work that would damage an occupied nest, eggs or young of breeding birds must be avoided; any damage to nests that may occur as a result of the development should be outside of the main breeding bird season (March-August). On occasions nests can become unoccupied during the breeding season but the status of the nest(s) should be determined by a suitably experienced ecologist before any damage takes place.

Policy

2.6 Paragraph 180 of the National Policy Planning Framework (as revised in July 2021) states:

When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development

in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and,

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

2.7 Key Statement EN4: Biodiversity and Geodiversity, of the Ribble Valley Borough Council Local Plan Core Strategy, echoes the national focus on preserving biodiversity, stating (see **Figure 2.1**):

KEY STATEMENT EN4: BIODIVERSITY AND GEODIVERSITY

The Council will seek wherever possible to conserve and enhance the area's biodiversity and geodiversity and to avoid the fragmentation and isolation of natural habitats and help develop green corridors. Where appropriate, cross-Local Authority boundary working will continue to take place to achieve this.

Negative impacts on biodiversity through development proposals should be avoided. Development proposals that adversely affect a site of recognised environmental or ecological importance will only be permitted where a developer can demonstrate that the negative effects of a proposed development can be mitigated, or as a last resort, compensated for. It will be the developer's responsibility to identify and agree an acceptable scheme, accompanied by appropriate survey information, before an application is determined. There should, as a principle, be no net loss of biodiversity.

These sites are as follows:

- Sites of Special Scientific Interest (SSSIs)
- Local Nature Reserves (LNRs)
- Local Biological Heritage sites (CBHs)
- Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)
- Local Geodiversity Heritage Sites
- Ancient Woodlands
- Lancashire Biodiversity Action Plan priority habitats and species
- European Directive on Protected Species and Habitats - Annexe 1 Habitats and Annexe II Species
- Habitats and Species of Principal Importance in England

With respect to sites designated through European legislation the Authority will be bound by the provisions of the relevant Habitats Directives and Regulations.

For those sites that are not statutorily designated and compensation could be managed through a mechanism such as biodiversity off-setting via conservation credits.

Figure 2.1 - Key Statement EN4: Biodiversity and Geodiversity, of the Ribble Valley Borough Council Local Plan Core Strategy

2.8 Where more detailed surveys are recommended by the Ecologist following a daytime assessment, then the Local Planning Authority, upon the advice of their ecological advisors, should not determine an application until such time that all relevant information is gathered, i.e. - until all required survey work has been completed. This is in accordance with the obligations placed upon Local Authorities in the exercise of its functions by way of its duties under the Conservation of Habitats & Species Regulations 2019 (EU Exit).

2.9 **Figure 2.2** is a process model that surmises how ecological issues should be dealt with in the context of the planning process.

