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Tyrer Ecological Consultants Ltd, Formby Business Centre, 42 Duke Street, Formby, L37 4AT

Dusk Survey Results

August 2022

Lower Town House Farm,
Town House Road,
Littleborough,
OL15 9JX

National Grid Ref: SD93671719



Lower Town House Farm, Town House Road, Littleborough, OL15 9JX
Dusk Survey Results

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1.0 Background and Introduction

- 1.1 As part of a proposed planning application for a barn at Lower Town House Farm in Littleborough (see Figures 5.1-5.2 for building layout), Tyrer Ecological Consultants Ltd conducted a daytime inspection and assessment in relation to bats and breeding birds in November 2021. As part of this survey a Preliminary Roost Assessment (PRA) was carried out, which concluded the following:

"Based upon the findings of the survey covered through sections 6.0-7.0 of the report, the Barn surveyed was roundly categorised to offer 'Moderate' bat roost suitability in accordance with the Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016), whilst the immediate environment offers a favourable environment for foraging and commuting bats. It is recommended that in order to obtain further information on which to base a conclusive impact assessment, two dusk and/or dawn emergence/re-entry surveys should be conducted at the site during the active season of bats (May - August), in order to establish if/how the building is being used by bats, and if so identify species, abundance, roost locations and flight lines around the site following emergence/re-entry."

- 1.2 Development Proposals for the surveyed area are understood to involve the conversion of the existing barn for residential use.
- 1.3 Tyrer Ecological Consultants Ltd were therefore re-commissioned by to undertake the further bat surveys recommended in the Preliminary Survey; the surveys (two dusk emergence surveys) were carried out in June 2022 in accordance with current Bat Conservation Trust (BCT) Guidelines during the active season of bats (see Figure 1.1).

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 1.1 - Extract from *Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016)*

- 1.4 The results, conclusions and recommendations following the survey, including any indicative mitigation to inform an application to Natural England for a European protected species mitigation licence (EPSML), where necessary, will be supplied within this report.
- 1.5 This report should be read, understood and presented to the local authority as an additional document to Appendix I (see Contents page).
- 1.6 In accordance with *Biodiversity Net Gain: Good practice principles for development* (CIEEM et al, 2019), measures have been recommended proportionate to anticipated impacts to ensure that the proposed development results in a biodiversity net gain.

2.0 Bats - Legislation & Policy

2.1 All British bats and their ****roosts**¹ are afforded protection under Schedule 5 of the Wildlife & Countryside Act (1981) (as amended) and are listed in Schedule 2 of The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579). When dealing with cases where a European Protected Species (EPS) (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 (Mainly spring/summer months)

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.

Policy

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

180. 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 reasons⁶³ 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.*

¹ ******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.

2.6 The Core Strategy for Rochdale borough Policy G7 states:

7. Protected Species: Development proposals which would affect a species protected by law or its habitat will not be permitted unless it can be demonstrated that:

- a. there is no adverse impact on the species concerned,*
- b. damage to habitats is minimal and alternative habitat provision is effective in maintaining those species,*

We will expect development proposals and improvements to:

- a. Protect and include existing biodiversity (including established biodiversity interest on brownfield land) within new developments, public realm and open spaces and meet the requirements of the Biodiversity and Development SPD, Greater Manchester and Local Biodiversity Action Plans;*
- b. Protect and enhance existing features such as peatland, ponds, wetlands, reservoirs, mill lodges, trees, hedges, wooded areas, meadows, flora and fauna;*
- c. Take opportunities to promote biodiversity and create new habitats through new development using landscaping and building and construction features wherever possible (e.g. ponds, species of vegetation, green roofs and walls, bat boxes, roof space, appropriate nest boxes and landscaping);*
- d. Enhance strategic wildlife corridors and the most natural areas and ensure that habitats and corridors are not fragmented by development;*
- e. Improve access where appropriate to new or existing biodiversity interest for public enjoyment; and*
- f. Protect important geology and take opportunities to increase interest and accessibility.*

3.0 Protected Species in Greater Manchester

- 3.1** Up to ten species have been recorded in Greater Manchester, most of which use built structures notably occupied residential properties for roosting - also trees. Bats (*Chiroptera*) feature on the Greater Manchester BAP and all are fully protected by UK legislation. The most frequently encountered bat species is the Common Pipistrelle (*Pipistrellus pipistrellus*) and its abundant status in Greater Manchester is reflected throughout the UK.

4.0 Survey Methods

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

“The guidelines do not aim to either override or replace knowledge and experience. It is accepted that departures from the guidelines (e.g. either decreasing or increasing the number of surveys carried out or using alternative methods) are often appropriate. The guidance 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.”

