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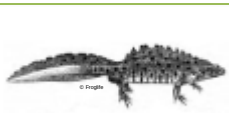
Inspection & Assessment in relation to Bats & Breeding Birds

July 2021

Ducie Arms,
424 Stockport Road,
Longsight,
Manchester,

M12 4EX

National Grid Ref: SJ86479593



Document Title	Inspection & Assessment in relation to Bats & Breeding Birds
Issue	1.0
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This report aims to provide general advice on ecological constraints associated with any development of the site and includes recommendations for further survey; it is not intended that this report should be submitted with a planning application for development of the site, unless supported by the results of further surveys and a detailed assessment of the effects of the proposed development

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Executive Summary

As part of a planning application (Manchester city council: Ref: 128987/FO/2020) Tyrer Ecological Consultants Ltd carried out a daytime inspection and assessment in relation to bats and breeding birds at the existing former public house 'Ducie Arms' in Manchester, in March 2021. The survey was instructed by Howard & Seddon Partnership Architects whilst commissioned by Dr. Noman Ehsan of Mediscan Diagnostic Services Ltd. Proposals are to demolish the former public house to facilitate the development of a new mixed use residential and medical centre (see Figure 1.1 and 1.2).

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 sections 6.0-7.0 of the report, the Ducie Arms former public house is determined to offer 'Negligible' bat roost potential in accordance with Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016) (Figure 8.1), however, there exists two limited features that could, in unlikely circumstances, be used by opportunistic bats on commute between more favourable roost habitat.

As such reasonable avoidance measures are recommended for bats, prior to any demolition work. See section 8.0 for further recommendations.

Breeding Birds: In relation to common birds, Feral pigeon (*Columba livia 'domestica'*) are breeding inside the building as confirmed during the survey. Feral Pigeon breeding presence may need to be addressed from a pest control point of view, as breeding habits in relation to this species are untypical of other bird species and can last throughout the year. A General Licence is therefore likely to be necessary.

From 1 January 2021, you must follow the conditions of general licence GL41 to control certain target birds for the purposes of preserving public health or public safety. See section 8.0 for more information.

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 such as:

As the proposals present the provision of green walls and a flat roof for solar panels, proposals may consider:

- *native species use on the green walls,*
- *a green/brown roof that provides a foraging and potential nest area for protected Black Redstart, priority Grey Wagtail and other threatened urban associated species,*
- *Integrated bat box,*

Further information is provided within Appendix II.

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1.0 Introduction & Reason for Survey

- 1.1 As part of a planning application (Manchester city council: Ref: 128987/FO/2020) Tyrer Ecological Consultants Ltd carried out a daytime inspection and assessment in relation to bats and breeding birds at the existing former public house 'Ducie Arms' in Manchester, in March 2021. The survey was instructed by Howard & Seddon Partnership Architects whilst commissioned by Dr. Noman Ehsan of Mediscan Diagnostic Services Ltd. Proposals are to demolish the former public house to facilitate the development of a new mixed use residential and medical centre (see Figure 1.1 and 1.2).