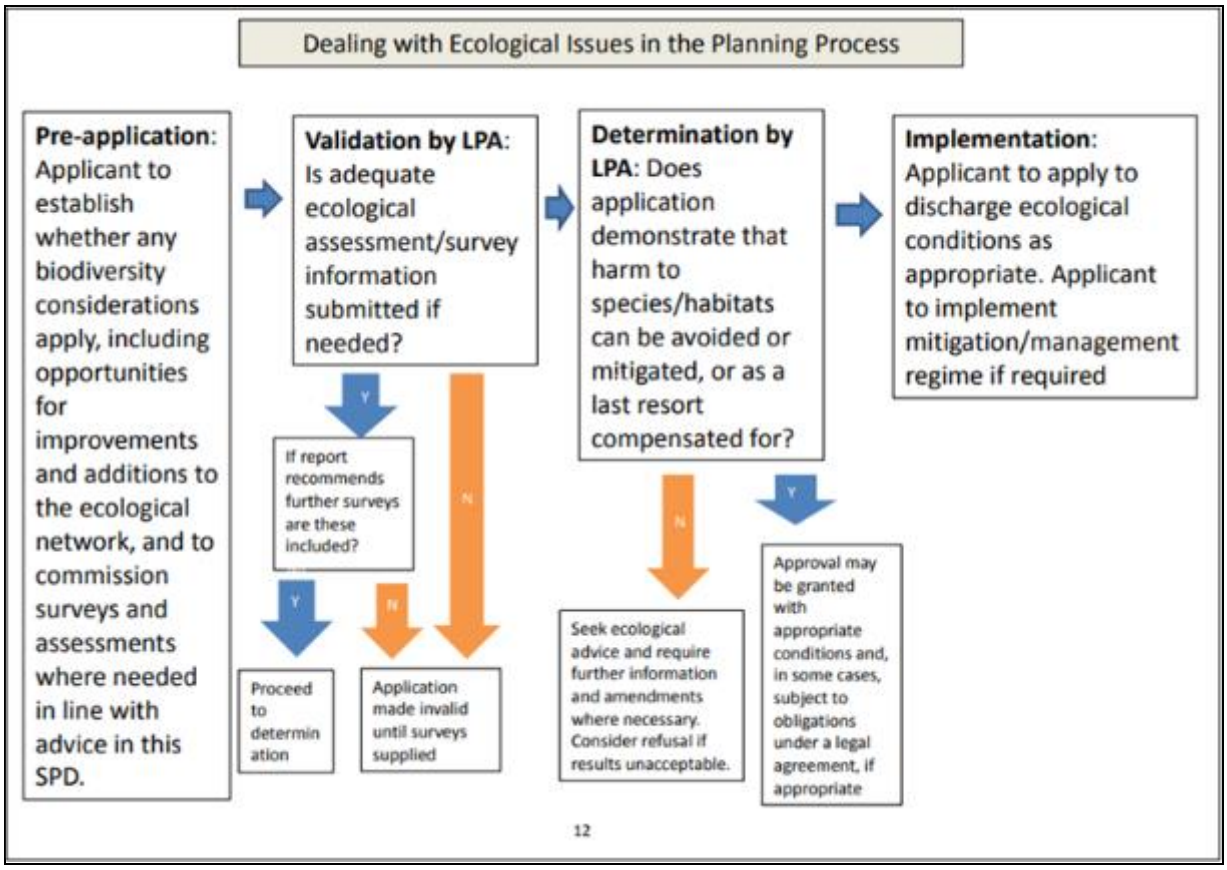

Figure 2.2 – Dealing with ecological issues in the planning process

3.0 Protected Species in Lancashire

3.1 Up to 11 bat species have been recorded in Lancashire, most of which use built structures notably occupied residential properties for roosting. The most frequently encountered bat species is the common pipistrelle (*Pipistrellus pipistrellus*) and its abundant status in Lancashire is reflected throughout the UK.

3.2 All wild birds (with only minor exceptions) and their nests, whilst being built or containing eggs or dependant young, are protected under the Wildlife & Countryside Act 1981 (as amended). Some species are, however, subject to a greater level of protection, for example the barn owl (*Tyto alba*), which is listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), with active nests being afforded wider protection from disturbance as well as destruction / damage.

4.0 Survey Methodology

4.1 As part of the Inspection & Assessment for Bats & Breeding Birds report, a desk-top and field-based study is conducted. Methods for both components of the appraisal are given below.

Desktop Study

4.2 Prior to a site visit a desktop study was conducted using online resources to obtain information pertaining to any sites afforded statutory (e.g. SSSI) and non-statutory (e.g. LWS) designations within 2.0km of the site boundary. To do so, the Multi Agency Geographic Information for the Countryside (MAGiC – provided by DEFRA) was accessed to gather such information; this particular interactive mapping service was also used to locate any locally granted European Protected Species Mitigation Licenses (EPSML) to further inform conclusions concerning such species in the context of the study site and its proposed development.

4.3 Satellite imagery was reviewed using sources such as Google Earth (© 2022/23) to determine the nature of adjoining and extending habitats; such information aids in the understanding of how the site might interact with its surroundings ecologically and its value in that context, and how the development may impact at a wider scale.

4.4 A commercial data request to the Local Environment Records Centre serving the area (which in this case is Lancashire Environmental Records Network) has not been sourced by the Ecologist and is justified through application of the following guidance:

1) The Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK (CIEEM, 2020) states:

"*It is generally expected that a desk study, including a data search, will be a key part of the ecological surveys or reports produced to inform a planning application. Freely available web-based sources of data and contextual information should always be used; in some cases, it may be acceptable to not undertake a data search with the LERC or other relevant NSS or local interest groups, for example:*

ii) Situations where the data search would be extremely unlikely to provide information needed to inform the assessment, due to the ***scale and location of the proposed development****. The appropriateness of excluding a data search will need to be judged on a case-by-case basis as, in most situations, it will be essential to carry out such a search even if the development is very small or is likely to have a low impact. It can be very difficult to demonstrate that a data search would not have provided relevant information without obtaining and reviewing those data.*

iii) In some cases for Preliminary Roost Assessments of buildings in ***low impact / small-scale*** *scenarios, such as an extension to a residential property, loft conversions (full or partial),* ***installation of Velux/dormer windows****, single modern agricultural or similar building conversion or demolition; however, it should not be assumed that data searches are never required for such scenarios and this must be judged on a case by case basis and justified accordingly.*

2) The Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) also states:

"Very occasionally it might be possible to carry out a robust PEA without obtaining LERC/NBDC/CEDaR data; this will usually only apply to ***low impact or small-scale projects*** *(e.g. by virtue of size, extent, duration of works, magnitude and locality), and should be determined on a case-by-case basis."*

4.5 As exemptions outlined in the guidance above can be applied in good practice for the proposals for which the applicant seeks consent, it is considered unnecessary to conduct a commercial data request at this time as enough information has been obtained; with respect to sensitive species (namely bats and breeding birds) it was determined, through the Site inspection and review of the development proposals both during the construction phase and operational phase, that the recommendations listed within this report would not be affected by confirmation of either species presence. However, if a data search is considered to be necessary by the Local Authority, or environmental advisory body, to better inform the appraisal, a proportionate data search should be commissioned with results interpreted into the conclusions and recommendations of a re-issued/updated report.

