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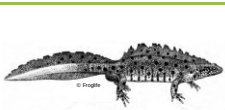
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Inspection and Assessment in Relation to Bats and Birds

August 2020

Parkgate House
Park Gate Road
Blackburn
BB1 9ET

SD 674 342



Document Title	Inspection & Assessment in Relation to Bats & Breeding Birds
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Executive Summary

As part of a planning application regarding Parkgate House, Blackburn, a daytime inspection and assessment in relation to bats and breeding birds was undertaken by Tyrer Ecological Consultants Ltd during July 2020. The survey was commissioned by PPY Design Ltd and it is understood that proposals entail the modernisation and extension of the existing residential property, which also includes a conversion of the loft space (Figure 1).

The following key ecological features and associated recommendations have been identified:-

Bats: Inspection of the external components of the house found a number of Potential Roost Features to all aspects, namely including gaps in stonework, under new UPVC soffits and at roof verge. On the basis of this suitability, although no evidence of bat use has been identified, the structure has been duly categorised to possess 'moderate' roost suitability. *Further dusk and/or dawn surveys to determine if/how bats are using the property are therefore required (see sections 8.1-8.3). These surveys may be followed by the requirement for a Natural England European Protected Species Mitigation Licence (EPSML), or precautionary method statement, dependent upon the outcome of said survey observations.*

Biodiversity Net Gain: A series of biodiversity enhancement measures are recommended within Appendix II which entail enhancement for nesting birds, invertebrates and landscaping.

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1.0 Introduction & Scope

- 1.1 As part of a planning application regarding Parkgate House, Blackburn, a daytime inspection and assessment in relation to bats and breeding birds was undertaken by Tyrer Ecological Consultants Ltd during July 2020. The survey was commissioned by PPY Design Ltd and it is understood that proposals entail the modernisation and extension of the existing residential property, which also includes a conversion of the loft space (Figure 1). Several trees, introduced shrubs and a garage also exist on site, though are understood to be exempt from the prospective scheme of works and altogether unaffected.
- 1.2 As part of the Local Authority's Planning Policies ecological surveys are generally required, particularly where a specially protected species is or may be present and could be affected by the proposals for which the application seeks consent.



Figure 1: Elevation drawings as existing (top) and as proposed (bottom (©PPY Design Ltd)

- 1.3 The aim of the inspection was to ascertain if the buildings on site and associated land are of value to bats and breeding birds; if they were found to be suitable for bats or signs of use was located 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. If bat/s or their roost/place of rest/shelter is subsequently affected by the work, then a European Protected Species Mitigation Licence would be required to proceed with the development.
- 1.4 The optimum time to investigate buildings for evidence of a bat roost is May – August, however that is not to say they cannot be inspected and assessed outside of that time and frequently the results can be conclusive, which can save time and expense for planning applicants but it should be borne in mind that equally the inspection can be inconclusive.
- 1.5 In addition to bats the site was assessed for its potential to offer nesting provision for breeding birds; if the survey results indicate that such species may be affected by the proposals then recommendations would be made accordingly

Additional information

- 1.6 Protected species discounted from this ecological assessment were omitted due to factors including: the absence of suitable habitats and / or distributional aspects negating the necessity to survey for them and / or the proposed works were not considered to negatively impact the species or encroach on areas where the species may be present; this includes red squirrel (*Sciurus vulgaris*).
- 1.7 No notable or semi-natural habitats exist on site, or within the immediate proximity of the survey area, and habitats impacted by the proposals are restricted to hardstanding and species-poor amenity grassland.

2.0 Legislation & Policy

- 2.1 All British bats and their **roosts are afforded protection under the 1981 Wildlife & Countryside Act (as amended) and are listed in Schedule 2 of the Conservation of Habitats & Species Regulations 2017 (as amended). 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 2017 Regulations and therefore has a statutory duty 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.
- b) Hibernation.
- c) Transitional or temporary roost.

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 & Species Regulations 2017 (Regulation 41) 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.

- 2.3 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); birds listed on Schedule 1 e.g. Barn owls (*Tyto alba*) are afforded a greater level of protection. Where nesting birds are present, then work should be timed outside of the main nesting season (March – August) so as to avoid disturbance.

Policy

- 2.4 The National Planning Policy Framework (NPPF) has replaced the existing Planning Policy Guidelines. (PPG's) In relation to wildlife PPG 9 was one of the documents to which Planning Authorities referred to, particularly where a specially protected species is or may be present and will be affected by a development for which a Planning application seeks consent. The aims of the NPPF in relation to species and habitats are that it places a clear responsibility on Local Planning Authorities to conserve and enhance biodiversity and to encourage on the consideration that should be given to Protected Species where they may be affected by development. The Office of the Deputy Prime Minister (ODPM) Circular 06/2005 provides administrative guidance on the application of the law in relation to planning and nature conservation.