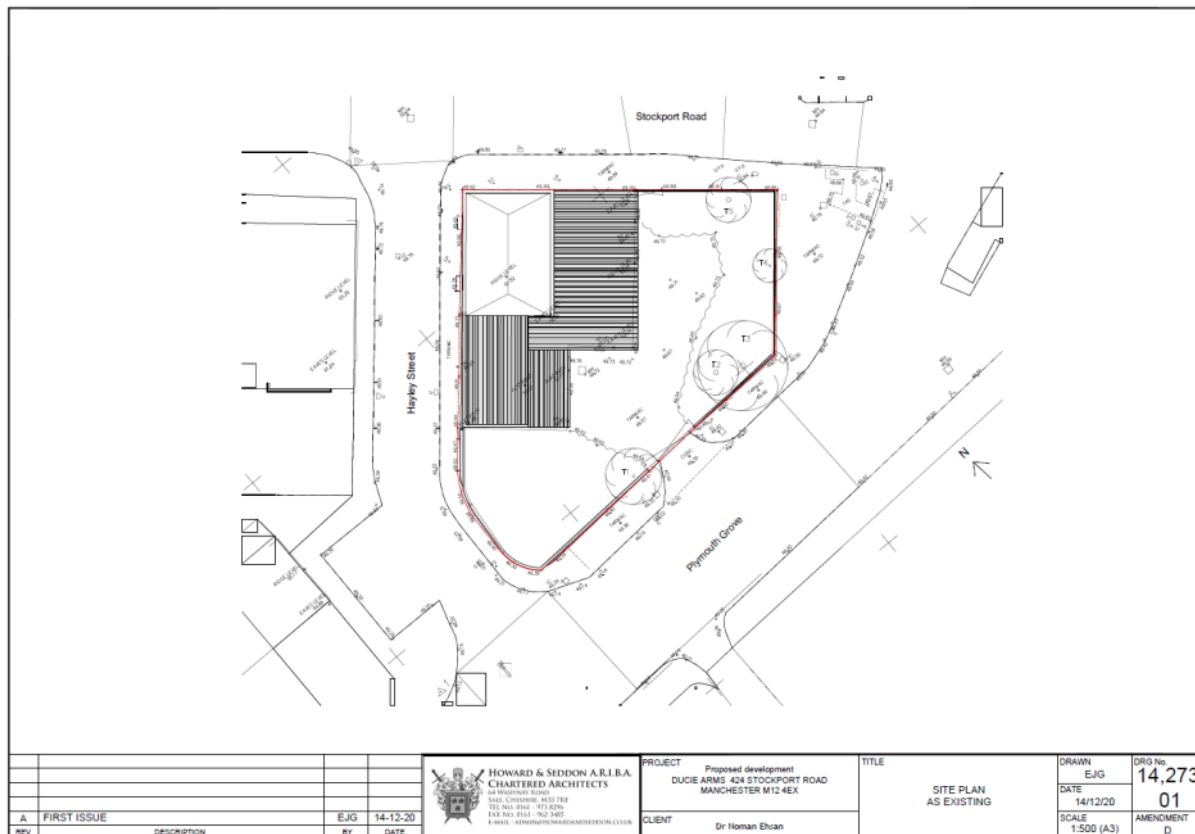


Figure 1.1 – The image above shows the existing site plan (Howard & Seddon Architects)

- 1.2 The aim of the inspection was to ascertain if the building was of value to bats whilst an assessment for birds was also carried out. Trees within range of the works were also considered.
- 1.3 If found to be suitable for bats, or field 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. If it is determined that bat(s) or their roost/place of rest/shelter will be subsequently affected by the works then a European Protected Species Mitigation Licence (EPSML) would be legally required to proceed with the development. If evidence indicated breeding birds may be impacted by proposals, then recommendations would be made accordingly.
- 1.4 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, may not grant permission until such time that all relevant information is gathered.

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



Figure 1.2 – The image above shows the proposed elevations in 3D (Howard & Seddon Architects)

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 (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

- Summer breeding roost (May-August)
- Hibernation roost (October-March)
- Transitional or temporary roost (other 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.

** 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

- 2.3 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 Black Redstart (*Phoenicurus ochruros*), are afforded a greater level of protection protected also from disturbance.
- 2.4 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

- 2.5 The National Planning Policy Framework (NPPF) 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.

“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 planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision”.

- 2.6 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 dependent upon built structures for survival and that roosts can be easily incorporated into existing and new developments to benefit these species.

When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying principle 175(a), as extracted from the NPPF:

“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”.

- 2.7 Further to mitigating and 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.”

2.8 Policy EN15 under Biodiversity & Geological Conservation of the Manchester Core Strategy 2012 to 2027 states -

“Developers will be expected to identify and implement reasonable opportunities to enhance, restore or create new biodiversity, either on-site or adjacent to the site, contributing to linkages between valuable or potentially valuable habitat areas where appropriate...”, and,

“Where adverse impacts are unavoidable, developers will be required to provide appropriate mitigation and/or compensation”, “It is important to recognise that brownfield sites often contain diverse and valuable biodiversity.”

2.9 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).

2.10 Figure 2.1 is a process model that surmises how ecological issues should be dealt with in the context of the planning process.