Field Survey

4.6 A daytime preliminary ecological appraisal was conducted on the 8th February 2023 in bright, clear conditions (7ºC), average wind 2/12 (Beaufort scale), average 50% cloud cover, by the following surveyor (see **Table 4.1**).

Table 4.1 – Surveyor credentials

Name	Description of most relevant credentials
Mr. D. Burrows Qualifying CIEEM	• Consultant Ecologist with 3 years of training and experience • Relevant Degree: BSc (hons) Wildlife Conservation; MSc Conservation and Biodiversity • Licensed for Great Crested Newt: CL08 (Great Crested Newt Survey Level 1) – 2022-10604-CL08-GCN. • Accredited agent on the Natural England Bat Class 2 Bat Licence of Mrs. K. Wilding

4.7 Bat Conservation Trust (BCT) - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016) states:

"*The guidelines should be interpreted and adapted on a case-by-case basis according to site-specific factors and the professional judgement of an experienced ecologist. Where examples are used in the guidelines, they are descriptive rather than prescriptive."*

4.8 The bat and breeding bird survey was conducted in tandem; the site and building were inspected for potential places that may be of value to bats or breeding birds, and to determine if evidence of use by either group was present. An internal assessment of the building took place with the aid of a high-powered torch for evidence of bat use, which mainly includes bat droppings and/or prey items, or the incidental presence of live or dead animals, and investigated for evidence of breeding birds which broadly involves a search for nesting materials, presence of pellets or accumulated faeces and/or dead juveniles/hatchlings.

4.9 External elevations were investigated with the aid of a high-powered torch and close focus binoculars (where necessary) for places that can be used as a roost by bats or as a means of ingress for bats and birds leading to areas of roosting/nesting potential. These features are typically referred to as potential roost features (PRF) concerning bats. All external features, with exception to the roof, were able to be surveyed without constraint.

4.10 The surrounding habitat was also considered in terms of general suitability for bat and bird species associated with the local habitat types.

4.11 Criteria for roost assessment are based upon the determinants given in the Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016): (see **Figure 4.1**).

Table 4.1 Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.

Suitability	Description Roosting habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions[a] and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation[b]). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.[c]	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions[a] and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions[a] and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

[a] For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.
[b] Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten *et al*, 2015). This phenomenon requires some research in the UK but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in large buildings in highly urbanised environments.
[c] This system of categorisation aligns with BS 8596:2015 Surveying for bats in trees and woodland (BSI, 2015).

Figure 4.1 – BCT guidelines extract

4.12 An assessment of the buildings was conducted when birds are outside of their breeding season (this is typically March-September inclusive). Elevations were inspected for evidence of historic nests and birds that show a high dependency upon built structures, many of which are in a state of decline. These might include the following species for example:

- Starling (*Sturnus vulgaris*): Birds of Conservation Concern (BoCC) red status,
- House Sparrow (*Passer domesticus*): BoCC red status,
- House Martin (*Delichon urbica*): BoCC red status,
- Swift (*Apus apus*): BoCC red status,

4.13 Additional to the site's capacity to support common species of bird, the area was subject to an assessment for capacity to support specially protected species such as, which is protected under Schedule 1 of the Wildlife & Countryside Act (1981) (as amended).

4.14 The results, conclusions and recommendations are based on several factors i.e.

- Practical experience of surveyor,
- Knowledge of bat/bird species relevant to the site location and geographical range,
- Nature of immediate/surrounding habitat in relation to foraging/commuting,
- Condition of the building,
- Presence/absence of a loft space or cellar and reasonable practicality of use,
- Presence/absence of roost potential,
- Value of roost potential – if present.

4.15 The results, conclusions and recommendations of this report have been assessed by Mrs. K. Wilding, the Director of Tyrer Ecological Consultants Ltd, and her assessment is consistent with that of Mr. D. Burrows.

5.0 Limitations

5.1 The survey was conducted in February at a time when bats are outside of their active season and are within their hibernation period. Evidence of bats can be less apparent in the winter months; however, bat roost potential and suitability of potential roost features can be adjudged as decisively as within the active season of bats, saving time and unnecessary delay to applicants, thus frequently the assessment can be as conclusive as the active season and timing is not considered a constraint in this instance.

5.2 There are visual constraints to the western elevation where works are proposed given the locality of private gardens.

5.3 The survey took place outside of the breeding bird season (typically March – September inclusive), therefore incidental breeding bird behaviour has a lower probability of being encountered. Suitability for breeding birds is readily identifiable all year round however, and often past nesting material can attest to presence of breeding birds at buildings.

5.4 Having considered the survey constraints above, no significant limitations were experienced that might adversely influence the results, conclusions, and recommendations of this report.

6.0 Desk Study Results

6.1 'The Manor Care Home' (referred to in part as "the Site") is located in Chatburn, Clitheroe, approximately 3.4 kilometres northeast from Clitheroe town centre (see **Figure 6.1**). The Site comprises of a private residential care home; from aerial imagery it is evident that the utilisation of the Site has not changed within the past 20 years.