This is supported by a guide to good practice entitled 'Planning for Biodiversity and Geological Conservation: Building in Biodiversity' in which paragraphs 5.34 and 5.35 identify that species such as bats are highly dependant upon built structures for survival and that roosts can be easily incorporated into existing and new developments/conversions to benefit these species.

When determining planning applications, Local Planning Authorities should aim to conserve biodiversity by applying the following principles:

“If significant harm 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.”

- 2.5 Further to mitigating / compensating for the loss of biodiversity, LPAs should also aim to enhance existing biodiversity and provide clear and measurable net gains. Paragraph 174 of the NPPF states the following:

“To protect and enhance biodiversity and geodiversity, plans should promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.”

- 2.6 Policy CS15 of Blackburn with Darwen’s Borough Council’s core strategy (2011) goes onto state that:-

“General habitats which may support species of principal importance either for shelter, breeding or feeding purposes (both natural and built features), will be protected from development, in accordance with the Environmental Strategy set out in Policy CS13.”

- 2.7 Guidance for Local Authorities: Extract from Office of the Deputy Prime Minister: Circular 06/2005

“It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision.”

- 2.8 Where ecological implications have been identified at application sites, Page 12 of the Central Lancashire Biodiversity and Nature Conservation Supplementary Planning Document surmises how said ecological issues are dealt with (see Figure 2 below).

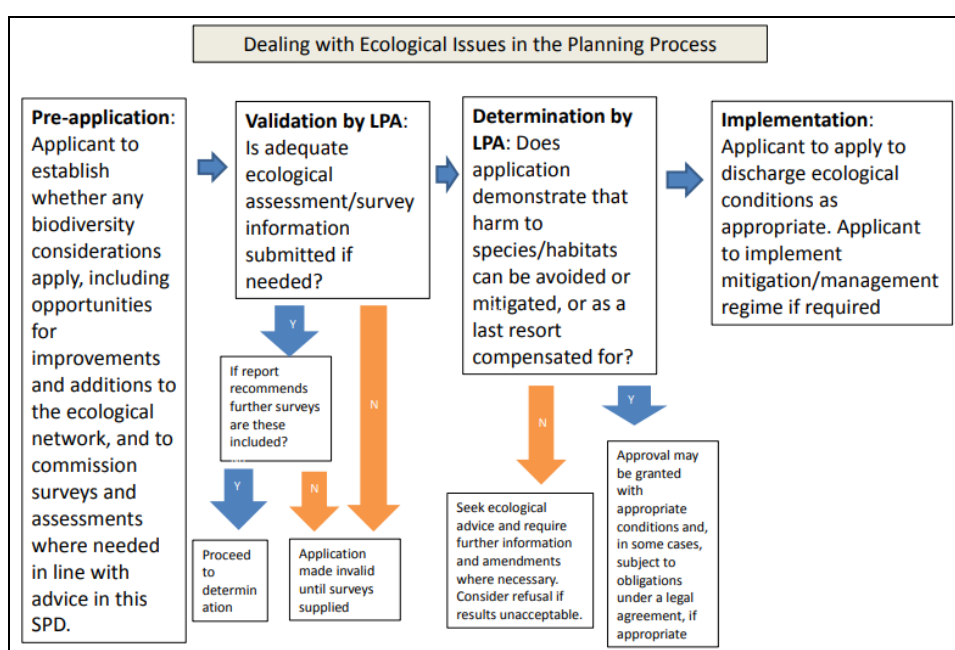


Figure 2: Central Lancashire supplementary planning document extract (©Chorley Council et al, 2012)

3.0 Protected Species in Lancashire

- 3.1 Up to eleven bat species have been regularly recorded in Lancashire, many of which use built structures and trees for roosting. A variety of building types and features are utilised by bat species at different times of year, ranging from occupied residential dwellings to disused barns and bridges. The most frequently encountered species is the common pipistrelle bat (*Pipistrellus pipistrellus*) and its abundant status in Lancashire is mirrored throughout the UK.
- 3.2 The number of breeding Barn owls (*Tyto alba*) within rural Lancashire is moderately high across areas of countryside where suitable environs exist; they are constantly under threat from loss of habitat and nesting opportunities.

4.0 Survey Methods

Desk Study

- 4.1 Prior to the 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 2km 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.
- 4.2 Satellite imagery was reviewed using sources such as Google Earth (© 2019) to determine the nature of the 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.
- 4.3 Whilst a data search of localised bat records was not sourced, a sufficient level of information on which to establish the potential use of the site by bats could be gathered from the daytime site visit. The UK Guidelines for Assessing and Using Biodiversity Data (CIEEM, 2016) state: *“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”*.

Furthermore, taking into consideration the nature of the immediate habitat bat species that are likely to be present can be anticipated.

Field Survey

4.4 BCT Survey Good Practice Survey Guidelines state:-

“The guidance should be interpreted and adapted on a case-by-case basis, according to the expert judgement of those involved. There is no substitute for knowledge and experience in survey planning, methodology and interpretation of findings, and these guidelines are intended to support these. Where examples are given they are descriptive rather than prescriptive.”