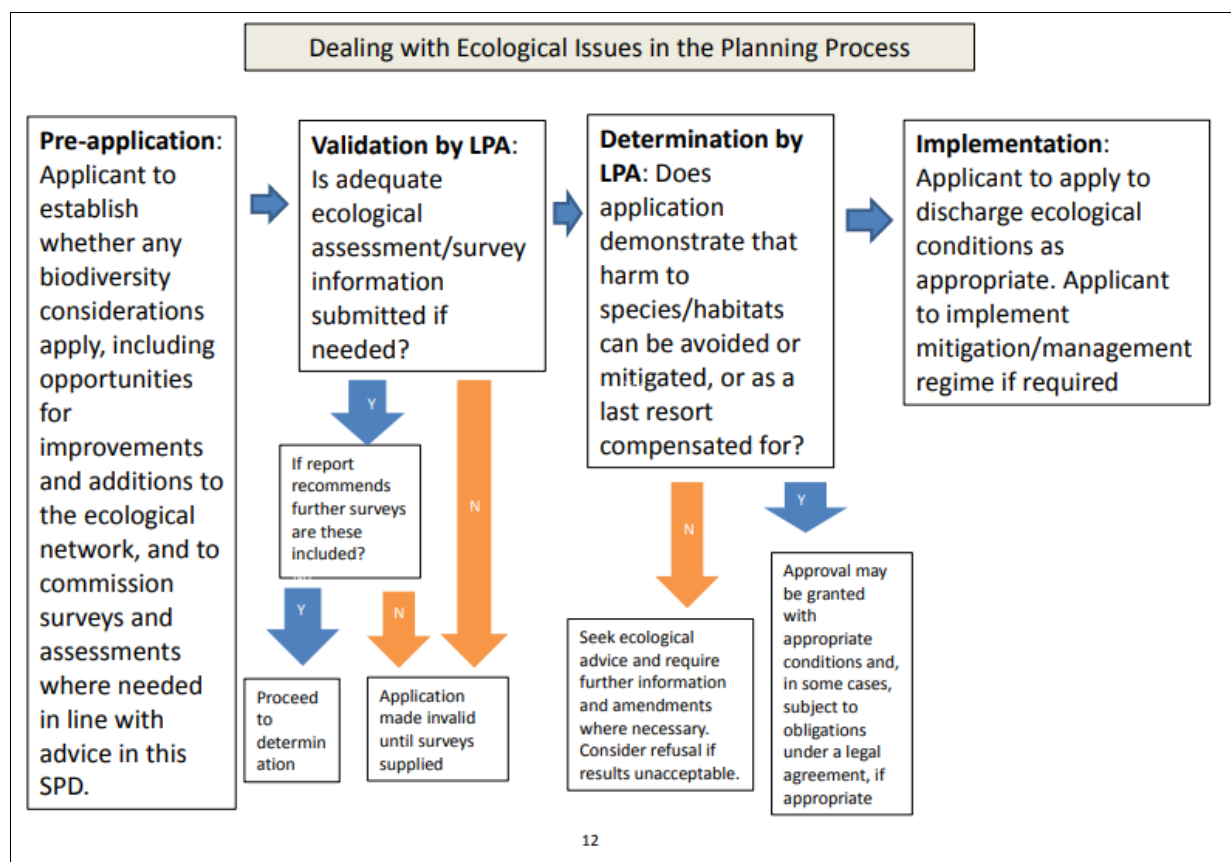


Figure 2.1 - Dealing with ecological issues in the planning process

3.0 Protected Species in Manchester

- 3.1 Up to ten bat species have been recorded in Greater Manchester, most of which use built structures notably occupied residential properties for roosting. All bats feature on the local biodiversity action plan for the area; the most frequently encountered bat species is the Common Pipistrelle (*Pipistrellus pipistrellus*) which will roost in building crevices, and its abundant status in Greater Manchester is reflected throughout the UK.
- 3.2 Black Redstart (*Phoenicurus ochruros*) is listed under Schedule 1 of the Wildlife & Countryside Act (1981) (as amended); additional to protection from nest destruction, Schedule 1 listed species are also protected from disturbance. The species is red-listed on Birds of Conservation Concern (BoCC 4) with fewer than 100 breeding pairs recorded in the UK; decline in Manchester is part-attributed to regenerative works across the city resulting in the loss of nesting sites and feeding areas as this is a species typically linked with abandoned sites close to water, railways and industry, whilst habitat such as forest, meadow and areas of dense vegetation of any height are typically avoided. Black Redstarts have their own action plan within Greater Manchester (Greater Manchester Biodiversity Action Plan: Black Redstart) which recommends enhancement for this species in suitable areas across the GM conurbation.

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 (© 2020/21) 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 GMEU 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 as made **bold** above can be applied at the site of the existing former public house Ducie Arms whilst following best practice, it is considered unnecessary to conduct a commercial data request following the desk study effort and daytime assessment at this time, which offers a proportionate level of survey effort. However, if a data search is considered necessary by the Local Authority advisory body to inform the ecological impact assessment following any further surveys recommended in this report, 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 diurnal inspection and assessment of the building and site in relation to bats and breeding birds was conducted on 1st March 2021 in clear, sunny conditions (2°C) wind 1/12 (Beaufort scale), 0% cloud, by Mr. M. Pritchard ACIEEM, a multiple protected species licenced Ecologist of four years (Natural England Class 1 Bat Licence: 2020-5039-CLS-CLS) who is additionally an accredited agent on the Class 2 Natural England bat licence of Mrs. K. Wilding (CLS-14227).

- 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; a building was 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. No internal assessment took place. External elevations were investigated with the aid of 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 were able to be surveyed without constraint.