Figure 6.1 - Location of the application site (red boundary) within the landscape (Source: Google 2022/23)

6.2 The immediate habitat (500 metre radius) is a combination of rural and sub-urban environs, characterised by residential properties with associated infrastructure including Bridge Road directly adjacent to the north and Downham Road <30 metres to the east of the Site. Ornamental landscaping, including trees and hedgerows, are present, associated with the residential properties whilst the area also has a range of commercial and educational faculties with associated green infrastructure including pubs, schools, restaurants and sports clubs (with amenity grasslands present). Semi-natural habitat local to the Site include pockets of priority deciduous woodland (the closest lying 0.18 kilometres west); a tributary to the River Ribble is present directly adjacent to the west of the Site. The A59 is located 0.35 kilometres to the southeast of the Site.

6.3 The extending environment (2.0-kilometre radius) is principally comprised of agricultural land with sub-urban infrastructure interspersed within the environment. Agricultural land, with associated hedgerows, ditches and treelines, dominate the landscape to the north, east and south of the Site. Urbanisation, specifically the town of Clitheroe, is situated to the southwest; a large quarry (for tarmac) is present 0.5 kilometres west of the Site. Semi-natural habitats include priority deciduous woodland, lowland calcareous grassland and lowland fens.

6.4 Collectively, the immediate and extending ecological features should be considered as offering a range of habitats with potential value to biodiversity most notably for bats and birds. There are significant ecological networks for commuting and foraging bats, with the protected species most typically associated with the habitats described being the brown long-eared bat (*Plecotus auritus*), which are commonly associated with woodland and more natural sites, and common pipistrelle (*Pipistrellus pipistrellus*) which are frequently associated with using buildings in sub-

urban and rural areas. The habitat surrounding the Site may afford nesting opportunities to bird species that are adapted to urbanisation, such as house sparrow; woodland bird species (tree sparrow *Passer montanus* etc.) may also be found within the immediate environment due to the presence of local woodland. The presence of a linear waterway adjacent to the Site may afford dipper (*Cinclus cinclus*) suitable foraging habitat.

6.5 There are four statutory designated sites within 2.0 kilometres of the application site (see **Table 6.1**).

Table 6.1 – Statutory designation types and reasons for designation within 2.0 kilometres buffer

Site name	Designation type	Interest features
Clitheroe Knoll Reefs (0.44 kilometres east of the Site)	Site of Special Scientific Interest (SSSI)	Clitheroe Knoll Reefs is a 115.3ha geological site near Clitheroe and is comprised of a road cutting and a series of small hills running east-west between the villages of Worston and Dowham. The hills are important examples of early Carboniferous "knoll-reefs". In conjunction with other well-exposed Clitheroe sites this site shows the best examples of such reefs which developed during the Chadian Stage in the Craven Basin. The nature and origins of the reefs have always been matters of controversy. This locality provides a unique opportunity to examine such carbonate build-ups, here expressed as actual knolls in the topography of the present day.
Salthill and Bellmanpark Quarries (1.4 kilometres west of the Site)	Site of Special Scientific Interest (SSSI)	Salthill and Bellmanpark Quarries is a 18ha geological site which straddles the A671 road immediately to the north-east of Clitheroe comprised of three adjacent disused quarries. The famous Carboniferous Limestone site is the type locality for the fossiliferous Salthill Bank Beds (Chadian) and the Salthill Cap Beds (Arundian) of the Clitheroe Limestone Complex. It provides the best sections through the Chadian and the Knoll Reefs of the Craven Basin, and some of the finest such sections in the English Lower Carboniferous. It shows three-dimensional relationships of reefs associated sediments and rich marine, especially echinoderm, faunas and is a key site for studies of fauna, carbonate sedimentology diagenesis and palaeoecology in the Lower Carboniferous.
Coplow Quarry (1.9 kilometres south-west of the Site)	Site of Special Scientific Interest (SSSI)	Coplow Quarry is a 4.9ha disused limestone quarry situated just north of clitheroe. The geological interest of the Site, in technical terms, may be defined as follows: This site shows exposures of the Coplow Knoll, of Chadian age, and its associated sediments. These are the best exposures of their kind in the Lower Coplow Knoll "Series", a sequence of rocks famous for their echinoderm fauna. This is one of the richest sites in the whole of the British Dinantian for such fossil material and it has yielded many type specimens. Coplow is a significant site in studies of carbonate facies relationships (between bank, inter-bank and flank deposits), and the controversial subject of the origins of the knolls in the Bowland Trough. A key Clitheroe Limestone site of outstanding interest for its faunas and carbonate sedimentology.

Salthill Quarry (1.85 kilometres south-west of the Site)	Local Nature Reserve (LNR)	Salthill Quarry is a 8.6ha geological site: the southeast corner of the reserve, the soil is at its earliest stage of development and supports a sparse vegetation of plants well adapted to the harsh conditions. Bee orchid, Carline Thistle and Milkwort can be seen growing here in June. You can see Autumn Gentian (or Felwort) flowering later in the year in August and September. On the more establishing soils you will be able to see cowslips. Ash and hawthorn trees dominate the woodland. There is also a variety of variety and birds. Fossilized rocks are abundant in several areas of the reserve.