- 4.5 The daytime survey was conducted on 15th July 2020 when the building to be modernised and extended was inspected for potential places that may be of value to bats and to determine if evidence of use was present. An internal investigation of the house (currently occupied) was not conducted at the time of the survey, in line with standing government and CIEEM guidance (see link: <https://cieem.net/i-am/covid-19/cv19-advice-for-members/>). However, an external assessment was achieved, whereby all external facets were inspected for viable ingress/egress opportunities for loft or crevice-dwelling bats with the aid of high-powered torchlight. The building was consequently assessed for its suitability for bats in line with bat Conservation Trust (BCT) guidelines 3rd edition (2016).

Both an internal and external assessment of the garage (unaffected directly by the proposals) was able to be undertaken at the time of the survey.

- 4.6 A number of deciduous trees exist within the confines of the survey area, including a semi-mature Sycamore (*Acer pseudoplatanus*), and two mature Ash (*Fraxinus excelsior*), which were assessed from ground level with the aid of high powered torch to appraise them for their capacity to support roosting bats. Features favoured by roosting bats include extensive holes, crevices and fissures for example.
- 4.7 The criteria for roost assessment is based upon the Bat Conservation Trust ‘Bat Surveys: Good Practice Guidelines’ (2016) (see Figure 3).

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 3: BCT guidelines extract

- 4.8 The survey was conducted at a time when bats have returned to summer roost sites and within their main active season (May-August inclusive). Surveyor credentials are given within Table 1 below.

Table 1: Surveyor credentials

Name	Description
Joshua Styles BSc. ACIEEM AMRSB	Senior ecologist and botanical specialist with a FISC Level 6; Mr Styles is an experienced ecologist with over 15 years' biological recording experience and over 4 years' consultancy experience. Mr Styles is also an accredited agent on the Class 2 Natural England bat license of Mrs. K. Wildling.

- 4.9 The results, conclusions and recommendations are based on multiple factors including:
- Practical experience of surveyor
 - Knowledge of bat/bird species relevant to the site location and geographical range
 - Nature of the immediate and surrounding habitat in relation to foraging/hunting opportunities
 - Condition of the building
 - Presence/absence of a loft space
 - Presence/absence of roost/nesting potential
 - Value of roost/nesting potential – if present
- 4.10 An assessment of the buildings and developmental footprint in general in relation to breeding birds was conducted in tandem with the investigation for bats, when birds are within their breeding season and nesting and territorial activity can often be observed (March-August inclusive). Exterior elevations of the structure were inspected for historic signs of 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 amber status
 - **Swift (*Apus apus*):** BoCC amber status

- 4.11 Additional to the area's capacity to support common species of bird for breeding purposes, the area was also subject to an assessment for the site's ability to support particularly notable assemblages of bird. This includes specially protected species such as Barn owl (*Tyto alba*), protected under Schedule 1 of the Wildlife & Countryside Act (1981) (as amended).

5.0 Limitations

- 5.1 Although no internal investigation was undertaken at the occupied house, this was done so in light of standing government and industry guidance during the COVID-19 pandemic and is not considered to pose a significant constraint to the ecological investigation and/or alter the results, conclusions and/or recommendations provided within this report.

6.0 Desk Study Results

- 6.1 The proposed development site is a relatively small plot of land, equivalent to circa 0.05 hectares, sited off Park Gate Road, Blackburn, and is set at an approximate distance of six kilometres north of Blackburn town centre.
- 6.2 Immediate habitats are represented by abundant tree lines, areas of permanent agricultural grassland and occasional woodland, with various tributaries evident across the immediate landscape. Residential development is sporadic in proximity to the site, and typically consists of small clusters of houses, with associated gardens.
- 6.3 Extending habitats follow to a similar character as those of the immediate, with the addition of further favourable environs, including more extensive woodlands, some of which are ancient, the River Ribble at 1.95 kilometres to the north-west. Alongside more extensive areas of woodland also includes a number of good quality semi-improved grasslands, additional to a small quantity of unimproved semi-natural grasslands. These previously identified habitats that occur in proximity to the survey area can be considered as being of high ecological value for many of the species for which the survey was undertaken (i.e. bats and breeding birds), including other taxa, subject to them being present in the locality. Where good quality habitat is present close to buildings then the percentage use of those buildings, by bats/birds increases given that roost/nest opportunities are available and vice versa.