- 4.9 The surrounding habitat was also considered in terms of general suitability for bat and bird species associated with the local habitat types.
- 4.10 Trees within the site / likely area of impacts were inspected for places that may be of value to bats and to determine if evidence of use was present; this typically involves a ground level search for potential roost features along with an investigation of those features using a high powered torch or close focus binoculars. Potential roost features can include woodpecker holes, rot holes, hazard beams, other vertical or horizontal cracks or splits in stems and branches, partially decayed lifted bark, knot holes, man-made holes, tear-outs, cankers in which cavities have developed, other hollows or cavities, including butt-rots, double-leaders forming compression forks with included bark, gaps between overlapping stems or branches, partially detached Ivy with stem diameters in excess of 50mm, or bat/bird boxes. Trees (where present) would also be checked for evidence of nesting birds and suitability for relevant species. All trees were able to be surveyed without any constraint.
- 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 building was conducted when most birds are within the early stages of their breeding season (this is typically March-August inclusive). Elevations were inspected for evidence 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,
- Swallow (*Hirundo rustica*): BoCC green status but vulnerable to development.

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 Black Redstart, a species protected under Schedule 1 of the Wildlife & Countryside Act (1981) (as amended) with its own Biodiversity Action Plan in Greater Manchester.

4.14 The results, conclusions and recommendations are based on a number of 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 are based on a number of factors i.e.

- Skills and experience of the surveyor,
- Knowledge of bat and bird ecology relevant to the site location and geographical range,
- Nature of the immediate and surrounding habitat in relation to shelter, foraging and commuting opportunities

4.16 All aspects of the field survey were undertaken in line with government and CIEEM (2020) standing guidance during the COVID-19 pandemic.

4.17 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. Pritchard.

5.0 Limitations

- 5.1 The survey was conducted at a time when bats are outside of their active season and are within the hibernation season a period when bat activity is significantly reduced; however, throughout March bats are beginning to forage on warmer nights. Evidence of bats can be less apparent in March particularly on external features exposed to wind and rain, however bat roost potential and suitability of potential roost features can be adjudged as conclusively as within the active season of bats, saving time and unnecessary delay to applicants; thus, frequently the assessment can be as conclusive as if carried out within the active season, though applicants should be aware of the risks. Survey timing is not considered a constraint in this instance.
- 5.2 The timing of the survey allowed a comprehensive assessment of trees for evidence of bat roost value and/or previous bird nesting, given an absence of foliage.
- 5.3 No internal access was attained by the surveyor thus solely the external fabric of the building was assessed. Internal access allows a more comprehensive and robust survey in most circumstances, though in this instance following the field survey results, in accordance with current government and CIEEM (2020) standing guidance during the COVID-19 pandemic, the Ecologist is satisfied that despite possible survey constraints, no significant limitations were experienced at the site that might adversely influence the results, conclusions and recommendations of this report.

6.0 Desk Study Results

- 6.1 Ducie Arms (referred to in-part as “the application site”) is situated at the corner junction plot of the A6 Stockport Grove and the A5184 Plymouth Grove adjacent to Hayley Street, set approximately 3.4 kilometres south-east of Manchester city centre, see (see Figure 6.1).