6.6 Despite proximity to statutory designated sites in the wider area, due to its low impact nature, the proposed works are unlikely to have any direct impact upon the sites or their associated interest features, and Natural England (NE) are unlikely to request a Habitat Regulations Assessment (HRA). Where no impact to SSSI's is predicted however, NE issue the following advice within their standing guidance on SSSI impact zones (NE, 2019):

"*It is important to note that the SSSI IRZs only indicate Natural England's assessment of likely risk to the notified features of SSSIs. Where they indicate such a risk is unlikely, this does not mean that there are no potential impacts on biodiversity or the wider natural environment.*"

Notable Species Information

6.7 An online search of MAGiC maps revealed that the following European Protected Species Mitigation Licenses (EPSMLs) have been granted within 2.0 kilometres radius of the Site (see **Table 6.2** and **Figure 6.2**).

Table 6.2 – EPSMLs within 2.0 kilometres of the Site

Case Reference	Distance from Site	Context (where relevant)
2020-44527-EPS-MIT	1.28 kilometres southwest	Destruction of common pipistrelle (*Pipstrellus pipistrellus*), soprano pipistrelle (*Pipistrelle pygmaeus*) and whiskered bat (*Myotis mystacinus*) resting place in 2020.
2018-33818-EPS-MIT	1.82 kilometres southwest	Destruction of common pipistrelle and soprano pipistrelle breeding site in 2018.

6.8 Tyrer Ecological Consultants Ltd have previous and ongoing projects involving bats within the 2.0-kilomtre area surrounding the application site – a search of such data likewise revealed an absence of records pertaining to bats within 2.0 kilometres of the application site. It should however be noted that an absence of records does not necessarily indicate an absence of bats in an area but instead may be attributed to an absence of surveys within that area.

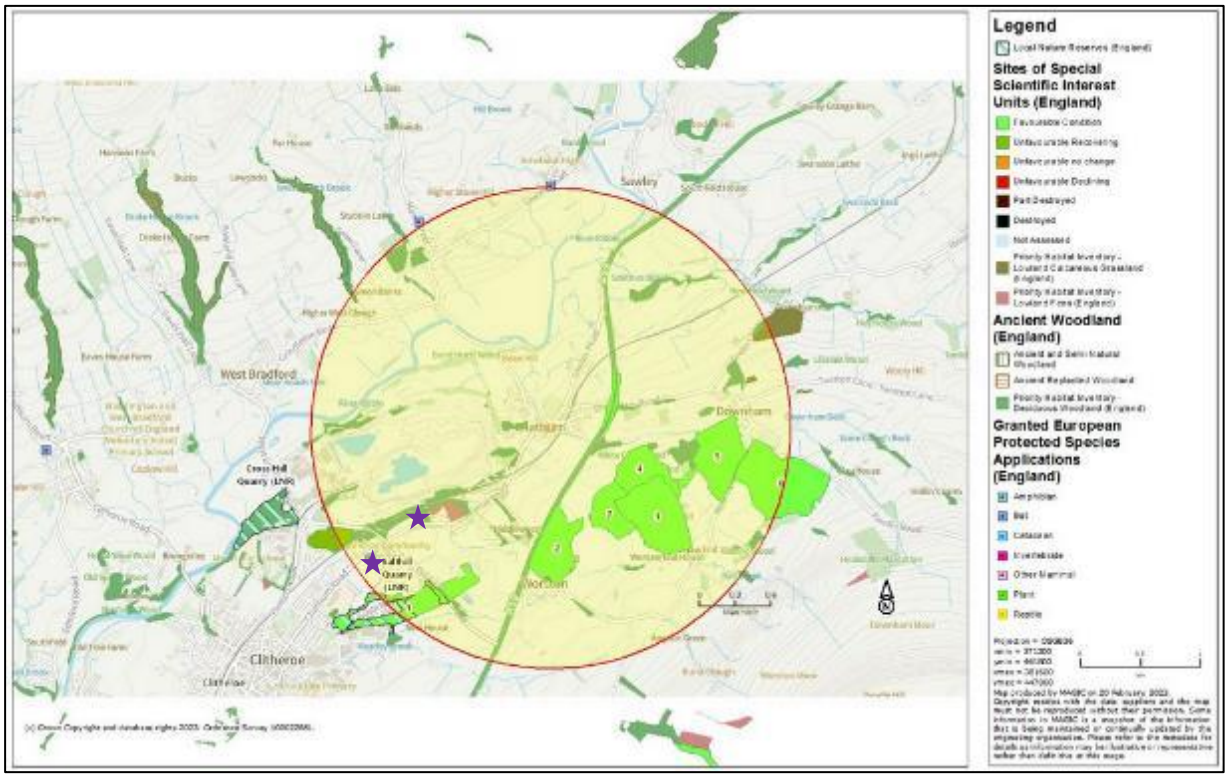

Figure 6.2 – EPSML (★) and designated site data for the area within 2.0 kilometres of the application site (MAGiC 2023)

7.0 Field Study Results

Bats

Figure 7.1 – Building surveyed (red line boundary); Google Earth Pro 2022/2023.