Relative to the above the survey protocol has been determined using the collective and long standing experience of Tyrer Ecological Consultants Ltd and knowledge of the specific nature of the site.

Survey Protocol

- 4.2 The timing of the surveys took place in June thus within the main active period of bats, at a time when maternity colonies have formed / returned to summer roosts and bats are in a highly active and social stage.

In accordance with Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016), it is specified that:

“The bat active period is generally considered to be between April and October inclusive”, though the period of May - August is the optimal most productive period that Natural England accept bat surveys and grant European Protected Species Mitigation licences (EPSML).

When considering survey protocol the decisions about whether dusk or dawn surveys are selected are based on the extensive experience of the Tyrer Ecological Consultants Ltd, the nature of the building and species that can be anticipated as being present either at the property or in the locality and how complex a building is relative to observations.

In this case the bat roost potential that exists at Lower Town House Farm presents no problems for dusk observations; if a building is complex, or observations were restricted, or species that are difficult to detect at dusk are suspected then dawn surveys would be conducted. At Lower Town House Farm there are no visual constraints and to date there is no evidence to suggest the presence of such species.

It should also be noted that at dawn temperatures are usually lower than at dusk and as a result bat activity can, in some locations, be less frequent. Additionally, where singular/small numbers of bats are present and there are no survey constraints then dawn surveys are of no more value than dusk surveys; singular bats can and do return to a roost before dawn and as a result a dawn survey would not record them anyway. Dawn surveys are more productive when “back tracking” bat to a roost from foraging grounds. BCT issued an Interim Guidance Note in May 2022 in advance of a 4th edition of bat survey guidelines to be published in Summer 2022, which supersedes existing guidelines and states in relation to dawn surveys that:

“Whilst dawn surveys can reward surveyors with displays of dawn swarming behaviour, there is a concern that bats that have returned earlier will be missed...”

The 4th edition of the survey guidelines will therefore transition away from the standard use of dawn surveys, particularly as a method for presence/absence surveys...”

Survey protocol should not be determined by parties who are 1) not familiar with the site 2) do not have a sufficient level or experience in relation to the undertaking of dusk/dawn bat surveys.

- 4.3 The number of surveys and surveyors was adequate relative to the roost potential that was identified on attendance of the site i.e. ‘Moderate’ and requiring three surveyors to accurately monitor potential roost features (PRF’s) on the buildings at any one time.
- 4.4 Surveyors were strategically positioned so that all elevations with bat roost potential, as described in the daytime report, could be observed without limitations. The surveyors were aided with Anabat or equivalent electronic bat detectors that enable the locating and recording of the high

frequency calls that are emitted by bats; echolocation calls were analysed the next day using Analook or equivalent computer software to verify field observations.

5.0 Results

Two dusk emergence surveys were undertaken on 1st June 2022 and 15th June 2022 by three surveyors at a time; surveyor credentials have been given within Table 5.1. Tables 5.2-5.3 alongside Figures 5.1-5.2 document the results of the dusk surveys.

Table 5.1 - Surveyor Credentials

Surveyor(s)	Experience	Surveyor Credentials
Miss. K. Judson	3 years	An experienced Junior Ecologist. BSc (Hons.) Biology, MSc Conservation Management (a CIEEM accredited course), Qualifying CIEEM.
Mr. H. Mulligan	1 year	Seasonal Ecologist with Tyrer Ecological Consultants Ltd. MBiolSci in Biological Sciences (Zoology), QualCIEEM
Ms. H. Taylor-Boyd	8 years	A highly experienced bat surveyor with several years' experience with Tyrer Ecological Consultants Ltd
Mr. D. Boyd	8 years	A highly experienced bat surveyor with several years' experience with Tyrer Ecological Consultants Ltd

Table 5.2 – Survey dates, times and weather conditions

Times of Survey	Date	Weather Conditions
Dusk survey 1 2110 - 2300	1 st June 2022	Sunset: 2130: Dry, Calm, 5% cloud cover Start temp: 14 °C End temp: 12 °C
Dusk survey 2 2122 – 2315	15 th June 2022	Sunset: 2142: Dry, Light air, 0% cloud cover Start temp: 15 °C End temp: 14 °C

Table 5.3 – Dusk Survey Results

Dusk Survey	Time	Activity
01/06/2022	2110 – 2300	Summary: Emergence of one Common Pipistrelle likely from internal crevice within barn before exiting through open door at south. 2129 hrs: Common Pipistrelle (CP) foraging within barn before exiting through open barn door at south, initial emergence likely from internal crevice. 2131 hrs: CP entering barn from south and foraging within