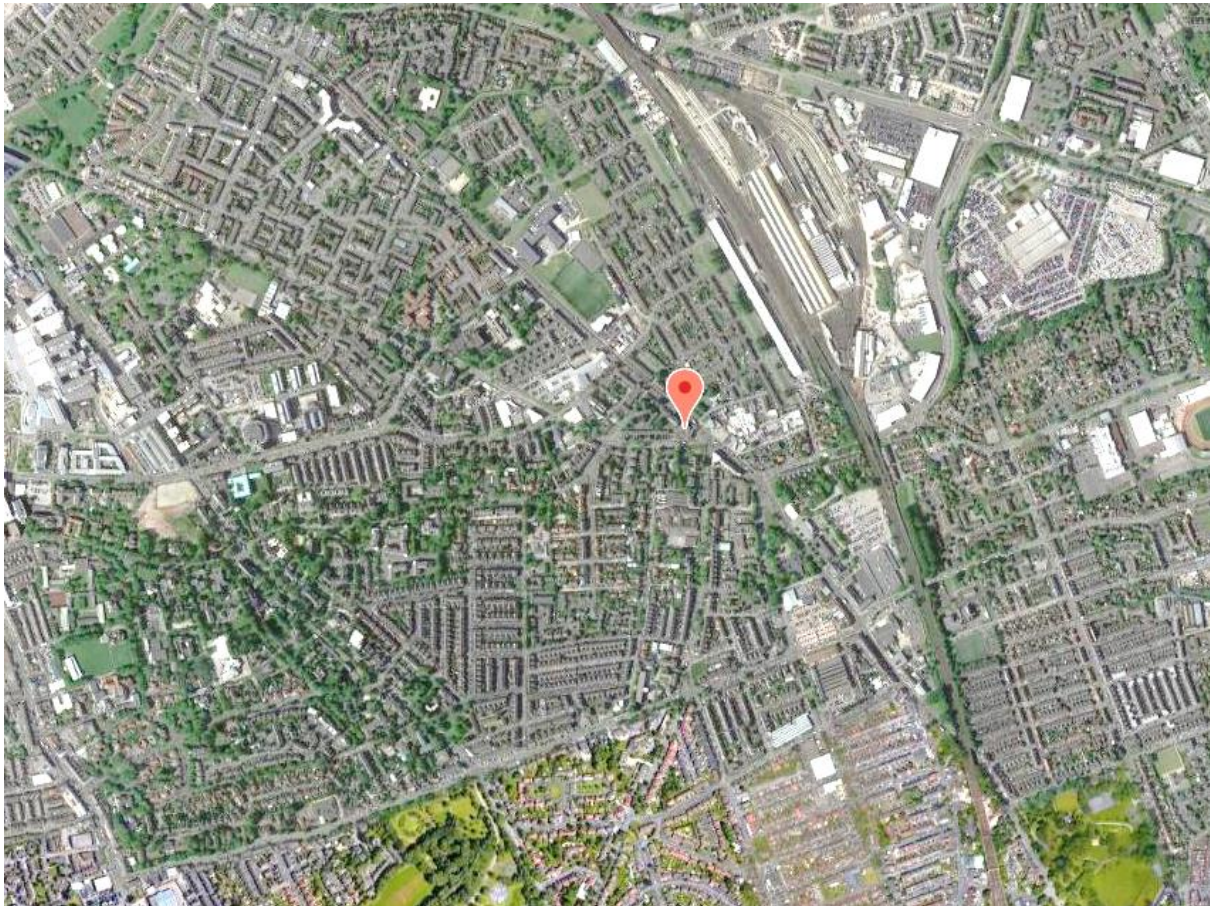


Figure 6.1 - Location of the application site within the landscape (Source: Google 2020/21)

- 6.2 The site is set within an sub-urban environment with typical associated infrastructure that includes a complex network of busy roads, artificial illumination, commercial premises, housing and services including rail network to the north-east, school grounds to the west and a large supermarket to the south-east. Semi-natural habitat is limited to occasional mixed scattered trees.
- 6.3 In the extending environment linear rows of trees line the nearby rail tracks and several residential gardens feature increased volume of tree cover. There are no particularly favourable treelines, hedgerows or water bodies within 500 metres.
- 6.4 There are no statutory designated sites within 2.0 kilometres.
- 6.5 The protected species most typically associated with the habitats described is the Common Pipistrelle (*Pipistrellus pipistrellus*) bat, frequently associated with using buildings in urban settings, and a species which has adapted well to metropolitan settings.

NB: *Where quality habitat is present close to buildings then the percentage use of those buildings, by bats, increases given that roost opportunities are available and vice versa.*

- 6.6 Indeed, an online search of MAGiC maps revealed Five European Protected Species Mitigation licences (EPSML) have been granted within a 2.0km radius of the application site; whilst the licences affect separate roosts the sole species affected are Common Pipistrelle bats, with the nearest EPSML granted at 340 metres to the west.