7.1 The Manor Care Home is a multi-storey, brick-built structure with external pebbledash rendering and a hipped, slate roof; external features include wooden soffit boxes and UPVC window and door framing; it functions as a residential care home. The approximate dimensions are 48m x 20m x 10m (Length x Width x Height) and whilst the surveyor is not qualified to assess the structural integrity of the building, it was adjudged to be in aesthetically favourable condition with only local areas of superficial deterioration on the roof.

7.2 Internally the building is comprised of various rooms consisting of residential spaces, offices and storage space. There are a number of loft voids associated with individual sections of the building (refer to **Figure 7.2** for individual sections).

Figure 7.2 – Sections of the building surveyed (Google Earth Pro 2022/2023).

Section 1

7.2.1 An internal loft void was located in Section 1, to the south of the building accessible via a ceiling hatch, revealing an open space with a timber rafter construction and bitumen 1F felt underlining spanning the length of the ridge (15m x 4m x 1.5m); the void is noted as being considerably warm, non-draughty and dark (**Plate 7**).

Section 2

7.2.2 Section 2 revealed two separate loft voids within the central building. The first void is a notably smaller space with a timber rafter and insulation board construction with a breeze block wall partition separating the void from a vaulted office space adjacent (1.5m x 1m x 0.5m) (**Plate 8 & 12**). An additional space located on the eastern side of Section 2 revealed an open void of similar construction to that previously stated, which is used for storage and contained a water heater with associated pipes (14m x 3m x 2m); consequently, the internal environmental conditions are warm, non-draughty and dark (**Plate 9 & 10**), however was likely subject to periodic human disturbance.

Section 3

7.2.3 Lastly, an open void located in Section 3 was assessed, with a similar construction to the loft space in Section 1 (15m x 4m x 1.5m), however, a light source is noted which subjected the space to significant light disturbance; in addition, a boarded off skylight is present within the loft space adding to the light ingress. The environmental conditions, other than light ingress, is considered to be similar to those previously stated (**Plate 11**).

7.3 Due to the aforementioned reasons, the building, in its' current condition, is considered broadly suitable for the breeding purposes of loft-dwelling bat species such as the brown long-eared (*Plecotus auritus*), which generally prefer warm, dark, open spaces which allow free flight. No evidence to indicate presence of loft-dwelling bats was identified despite a meticulous search of accessible areas.

7.4 Bitumen underfelt and insulation board is present below the roof slate (based on the internal inspection); the presence of Bitumen underfelt or other similar roof linings typically improves a buildings value to bats notably for crevice dwelling bats of the *Pipistrellus* genus, whereby bat will roost between linings and the roof cover material where external opportunities exist, whilst the absence of roof linings can lower a structures value in the that respect. No evidence of crevice-dwelling bats was found – it should be stated however that evidence of this species can often be absent or less apparent even when such bats are in occupation given their preferences for roosting in crevices.

NB: *The breeding roosts of Pipistrelle bats are proportionally higher in occupied residential dwellings where the warm, dry conditions favour the requirements of a maternity colony but Other structures are also used, especially for hibernation or by male bats which do not need the same conditions as a maternity colony.*

7.5 Externally, the building was found to contain several potential roost features (PRF's) that could provide ingress opportunities as well as roosts for crevice-dwelling species of the *Pipistrellus* genus. These are located primarily on the roof with a number of lifted slate tiles on the eastern and western elevations (see **Plate 2 & 5**) where works may affect.

7.6 Taking into account the identified PRFs on the building and the favourability of the surrounding habitats, the proposals have the potential to cause disturbance to bats subject to presence and/or result in roost damage/loss.

Breeding birds

7.7 In relation to WCA Schedule 1 listed species such as barn owl, this species could be present within the semi-rural landscape, however, no evidence of any recent or historic use by barn owl was recorded and it is considered unlikely this species would be impacted.

7.8 In relation to common bird species, evidence of house sparrow using holes within the end ridge tile of the eastern elevation (**Plate 14**) as well as the climbing ivy on the northern gable was recorded during the diurnal survey; these noted features could support nesting, particularly during the breeding bird season. Furthermore, additional evidence of house martin nesting was recorded underneath the eaves of the northern gable roof elevation (**Plate 13**). The nesting bird season is weather dependent but generally extends between March and September inclusive (peak period March – August).

7.9 Refer to **Table 7.1** for the bird species recorded during the Site visit.

Table 7.1 – Bird species recorded during the diurnal survey

Species	Scientific Name	Status	Context (where relevant)
House Sparrow	*Passer domesticus*	Red (BoCC)	Noted perching within a hole of the building on the eastern elevation
House Martin	*Delichon urbicum*	Red (BoCC)	A historic nest was noted
Wood Pigeon	*Columba palumbus*	Amber (BoCC)	Perching on the roof and commuting over

S.41 - a bird listed on section 41 of the Natural Environment Rural Communities Act 2006 (NERC Act)
LBAP - A local biodiversity action plan listed species
Q - Qualifying species of nearby SSSI site(s)
SPEC - a species of conservation concern, Amber or Red, Red being the highest conservation priority
BoCC – Bird of Conservation Concern

8.0 Conclusions & Recommendations

8.1 Based upon the site-specific assessment The Manor Care Home has duly been categorised as offering '**Moderate**' bat roost potential in accordance with Bat Conservation Trust 'Bat Surveys: Good Practice Guidelines' (2016) (see **Figure 8.1**)

Table 7.3 Recommended minimum number of survey visits for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).