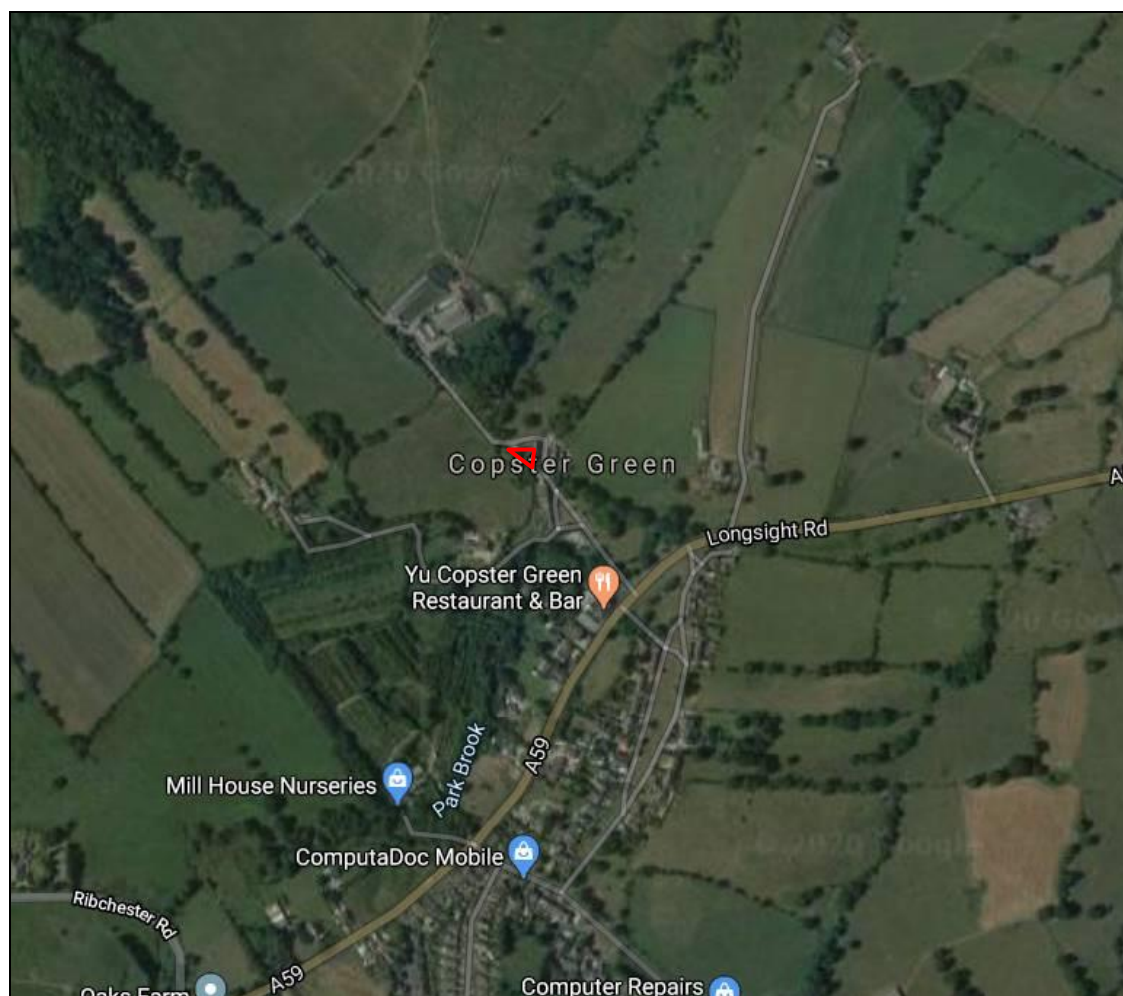


Figure 4: Position of the study site within the contiguous landscape (©Google Maps)

- 6.4 An online search of Magic Maps revealed the presence of two European Protected Species Mitigation Licences (EPSMLs) within a 2.0km radius of the application site (Figure 5). Both of these relate to the breeding and non-breeding roosts of common pipistrelle, whiskered and brown long-eared bats.
- 6.5 The application site lies within the impact zone for the following statutorily designated sites:

Table 2: Designated sites in proximity to the survey area

Site name	Designation type	Interest features
Red Scar and Tun Brook Woods	Site of Special Scientific Interest	Red Scar and Tun Brook Woods is a site designated for its extensive example of western valley ash-wych elm wood and valley Alderwoods overlying neutral to alkaline soils, typical of woodlands in the area derived from glacial drift. The site is host to a number of locally rare species, including native Yellow Archangel, Alternate-leaved Golden-saxifrage, Woodruff and Hairy St. John's-wort, alongside a number of uncommon bird species such as hawfinch.

- 6.5 Notwithstanding the proximity to this designated site, the proposed development at Parkgate House is considered to be unlikely to have any significant impact upon the sites, or their interest features.

If the Local Authority considers impact to designated site/s possible, funding from prospective development towards the creation and improvement of alternative greenspaces (Suitable Alternative Natural Greenspaces (SANGs)) could be requested. The development of SANGs is commonplace to mitigate potential cumulative impact to designated sites and is used by Local Authorities all across the country (see SANG guidance relevant to Ashdown Forest SPA: <https://www.midsussex.gov.uk/media/2180/sang-guidance.pdf>).