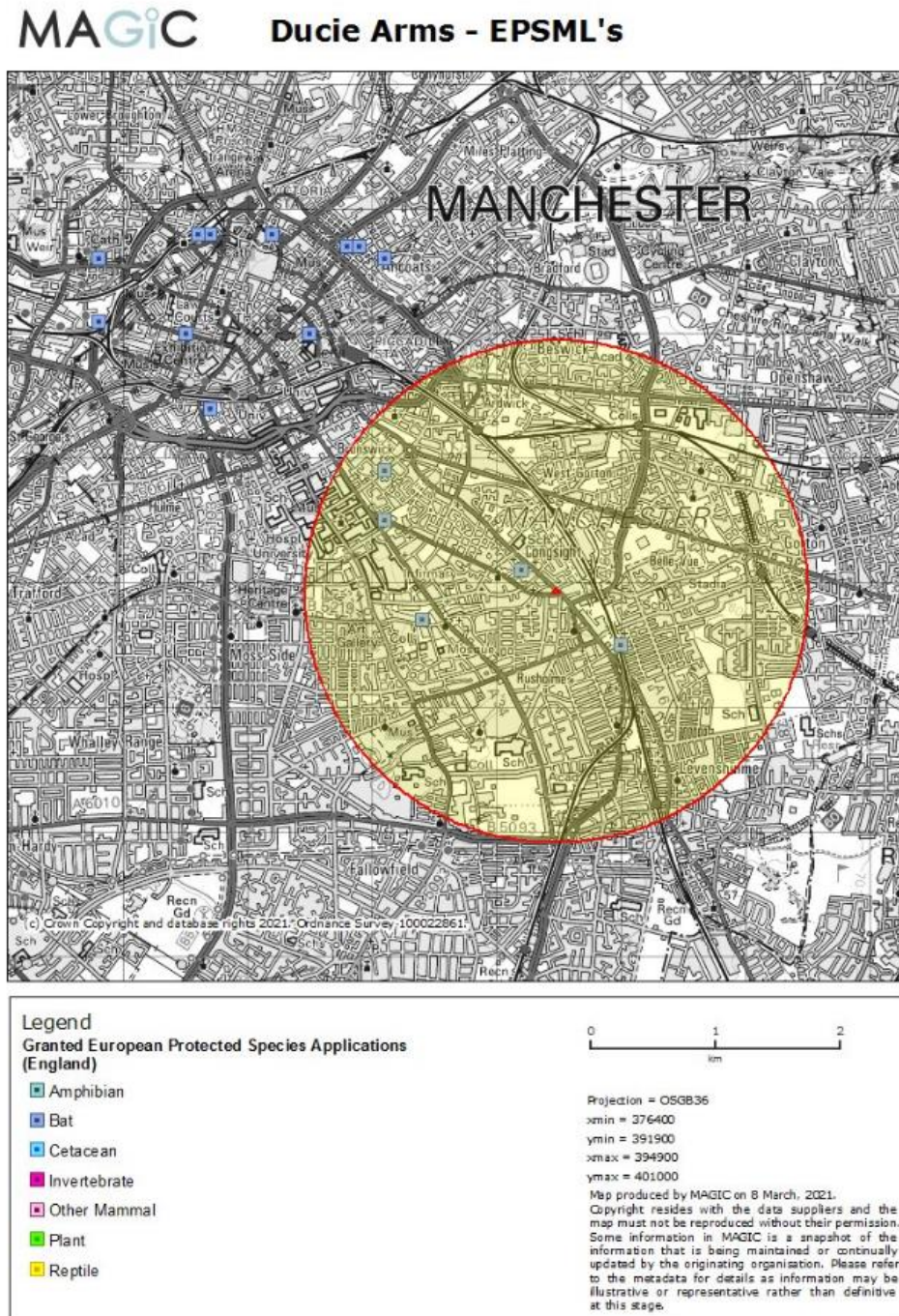


Figure 6.2 - EPSML data for the area within 2.0 kilometres of the Ducie Arms (MAGiC 2021)

- 6.7 Tyrer Ecological Consultants Ltd have previous and ongoing projects involving bats within the area - as such, the following biological data is readily available to the Ecologist up to 2.0 kilometres from the company database - all data has been previously submitted to the LRC serving the area Greater Manchester Ecology Unit (GMEU).

- 340 metres north-west / 2014 / Day roost supporting five Common Pipistrelle,
- 1.45 kilometres north-west / 2014 / Day roost supporting two Common Pipistrelle,

- 6.8 Local habitat is not considered particularly favourable for protected Black Redstart. The presence of waste patches colonised by weed species, with many bare disturbed areas of soil, and an ample supply of song posts and cavities for nest building provides an ideal habitat for this species. The frequency and convenience of nest sites in walls or roofs of buildings has led to the evolution of a close commensalism with man, with populations now present in many large cities in mainland Europe. Suburbs, parks and landscaped areas are less often colonized than industrial sites such as railways, warehouses and large public buildings, such as those found in the city centre of Manchester. Why Black Redstarts do not exploit suburban habitats more often in England as they do in mainland Europe is unknown (Black Redstart Species GM Action Plan, 2009).

7.0 Field Study Results

Bats

- 7.1 The existing former public house 'Ducie Arms' is a brick building with three main structural areas; them being 1) a three-storey area with a tiled, hipped roof, 2) a two-storey area with flat roof, and 3) a one-storey area with flat roof, all structural areas are understood to interconnect. Both flat roof sections were absent of a true roof cover during the survey though did feature loosely fastened bitumastic sheeting with partly exposed sides. The whole structure was unoccupied during the survey and aesthetically adjudged, on the day of the survey, to be in an unfavourable state in need of significant remedial works given signs of vandalism and structural damage.
- 7.2 Whilst no internal assessment took place, much of the building interior had clearly been cleared out with a large pile of dumped aggregates located in the associated former car park hardstanding within the grounds of the former public house. The upper floors were observed to be accessible via several windows left ajar. The internal can be considered to be variably spacious, draughty and illuminated. Given the sub-urban setting, local habitat types and absence of local biological records concerning most bat species other than Pipistrelle, the building is highly unlikely to be used by loft-dwelling species such as the Brown long-eared (*Plecotus auritus*) bat, a species more commonly associated with park and pasture / connected gardens / hedgerows / woodland type of habitat.
- 7.3 Whilst it is currently unclear whether or not any conventional roof lining is present below the roofing tiles of the three-storey area, it should be clearly stated the presence of roof linings, such as bitumen underfelt (for example), typically improves a buildings value to bats notably for crevice-dwelling bats of the *Pipistrellus* genus, whereby the bats roost between linings and roof cover materials where external opportunities exist. On the flip-side an absence of roof linings can lower a structures value in the same respect, and value can be lowered further where no gaps are present in the roof.
- NB:** *The breeding roosts of Pipistrelle bats are proportionally higher in occupied residential dwellings were 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 Externally, the roofing tiles of the three-storey section all appeared tight-fitting with no notable gaps or crevices observed in the ridge tiles or the four down gradient hipped tiles. All common roof tiles appeared to be interlocked. Brickwork was notably chipped and weathered, though no notable splits, cracks or crevices were observed that could harbour a bat roost; a single ingress/egress opportunity exists in the western elevation facing Hayley Street by way of a large hole/opening in the brickwork façade, but this feature was being used during the survey by an abundance of Feral Pigeons likely to be breeding/nesting inside the available cavity (see Appendix I).