Low roost suitability	Moderate roost suitability	High roost suitability
One survey visit. One dusk emergence or dawn re-entry survey[a] (structures). No further surveys required (trees).	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey.[b]	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third visit could be either dusk or dawn.[b]

Figure 8.1 – BCT extract on Moderate roost potential requirements

8.2 Whilst taking into account the identified PRFs on the building and the favourability of the surrounding habitats, the proposals have the potential to cause disturbance to bats, subject to presence, and/or result in roost damage/loss. It is recommended that two dusk and/or dawn emergence/re-entry surveys are conducted at the site during the active season of bats (May - August, extending into September), in order to establish if/how the building is being used by bats, and if so, identify the species present, abundance, roost locations and flight lines around the site following emergence/re-entry. The surveyors would be required to monitor the potential roost features described at the building that might be directly or indirectly impacted by the works, or, allow bats ingress/egress to areas at roof level that might be accessed for works.

8.3 The applicant should be aware that, if during further surveys, evidence is gathered by the Ecologist that confirms bat(s) or their roost(s) are found and will be impacted upon, then an EPSML may be required to legally commence with the proposals.

8.4 Natural England provides information and guidance about licensing for Bats and the following extract is included in that guidance: -

"If you intend to apply for a licence for development, you are advised to seek the guidance of a consultant ecologist.

Natural England's view is that:

"*A licence is needed if the consultant ecologist, on the basis of survey information and specialist knowledge of the species concerned, considers that on balance the proposed activity is reasonably likely to result in an offence under the Conservation of Habitats and Species Regulations (2019) (EU Exit)".*

8.5 If the consultant ecologist, on the basis of survey information and specialist knowledge of the species concerned, considers that on balance the proposed activity is reasonably unlikely to result in an offence being committed then no licence is required. However, in these circumstances Natural England would urge that reasonable precautions be taken to minimise the effect on European Protected Species (EPS) should they be found during the course of the activity. If EPS are found, cease the work until you have assessed whether you can proceed without committing an offence.

8.6 A licence should be applied for if offences are unavoidable, and the work should not be re-started until a licence is obtained. The application should be completed by the developer and a consultant ecologist. The ecologist will need to be able to demonstrate to the satisfaction of Natural England that they have the relevant skills and knowledge of the species concerned.

8.7 Where more detailed bat surveys are recommended by the Ecologist, following an initial daytime investigation, then Local Planning Authorities, on the advice of their ecological advisors, may not determine the application until such time that **all relevant information is gathered, i.e., by conducting dusk/dawn surveys.**

8.8 The advice that is provided by the ecological advisors is also in accordance with the obligations placed upon Local Authorities by way of its duties under the Conservation of Habitats & Species Regulations 2019 (as amended). Therefore, it would be prudent to make enquiries to the relevant departmental Planning Officer before submitting a Planning Application that includes an ecological survey report that recommends more detailed surveys.

8.9 Installation of overly harsh artificial lighting as part of any development that exceeds current levels may have a negative impact upon foraging/commuting bats in the landscape, particularly if increased light spillage occurs in areas of that are currently free from illumination. A bat-sensitive lighting plan is therefore recommended in order to avoid potential impacts to bats that may use the surrounding treelines. Several options to consider have been listed below, though the reader is referred to the Bat Conservation Lighting Guidelines for further information.

Appropriate luminaire specifications: Luminaires come in a myriad of different styles, applications and specifications which a lighting professional can help to select. The following should be considered when choosing luminaires.

All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used. LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability. Lighting should be directed to where it is needed, and light spillage avoided. This can be achieved by the design of the luminaire and by using accessories such as hoods, cowls, louvres and shields to direct the light to the intended area only. Planting can also be used as a barrier or manmade features that are required within the build can be positioned so as to form a barrier.

Predicting where the light cone and light spill will occur: There are lighting design computer programs that are widely in use which produce an image of the site in question, showing how the area will be affected by light spill when all the factors of the lighting components listed above are taken into consideration. This should be a useful tool to inform the mitigation process.

Light levels: The light should be as low as guidelines permit. If lighting is not needed in any particular area, do not light. Numerous software programmes are currently available which can be used inform lighting plans, demonstrating how lighting decisions will illuminate a site.

Please refer to the 'Landscape and urban design for bats and biodiversity' (*Gunnell et. al.*, 2012, Bat Conservation Trust) Guidance Note 8 'Bats and Artificial Lighting' 2018, Bat Conservation Trust for further information.

8.10 No recommendations are necessary in relation to bats and trees, as the trees adjacent to the site are not adjudged to be affected by the proposed development.

8.11 No impacts are applicable in relation to any Sch.1 (WCA) specially protected bird species such as barn owl and no further surveys or recommendations are necessary in relation to specially protected birds.