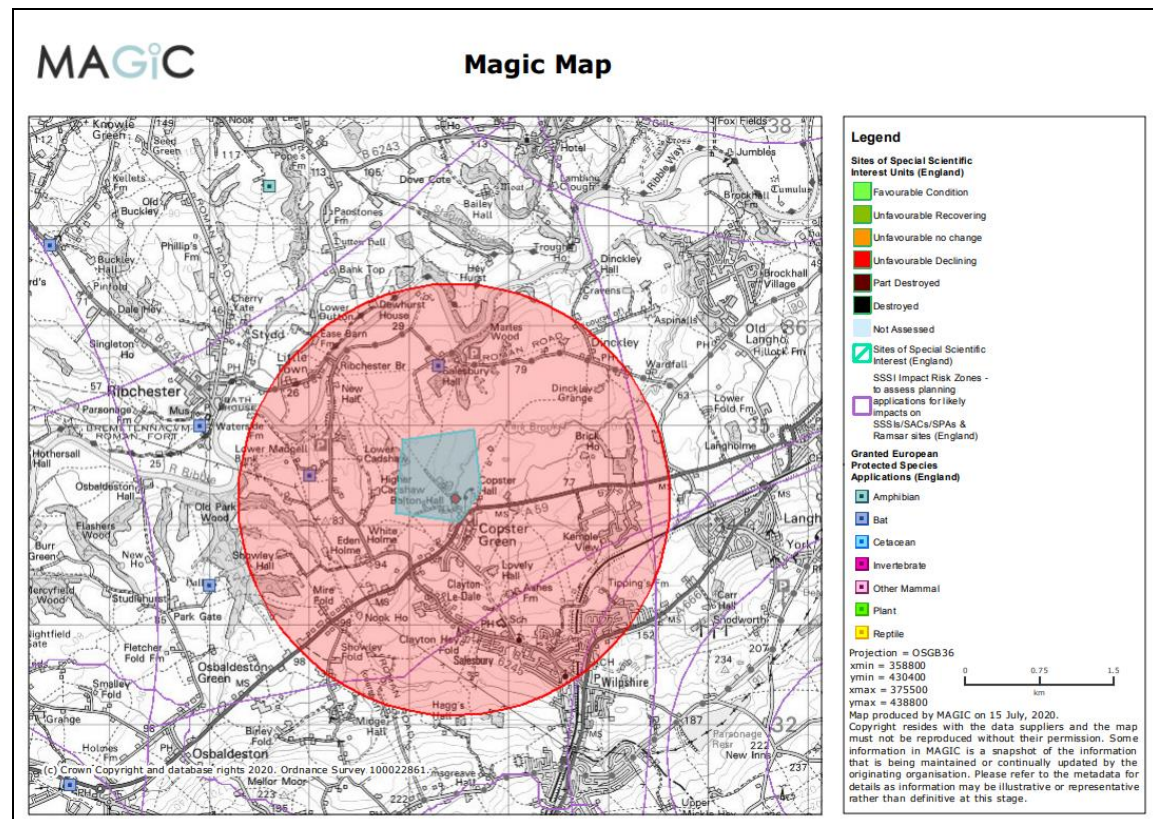


Figure 5: MAGIC Map desk-top results

7.0 Field Study Results

Bats

- 7.1 Two buildings were inspected as part of the Preliminary Roost Assessment in order to inform potential impacts; these include the main house, and a garage to the west of the house. An assessment of both buildings and trees may be viewed below.

House

- 7.2 Parkgate House comprises a two-storey, semi-detached property in a slightly dilapidated aesthetic condition, and is currently utilised as a living quarters. The property is of stone construction with a partial render finish, with a multi-pitch slate roof; some alteration works were noted to be in the process of completion at the time of the survey visit, including the erection of UPVC soffits. The building is to the approximate dimensions 15 metres by 9 metres by 12 metres in height.
- 7.2 An internal investigation into the interior of the property, including any loft space/s, was not undertaken at the time of the survey (see section 5.1).
- 7.3 The presence of traditional bitumen felt immediately beneath roofing slates could not be established at the time of the survey. Where present, however, such linings will significantly improve the probability of occupancy by crevice-dwelling species, whereby bats are able to roost between internal and external roofing material, provided external access exists. No evidence of crevice-dwelling bat species was noted at the time of the survey; however this is often the case due to the cavity-inhabiting nature of this species group.

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.

- 7.4 The external assessment of the Parkgate house found a number of viable ingress opportunities to all aspects including:
- Gaps beneath newly fitted UPVC soffits
 - Gaps at roof verge
 - Crevices in stonework where render had been removed

Due to the number of Potential Roost Features (PRFs) sited across the structure, the building has therefore duly been categorised to possess 'moderate' bat roost suitability. This categorisation is in line with existing Bat Conservation Trust (BCT) guidelines (Collins, 2016).