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		2135 hrs: CP entering barn from north and foraging within 2137 hrs: CP commuting from south-west to north-east over building 2140 – 2216 hrs: Constant foraging within and around barn, exiting and entering via the various openings 2142 hrs: CP commuting south-west to east over building 2159 – 2230 hrs: CP constantly foraging at north of building Activity consisted of constant foraging around and within the building by up to three CP.
15/06/2022	2122 – 2315	Summary: Emergence of one Common Pipistrelle likely from internal crevice within barn before exiting through open door at south. 2139 hrs: Foraging by CP within barn before exiting out of open barn door at south, initial emergence likely from internal crevice 2139 - 2200 hrs: Regular CP foraging within barn 2140 hrs: CP entering barn from south-west 2141 hrs: CP leaving barn to south-west 2201-2205 hrs: Three CP commuting passes south to north-east over building 2206 hrs: CP commuting through barn heading north 2211-2225 hrs: Regular foraging by up to two CP at north of building 2214-2235 hrs: Three CP passes heading north at east of building 2215 – 2240 hrs: Up to two CP constantly foraging at south of building 2221 hrs: CP foraging at east of building 2235 hrs: CP commuting from west at south of building before heading north-east 2237 – 2240 hrs: Regular foraging by CP at north of building Activity consisted of constant foraging and commuting activity by up to two CP at a time.



Dusk Survey 1 – 01/06/2022

Key			
	Site Boundary		Foraging activity
	Surveyor Positions		Commuting activity
	Directional compass		Emergence point

Figure 5.1 - Visual Aid - Dusk Survey Results with Key



Dusk Survey 2 – 15/06/2022

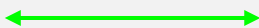
Key			
	Site Boundary		Foraging activity
	Surveyor Positions		Commuting activity
	Directional compass		Emergence point

Figure 5.2 - Visual Aid - Dusk Survey Results with Key



Figure 5.3 – Emergence point of Common Pipistrelle bat on southern elevation, with initial emergence likely from an internal crevice (this door was open on both surveys)

6.0 Survey Conclusions & Recommendations

- 6.1 The survey results gathered by Tyrer Ecological Consultants Ltd conclude that the barn at Lower Town House Farm is being used by one Common pipistrelle (*Pipistrellus pipistrellus*) bat for roosting purposes. Based upon the evidence, the building is host to one 'Day roost' likely located at an internal crevice within the barn, with emergence out of the barn door on the southern elevation on both surveys
- 6.2 Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016) describes a 'Day roost' as:
- "a place where individual bats, or small groups of males, rest or shelter in the day but are rarely found by night in the summer".*
- 6.3 The full extent of the proposed works are understood to involve the conversion of the barn on site; the likely destruction of a bat roost will therefore need to be addressed from both a conservation and legal perspective along with the application of appropriate mitigation. A European Protected Species Mitigation Licence (EPSML) will be required to legally destroy places that are actively used for breeding, rest or shelter (roost) by bats, however, before a licence can be applied for all planning issues need to be resolved.
- 6.4 In order that the LPA can implement its obligations under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579), appropriate and proportionate mitigation will need to accompany the planning application which will demonstrate that the *"favourable conservation"* of the species concerned can be maintained.
- 6.5 Installation of new lighting as part of a development scheme that exceeds current levels may have a negative impact upon foraging/commuting bats confirmed as present in the vicinity, particularly if increased light spillage occurs in areas currently free from illumination such as illumination of boundary features. There are several measures that can be used to offset impacts upon bats,

where lighting is unavoidable; these include, however are not limited to, the light source used and luminaire design, and accessories to direct light at its intended target. Numerous software programmes are currently available which can be used inform lighting plans, demonstrating how lighting decisions will illuminate a site. Refer to the Bat Conservation Lighting Guidelines for further strategic information if applicable.

7.0 Indicative Mitigation

7.1 From the evidence gained during the dusk surveys, the use of the barn by bats is considered to be of 'low' level significance relatable to Common Pipistrelle bats and their current status (as according to - English Nature: Bat Mitigation Guidelines 2004); the proposed mitigation is proportionate to that use. However, if at any time that assessment is revised to a higher level, then the mitigation will also be accordingly revised.

7.2 The following procedures and mitigation recommendations are designed to allow the Local Planning Authority (LPA), in association with their ecological advisers, to determine a Planning Application where a European Protected Species has been identified and will be affected by the work for which the Planning Application seeks consent.

In addition, Local Planning Authorities in accordance with the obligations placed upon them by way of their duties under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579) have to take into consideration the presence of a European Protected species (EPS) before determination of an application where it/they have been identified.

7.3 The LPA need to consider the mitigation in relation to the potential success of a Natural England licence application and/or if in their opinion the mitigation is considered as being appropriate, or if it is over and above what is required; if they determine that the mitigation is appropriate then a Planning Condition should be attached requiring the roost provision to be implemented.