8.12 In relation to common birds both the building and adjacent trees present could offer small birds nesting habitat, particularly during the breeding bird season, with evidence of house sparrow using accessible gaps beneath the ridge tiles and a historic house martin nest encountered during the survey.

8.13 In the interests of potential impact avoidance it is recommended that proposed works should be undertaken outside of the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive (peak period March-August). For works within the breeding bird season, any areas that can support nesting birds should be checked by a professional Ecologist for nesting birds within 48 hours or less prior to works commencing. If birds are found nesting any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally, for example via the implementation of an appropriate buffer zone (species dependent) around the nest in which no disturbance is permitted until the nest is no longer in use.

NB: *All wild birds (with only minor exceptions) and their nests whilst being built or containing eggs or dependant young are protected from destruction, damage and disturbance under the Wildlife & Countryside Act 1981* (*as amended*)*. It is a punishable offence to interfere in any way with an active nest.*

Biodiversity Enhancement

8.14 As a means of enhancement and aiding the design of the scheme in keeping with local and national planning policy considering biodiversity net-gain principles, the proposals may consider incorporating wildlife friendly provisions in addition to those described. Recommendations are provided within **Appendix II**.

9.0 Bibliography

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Appendix I: Site Photographs

Plate 1 – *The general character of the eastern aspect of the building (Section 2)*

Plate 2 – *A close up of the eastern elevation; see gaps in tiles acting as PRFs*

Plate 3 – *General character of Section 3; see hang tiles are present and ivy growth*

Plate 4 – *General character of the southern aspect*

Plate 5 – *General character of the western roof elevation – this is the area to be affected by the proposed plans; note the PRFs*

Plate 6 – *General character of the northern gable; note the ivy which was used by house sparrow*

Plate 7 – *General character of the internal void within Section 1*

Plate 8 – *General character of the small void adjacent to the area affected by the proposed development*

Plate 9 – *The general character of the second void, used for storage, within Section 2.*

Plate 10 – *Additional image showing the internal character of the void in Section 2.*

Plate 11 – *General character of Section 3 showing a rafter construction and light ingress*

Plate 12 – *General character of the vaulted room which is due to be affected by the proposed development*

Plate 13 – *A house martin nest beneath the eave on the northern elevation*

Plate 14 – *A house sparrow using a gap beneath a ridge tile on the eastern elevation.*

Appendix II: Biodiversity Enhancement: General Recommendations

Indicative Enhancement

Breeding Birds - House Sparrow

The Sparrow Terrace has been designed to help redress the balance of falling House Sparrow numbers. The current UK population is now half of what it previously was in 1980 and this is widely attributed to habitat destruction and lack of suitable nesting spaces. House Sparrows are social birds and like to nest in company, therefore, this terrace provides ideal nesting opportunities for three families. The terrace can be fixed on to the surface of a suitable wall or incorporated into the wall. It is suitable for all types of buildings.

Breeding Birds – House Martin

These house martin nests are constructed from exterior grade plywood and WoodStone, a mixture of FSC wood fibres and concrete. The backing to the nests is exterior grade plywood, making them lightweight and easy to fit, but hard-wearing. These nests should be sited underneath the eaves on exterior walls of your house or outbuildings, at a minimum height of 2m above the ground.

Breeding Birds - Other

This traditional design has proved to be highly effective in attracting Robins, as well as other small species such as Black Redstart, Spotted Flycatcher and Wren. It is designed to be installed on the walls of houses, barns, garden sheds or other buildings and should be hung so that the entrance is to one side (at an angle of 90° to the wall). The front panel can be easily removed for cleaning.

This type of box should not be made conspicuous on a tree or bush because small predators can enter through the unprotected opening. By hanging on a wall, predators won't be able to reach the box. Alternatively hide the box in Ivy, Honeysuckle or other climbing plants.

Native Planting and/or Landscaping

New feature landscaping should incorporate native woody plants as opposed to non-native species that are of significantly less benefit to biodiversity. Species such as Blackthorn (*Prunus spinosa*), Honeysuckle (*Lonicera periclymenum*), Rowan (*Sorbus aucuparia*), Guelder-rose (*Vibernum opulus*) and Hawthorn (*Crataegus monogyna*) are native and will provide a valuable resource for a myriad of wildlife as opposed to non-native, exotic species which are generally much less effective, particularly to pollinator groups including bees, butterflies and moths.

Suitable Trees	Suitable Woody Shrubs
English Oak (*Quercus robur*)	Hawthorn (*Crataegus monogyna*)
Rowan (*Sorbus aucuparia*)	Honeysuckle (*Lonicera periclymenum*)
Wild Service Tree (*Sorbus torminialis)*	Guelder Rose (*Vibernum opulus*)
Silver Birch (*Betula pendula*)	Elder (*Sambucus nigra*)
Ash (*Fraxinus excelsior*)	Wild Privet (*Ligustrum vulgare*)
Goat Willow (*Salix capraea*)	Blackthorn (*Prunus spinosa*)
Wild Cherry (*Prunus avium*)	