Garage

- 7.5 The garage consists of a one-storey, semi-detached building of stone construction, and possesses a monopitch corrugated metal roof. The building itself appears to be in a reasonable aesthetic condition, and is currently utilised for storage purposes. No loft spaces are present internally, and the combined dimensions of the garage approximate to 9 metres by 6 metres by 5 metres in height.
- 7.6 Internal investigation of the garage found it to be tightly sealed internally, darkened, non-draughty and open to the corrugated metal roof. Although the darkened, non-draughty conditions are typically to the liking of loft-dwelling species of bat, such as the

brown long-eared (*Plecotus auritus*), the lack of viable hanging points limits suitability of the interior for this group, although does not necessarily preclude occasional roosting if viable external ingress/egress exist. No evidence of loft-dwelling bat species was identified at the time of the appraisal, although aspects of both immediate and extending habitat are of high suitability relative to the foraging requirements of this species group.

- 7.7 Underfelt is absent immediately beneath corrugated metal roofing, therefore limiting suitability for crevice-dwelling bats at roof level, for the reasons specified within section 7.3.
- 7.8 External assessment of the garage found no viable roost features through any part of the building, and has therefore been concluded to possess 'negligible' bat roost suitability. This categorisation is in line with best-practice guidance, as presented by Collins (2016).

Trees

- 7.9 All trees identified to exist within the confines of the site boundary are concluded to possess 'negligible' bat roost suitability on the basis of the absence of extensive holes, fissures and/or crevices across any individual.

Birds

Breeding birds

- 7.10 A number of platforms that favour the nesting requirements of various bird species exist across the site, namely including shrubs and trees which are unaffected by the proposals. Although no historical evidence of nesting was identified upon inspection, the presence of nesting birds within the application boundary within the nesting period (March-August inclusive) is considered to be likely only in trees and shrubs.
- 7.11 No areas considered to be suitable for the breeding habits of any Schedule 1 WCA-listed species were identified on site and no evidence of such species was located across the full extent of the survey area.

8.0 Conclusions & Recommendations

- 8.1 Parkgate House has been found to offer a number of viable Potential Roost Features (PRF's) suitable for. The structure has consequently been categorised to possess 'moderate' roost suitability in line with up-to-date BCT guidance (Figure 7).

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

^a Structures that have been categorised as low potential can be problematic and the number of surveys required should be judged on a case-by-case basis (see Section 5.2.9). If there is a possibility that quiet calling, late-emerging species are present then a dawn survey may be more appropriate, providing weather conditions are suitable. In some cases, more than one survey may be needed, particularly where there are several buildings in this category.

^b Multiple survey visits should be spread out to sample as much of the recommended survey period (see Table 7.1) as possible; it is recommended that surveys are spaced at least two weeks apart, preferably more. A dawn survey immediately after a dusk one is considered only one visit.

Figure 7: Bat Conservation Trust extract

Based upon this categorisation, it is recommended that two dusk and/or dawn emergence or/and dawn re-entry surveys are conducted at the building, within the main active season of bats (May - August) and spaced as a minimum of 2 weeks apart in order to establish if/how the building is being used by bats and if so identify the species, abundance, roost locations and flight lines following emergence/re-entry.

- 8.2 If a bat roost/s is identified at the house, it is possible that a European Protected Species Mitigation Licence (EPSML) may be required for the demolition/development to legally proceed.
- 8.3 Natural England provides information and guidance about EPSML 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 & Species Regulations (EU exit) 2019.

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 should they be found during the course of the activity. If European protected species are found, cease the work until you have assessed whether you can proceed without committing an offence.

A licence should be applied for if an offence/s is unavoidable and the work should not recommence 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.

***NB:** Where more detailed bat surveys are recommended, following an initial investigation, then Local 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. 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 2017. 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.*

- 8.4 Suitable bird nesting platforms exists at the surveyed site, restricted to areas of trees and shrubs contained within the site boundary. Therefore, no recommendations in relation to nesting birds are applicable.
- 8.5 To improve opportunities for bats and breeding birds on site, enhancement for nesting birds is recommended to be incorporated into the new development as per Appendix II.
- 8.6 Biodiversity enhancement relative to landscaping and invertebrates is also recommended within Appendix II

9.0 Bibliography

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Appendix I: Site Photographs



Plate 1: A view of the garden



Plate 2: Ash tree indicative with bird box affixed



Plate 3: A view of the house



Plate 4: Gaps at roof verge of the house indicative



Plate 5: Gaps beneath newly fitted UPVC soffit indicative



Plate 6: Abundant crevices in stonework and at roof verge indicative



Plate 7: A view of the garage



Plate 8: A view of the interior of the garage, open to the corrugated metal roof

Appendix II: Biodiversity Enhancement

Enhancement

Landscaping

A series of trees, woody shrubs, climbers, herbaceous plants and ferns have been given within the table below which are suitable for incorporation into the land at Parkgate House; the list of plants given below are readily commercially available.