If the LPA consider that the mitigation is over what is necessary but require "enhancement" as part of their Local Biodiversity/Net-Gain Planning Policies this should be included in the terms of Consent. The acting bat ecologist deems the proposed new roost creation as appropriate and not over and above what is required.

7.4 **Notwithstanding that Planning Consent is granted or equally if the work is undertaken outside of the planning system, whereby projects that do not require planning consent may affect bats or their roost, including disturbance, it does not absolve the applicant, site owner, developer or any other party involved with the work from ensuring that an application is made for a Natural England development licence, to legally undertake work that will affect bat(s) or their roost(s).**

If work is undertaken without a licence and bat(s) or their roost(s) is/are affected then a breach of current wildlife legislation will occur for which penalties are severe.

7.5 Under Regulation 53(1) and 56(3)(a) of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579), a licence is required prior to disturbing bats or destroying/damaging or obstructing any place that is used by bats as a resting place or breeding site. The licence is issued by the EPS Licensing Team of Natural England.

7.6 The conversion of the barn at Lower Town House Farm is the key component of the applicant's plans for the site; however, it is acknowledged that the presence of roosting bats needs to be addressed from both a legal and conservation perspective.

The mitigation proposals outlined in this report are seen to be the most productive way forward, should retention not be an option, that will retain long term roosting opportunities for bats.

- 7.7 To ensure that bats are not left without a roost while the work takes place one Schwegler 2F bat box (or suitable equivalent) will be erected on a suitable tree in proximity to the survey area (See Figure 7.1). The box will serve as a receptor bat box for if bats have to be captured by hand and translocated to it by a suitably licenced Ecologist or named agent during the works schedule; it will be retained permanently following the works.



Figure 7.1 – Proposed location of bat box []

Assigned Ecological Clerk of Works - EcOW

- 7.8 At the pre-commencement stage a suitably qualified Ecologist is to undertake an induction 'toolbox talk' on possible bat presence and present/discuss document features taken from the license i.e. License, Method Statement, Mitigation Figures and Work Schedule to be kept on site for the duration of the work.

Prior to any work being undertaken the presence/absence bats as far as is possible will be established by undertaking detailed investigation of the areas at which bats have been observed using the building, at any internal crevices within the barn. The ecologist will supervise careful dismantling of all places that will be removed as part of the proposed work which have been identified as offering roost access or roost potential at the ecologist discretion. In addition, wherever opportunities for bats exist in other parts of the building the supervised dismantling will extend to these areas with strategies for safely removing bat(s), as long as a maternity colony is considered not to have taken up occupancy of the building.

All dismantling of roost features will be undertaken during favourable weather conditions. An increase in external lighting is expected during the conversion; should additional lighting be installed it must be directed away from any bat roost access points, flight paths and foraging areas.

Mitigation proposed is subject to the approval of the Natural England EPS team; all proposed roost provisions outlined hereafter will be dedicated for bats and permanent.

7.9 Work undertaken by the Ecologist

Capture/Exclusion: Once an EPSML licence is in place the contractor will provide a safe means of access to allow the ecologist to investigate the confirmed roost area for bat presence at The Hermitage.

In addition, wherever opportunities for bats exist in other parts of the building the supervised dismantling will extend to these areas at the discretion of the ecologist in attendance. In the event of bat(s) being present, it/they will be removed, placed in a secure box with soft tissue and immediately transferred into a receptor bat box that will have previously been erected on a tree nearby as indicated in Figure 7.1. Once it has been established by the ecologist that bat(s) are absent the building works will continue to completion.

In the unlikely event that bats are found outside of supervision time, then as legal requirement and conditions of the granted licence work will immediately cease and the ecologist contacted for further advice; contractors must not touch, handle or in any way cause bats to move.

7.10 Work undertaken by the Contractor

A number of viable ingress points and roosting opportunities were identified on the building, primarily being the gaps at the ridge tiles, gaps in the window and door frames, gaps in the timber from bolts and fastenings, gaps at the wall plate and roof verge on both the north and south side, a small area of wall cavity around the door on the south side, and vent holes on both the south and north walls. It is likely that many of these features will be lost during the conversion of the building; new roost provision is therefore recommended to be built into the design of the converted dwelling at Lower Town House Farm (the below mitigation measures are indicative and to be finalised subject to the provision of development plans during the EPSML application):

- New roosting provision will be re-created in the form of a single Norfolk bat brick integrated into the converted structure of the barn, which provides like-for-like crevice roost conditions for bats to replicate the roost being lost at the site. These bat bricks can replace existing bricks within a building's structure and allow external roosting crevices for bats.
- See: <https://portal.peakdistrict.gov.uk/system/download/f/13369045>

8.0 References

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