The flat roofed sections of the building permit entry inside the building and to areas of the wall plate, however are fully exposed to wind and thus likely susceptible to draught and frost, thus lowering the probability of use by bats. These areas also allow additional opportunities for pigeons.

- 7.5 UPVC fascia board is affixed to the southern and eastern elevations of the three-storey sections, below plastic guttering. Both fascia's appeared to be slack-fitted against the brickwork, and thus may provide minor crevice potential.
- 7.6 No trees on site have bat roost potential, given an absence of suitable roost features found. The small group of trees present however should be considered valuable to wildlife in a local context in that they could provide foraging/commuting habitat.

Breeding Birds

- 7.7 In relation to Schedule 1 (WCA) specially protected bird species such as Black Redstart, no evidence was found to suggest any form of building use or historic nesting, and the setting offers no real value to this species. Records of Black Redstart are known further towards the city centre where green roofs, old canals, bare disturbed areas of soil, warehouses and large public buildings offer more variety and opportunities for this species to thrive.
- 7.8 In relation to more common bird species, confirmed evidence of breeding behaviour by Feral Pigeon (*Columba livia 'domestica'*) was observed during the survey and birds were seen to be coming/going inside the building via a hole in the western elevation facing Hayley Street and seen perched on the window sill inside the structure. Access inside the building is also available in the lower storey regions and it is likely a fair abundance of pigeons use the structure consistently given its abandoned, convenient to access state. Likelihood of other bird species using the building is unlikely.
- 7.9 The trees present offer birds opportunities for nesting during the breeding bird season in particular, though no evidence of breeding was found during the survey.

8.0 Conclusions & Recommendations

- 8.1 Based upon the findings of the survey covered through sections 6.0-7.0 of the report, the Ducie Arms former public house is determined to offer 'Negligible' bat roost potential in accordance with Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016) (Figure 8.1), however, there exists two limited features that could, in unlikely circumstances, be used by opportunistic bats on commute between more favourable roost habitat. As such reasonable avoidance measures are recommended for bats, prior to any demolition work, in accordance with the Bat Workers Manual (2004).

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.

Figure 8.1 - BCT Extract

- 8.2 Prior to any demolition works and within the preceding 72 hours it is recommended reasonable avoidance measures for Bats are carried out under the supervising guidance and behest of a licenced Bat ecologist acting as Ecological clerk of works (ECoW); the ECoW in attendance should:
- supervise a soft-strip removal of the fascia boards to the south and eastern elevations of the three-storey section of the building,
 - seal up or remove potential roost features where it can be conclusively ascertained bats are absent,
 - supervise removal of any other features deemed necessary by the ECoW in attendance.
- 8.3 Under ecological supervision areas as bullet pointed above should be checked for any evidence of Bats, including incidental presence, droppings, dead animals or other signs of roost use, such as oil staining and smells. Access should be arranged to the areas above via a mobile lifting platform (cherry picker) (recommended) or scaffolding. Where scaffolding will be erected, it should maintain existing openings/potential access and not lean against fascia boards, or otherwise, that might cause modification, sealing or damage. Any works involving scaffolding should be carried out between September and April, and not within the active season of bats (May-August).
- 8.4 Following the pre-demolition checks, if no evidence of bats is observed during the ECoW supervision, no implications are triggered, and the work schedule should proceed to completion.
- 8.5 If at any point evidence of bats is located (see Figure 8.1), works should immediately cease as a bat roost will have been identified, triggering a requirement to re-assemble the dismantled feature(s) as close to identical as possible. The Applicant should be aware that where bat(s) or their roost(s) are found and will be impacted, then an EPSML may be required to legally commence with the works and bat surveys will be activated/necessary to gather such information as species present, roost type, abundance and behaviour on site.
- 8.6 No recommendations are necessary in relation to bats and trees at this time.