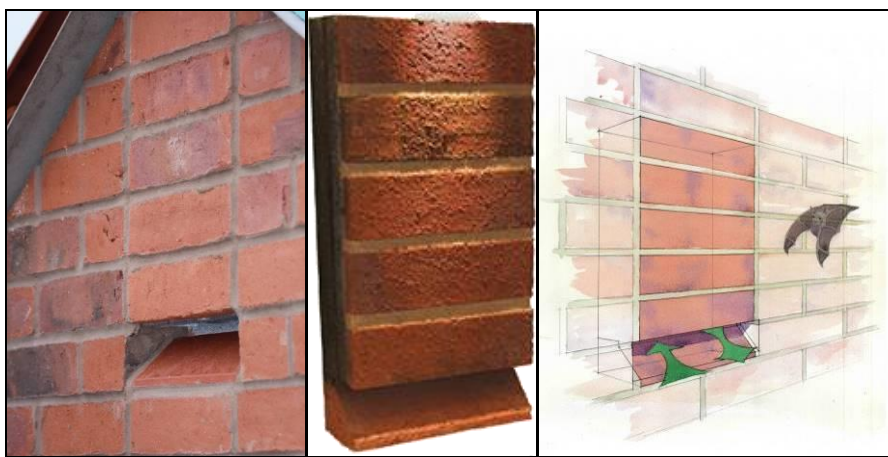
	Common Name	Scientific Name	Planting Preference
Ferns	Male Fern	<i>Dryopteris filix-mas</i>	Semi-shade or shaded
	Soft Shield-fern	<i>Polystichum setiferum</i>	Semi-shade or shaded
	Maidenhair Fern	<i>Adiantum capillus-veneris</i>	Suitable for rockeries / walled gardens
	Royal Fern	<i>Osmunda regalis</i>	Full sun in moist-damp areas
Herbaceous plants	Bloody Crane's-bill	<i>Geranium sanguineum</i>	Dry soils - suitable for rockeries
	Columbine	<i>Aquilegia vulgaris</i>	Semi-shade or open areas
	English Bluebell	<i>Hyacinthoides non-scripta</i>	Moist soils in semi-shade or open areas
	Giant Bellflower	<i>Campanula latifolia</i>	Semi-shade or open areas
	Greater Knapweed	<i>Centaurea scabiosa</i>	Dry-moist soils. Suitable for borders
	Greater Woodrush	<i>Luzula sylvatica</i>	Moist soils in semi-shade or open areas
	Meadow Crane's-bill	<i>Geranium pratense</i>	Humid-moist soils. Suitable for borders
	Musk Mallow	<i>Malva moschata</i>	Dry-moist soils. Suitable for borders and rockeries
	Sea Campion	<i>Silene uniflora</i>	Dry soils - suitable for rockeries
	Stinking Hellebore	<i>Helleborus foetidus</i>	Semi-shade or open areas
Climbers	Honeysuckle	<i>Lonicera periclymenum</i>	Dry-moist soils
	Hops	<i>Humulus lupulus</i>	Dry-moist soils
	Ivy	<i>Hedera helix</i>	Dry-moist soils
	Sweet-briar	<i>Rosa rubiginosa</i>	Dry-moist soils
Woody Shrubs	Dogwood	<i>Cornus sanguinea</i>	-
	Guelder Rose	<i>Viburnum opulus</i>	-
	Hawthorn	<i>Crataegus monogyna</i>	-
	Hazel	<i>Corylus avellana</i>	-
	Holly	<i>Ilex aquifolium</i>	-
Trees	Alder Buckthorn	<i>Frangula alnus</i>	-
	Osier	<i>Salix viminalis</i>	-
	Pedunculate Oak	<i>Quercus robur</i>	-
	Purple Willow	<i>Salix purpurea</i>	-
	Rowan	<i>Sorbus aucuparia</i>	-
	Silver Birch	<i>Betula pendula</i>	-
	Wild Cherry	<i>Prunus avium</i>	-
	Wych Elm	<i>Ulmus glabra</i>	-

Bats

There are a number of options available for enhancing a building for crevice-dwelling bats if so required; such forms of enhancement replicate crevice situations that are used by species including Pipistrelle bats; provision may be incorporated in the form of soffit access, integrated bat box/es, ridge access or by way of externally fitted boxes. A number of options are given below:-

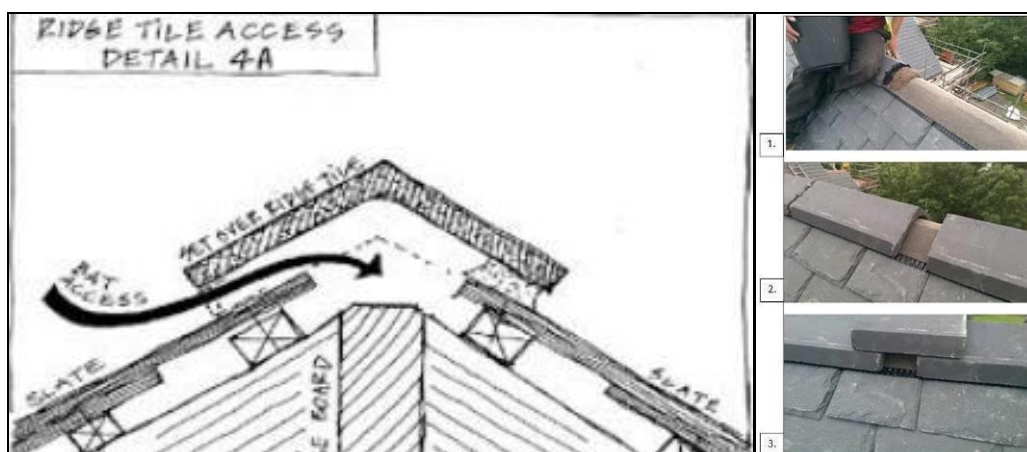
Integrated bat box

The Habibat Bat Box is a solid box made of insulating concrete with internal roosting space. The box blends seamlessly into brick-built properties and may be incorporated into the fabric of buildings, being best placed on gable elevations.



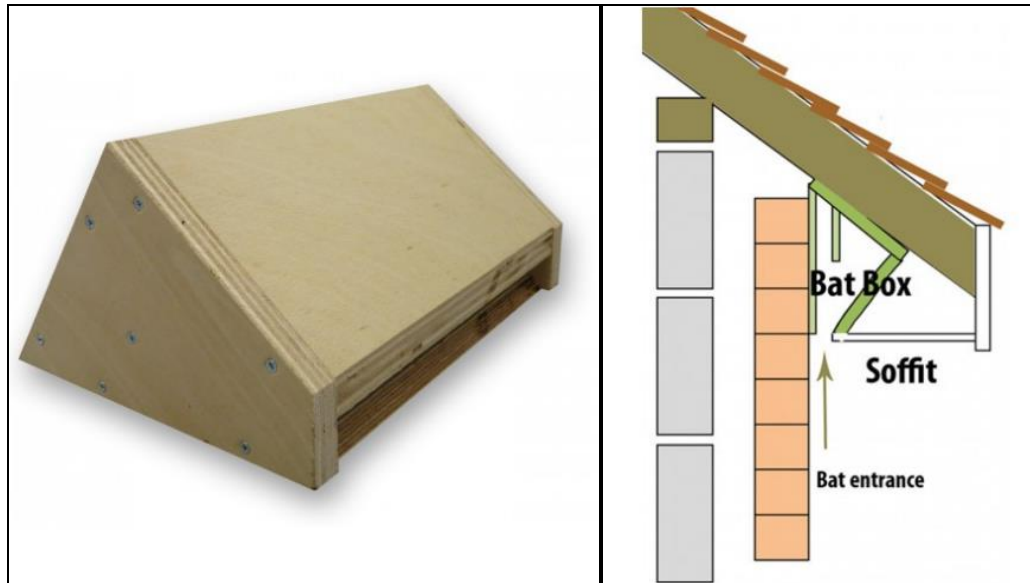
Ridge access

Where appropriated, ridge tile access should be made with the incorporation of traditional Bitumen 1F underfelt immediately beneath ridge tiles. Breathable BRM membrane can cause significant problems where bats are in contact with it, whereby their fine claws become entangled within the fibres of the membrane, entrapping and killing bats.



Soffit access

Where soffit are instated at gable elevations, roost provision may be instated in the form of a soffit bat box with internal roosting space.



Externally fitted boxes

A large number of externally fitted box models for bats exist for buildings and trees. Suitable models for both buildings and trees may include the Eco Kent Bat Box .



Birds

House sparrow

The 'Sparrow Terrace' has been designed to help redress the balance of falling house sparrow numbers. The current UK population is half what it was in 1980 and this is thought to be due to habitat destruction and lack of suitable nesting spaces. 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 agricultural buildings such as barns.

<http://www.nhbs.com/title/174850/1sp-schwegler-sparrow-terrace>



Swift

The type of entrance possessed by the swift WoodStone Swift Nest Box is preferred by swifts and discourages competing species such as house sparrows.

This box should be installed at least five metres above ground level, ensuring that there is unobstructed access for birds entering and leaving, preferably being placed in a sheltered locality under eaves or overhanging roofs.



https://www.nhbs.com/woodstone-swift-nest-box?bkfno=217160&ca_id=1495&gclid=EAlalQobChMI4Ovj4pXq5wIVFZ3VCh3_oQWG EAKYASABEqJ1Z_D_BwE

Invertebrates

Bee and Bug Houses will provide valuable habitat on site for solitary bees and other insects. At a time when many of our native insects are struggling, this is a fantastic way to give them a helping hand. Top chambers can feature wooden nesting tubes in wooden blocks, together with bamboo tubes of various sizes. Alternatively holes can be drilled into existing timber to create novel designs - perfect for attracting ladybirds, earwigs and lacewings. Other chambers can be filled with miscellaneous items such as pine cones to provide nooks and crannies for insects, aiding to provide habitat for insects that predate natural garden pests such as aphids. Natural materials, such as straw or bark, will provide an excellent winter habitat for lacewings, ladybirds, woodlice, earwigs and many other bugs. A range of other novel ideas can be used.

For example, see link - www.nhbs.com/bee-and-bug-biome