Figure 8.1 - Indicative evidence of bats - droppings, left / Common Pipistrelle bat, right - for ref

8.7 No impacts are applicable in relation to any Sch.1 (WCA) specially protected bird species such as Black Redstart and no further surveys or recommendations are necessary in relation to specially protected birds at this time. As the proposals present the provision of green walls and a flat roof for solar panels, proposals may consider:

- native species use on the green walls,
- a green/brown roof that provides a foraging and potential nest area for Black Redstart, Grey Wagtail and other urban associated species,

See Appendix II for further recommendations on the above.

8.8 In relation to common birds, Feral pigeon are breeding inside the building as confirmed during the survey. Feral Pigeon breeding presence may need to be addressed from a pest control point of view, as breeding habits in relation to this species are untypical of other bird species and can last throughout the year. A General Licence is therefore likely to be necessary.

8.9 From 1 January 2021, you must follow the conditions of general licence GL41 to control certain target birds for the purposes of preserving public health or public safety. The main changes to the licence conditions are:

- Species that can be controlled under licence are listed by 3 health and safety purposes of: slips and falls; spread of human disease; birds nesting,
- Magpie, carrion crow and rook are removed from the licence,
- Licence users must comply with the standard licence conditions for trapping wild birds and using decoy birds in traps (WML-GL33),

- You may use the licence on or near a protected site as long as you have any necessary consent from Natural England to do so and comply with any site-specific conditions on the licence,

For further information on General Licencing see - [Wild birds: licence to kill or take for public health or safety \(GL41\) - GOV.UK \(www.gov.uk\)](#).

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Appendix I: Site Photographs



Plate 1 - North-facing elevation of Ducie Arms former public house



Plate 2 - East-facing elevation of Ducie Arms former public house



Plate 3 - West-facing elevation of Ducie Arms former public house



Plate 4 - Note the presence of Feral Pigeon (*Columba domestica* 'livia') exiting the building via damage in the brickwork



Plate 5 - South-facing elevation of Ducie Arms former public house



Plate 6 - South-facing elevation of Ducie Arms former public house, alternative angle



Plates 7-8 - Trees at the site in the south-east of the plot

Appendix II: Biodiversity Enhancement Strategy

Bats - 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.



Green Roof/ Brown Roof

A 'Green Roof' or 'Brown Roof' can be incorporated onto flat areas of roof and can help form an important ecological mechanism in urban areas by 1) providing a vital role in helping cities/towns adapt to the effects of climate change by reducing the need for artificial cooling in hot weather, and 2) attenuating or capturing rainwater runoff, whilst 3) providing a range of habitats for urban wildlife including Black Redstart and pollinator species.

Planting should always consist of native species at a low density. Substrate may include a shallow topsoil or topsoil overlaid by gravel and species most appropriate for planting within any roof area include the following:

Common Toadflax (*Linaria vulgaris*)
Common Vetch (*Vicia sativa*)
Cornflower (*Centaurea cyanus*)
Cowslip (*Primula veris*)
Hoary Plantain (*Plantago media*)
Lesser Stitchwort (*Stellaria graminea*)
Musk Mallow (*Malva moschata*)
Rough Hawk-bit (*Leontodon hispidus*)
Scarlet Pimpernel (*Anagallis arvensis*)
Selfheal (*Prunella vulgaris*)
Sheep's-bit (*Jasione montana*)
St Johns-wort (*Hypericum perforatum*)
Wild Grasses (*Poaceae*)
Wild Marjoram (*Origanum vulgare*)
Wild Pansy (*Viola arvensis*)
Yarrow (*Achillea millefolium*)

Autumn Hawk-bit (*Leontodon autumnalis*)
Birds-foot Trefoil (*Lotus corniculatus*)
Black Medick (*Medicago lupulina*)
Bladder Campion (*Silene vulgaris*)
Common Knapweed (*Centaurea nigra*)
Common Spotted Orchid (*Dactylorhiza fuchsii*)
Corncockle (*Agrostemma githago*)
Crested Dogs-tail (*Cynosurus cristatus*)
Red Fescue (*Festuca rubra*)
Sheep's Fescue (*Festuca ovina*)
Small Scabious (*Scabiosa columbaria*)
Thrift (*Armeria maritima*)
Viper's-Bugloss (*Echium vulgare*)
Wild Basil (*Clinopodium vulgare*)
Wild Red Clover (*Trifolium pratense*)
Yellow Rattle (*Rhinanthus minor*)



Black Redstart provision

In conjunction with the above: the integral Black Redstart nest box is intended to be built into walls to provide nesting cavities. This provides much needed nesting provision for this protected and threatened Red listed species. Constructed from FSC certified Wood Stone this nest box will not deteriorate like a traditional wooden nest box. Externally fitted boxes are also available.



For information see - www.nhbs.com/woodstone-build-in-open-nest-box