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8-16 Newton Street, Manchester, M1 2AN

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Inspection & Assessment in Relation to Bats and Breeding Birds

Prepared for:

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Summary

A proposed Planning Application regarding the building comprising 8-16 Newton Street, Manchester is understood to involve the refurbishment of the existing building, including re-roofing for use as office and retail use. The Tyrer Partnership was therefore commissioned to undertake a daytime assessment of the building in relation to bats and breeding birds during January 2018, Atelier MB Ltd on behalf of the site owners, commissioned the inspection and report. As part of the Local Authority's Planning Policies, ecological surveys are generally required, prior to permission being granted, particularly where a protected species is or may be present that could be affected by the proposals for which the application seeks consent.

The structure itself is located in a highly urbanised and illuminated environment within Manchester city centre with no favourable connecting features typically utilised by bats, such as trees within a one kilometre proximity to the building.

The interior assessment of the building found that all floors, including basement compartments, are fully illuminated and draughty; upper floor compartments (fourth and fifth floors) also have abundant evidence of Feral Pigeon presence throughout. Thus, the interior of the building is deemed to be unsuitable to the specific roosting/breeding requirements of loft-dwelling species of bat; typical to the nature of the building a loft space is absent throughout the structure and roofing underfelt was determined to be absent.

An external assessment found numerous ingress opportunities located to all aspects of the structure in the form of gaps under slates, within brick work and at the roof verge. Notwithstanding the number of potential ingress opportunities possessed by the building, given the extremely poor quality of immediate and extending habitat, absence of underfelt and generally fully illuminated nature of the structure, the building has been categorised as offering "negligible" potential for loft and crevice-dwelling species of bat. Precautionary measures have been recommended during roofing refurbishment works contained within section 7.

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.

No evidence of nesting birds was located during inspection of the building, however the evidence of abundant roosting Feral Pigeon was found in the form of feathers and faeces throughout upper floor compartments. Additionally, local breeding populations of Schedule 1 listed Black Redstart and Peregrine Falcon are known to be present within the immediate vicinity; although no historic nests or evidence of nesting by these species was located, potential for nesting is however present. It is therefore recommend that if site operations are undertaken within of the breeding bird season (March-August) the building should be re-investigated by an ecologist; additionally provisions for Black Redstart and Peregrine Falcon could be incorporated within the proposals (see Appendix II).

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1.0 Introduction & Reason for Surveys

1.1 A proposed Planning Application regarding the building comprising 8-16 Newton Street, Manchester is understood to involve the refurbishment of the existing building, including re-roofing for use as office and retail use. The Tyrer Partnership was therefore commissioned to undertake a daytime assessment of the building in relation to bats and breeding birds during January 2018. Atelier MB Ltd, on behalf of the site owners, commissioned the inspection and report. As part of the Local Authority's Planning Policies ecological surveys are generally required, prior to permission being granted, particularly where a protected species is or may be present that could be affected by the proposals for which the application seeks consent.

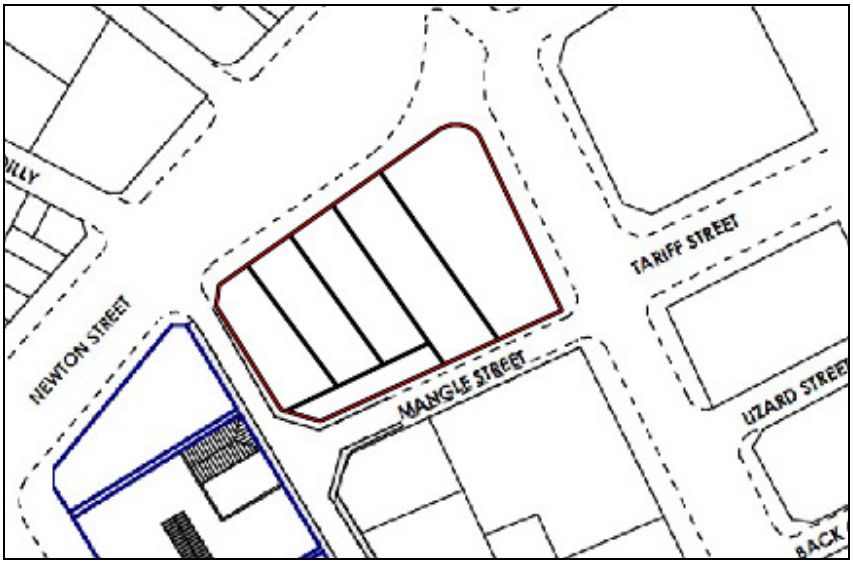


Figure 1: Existing site plan (red-line boundary)

1.2 The aim of the inspection was to initially ascertain if the building is of value to bats or breeding birds; if it was found to be suitable for bats, signs of use were located or the survey was inconclusive 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 (EPSML) would be required to legally proceed with the development.

1.3 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.

2.0 Protected Species & Their Requirements

2.1 All British bats and their roosts are afforded protection under the Wildlife & Countryside Act (1981) (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 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 and enhance 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

2.3 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" which essentially is the same 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.

2.4 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 of the Act, including Peregrine Falcon and Black Redstart, are afforded a greater level of protection. Where nesting birds are present then work should be timed outside of the nesting season (March – August) so as to avoid disturbance.

2.5 Both Peregrine Falcon (*Falco peregrinus*) and Black Redstart (*Phoenicurus ochruros*) are known to be resident and breed in urbanised, often derelict areas within Manchester city centre in populations consisting of one and 2-3 breeding pairs, respectively. The Peregrine Falcon is thought to be increasing in the area and nationally, Black Redstart is thought to be in decline within Manchester due largely to the regenerative works across the city; it is one of Britain's rarest bird species and has its own action plan within Greater Manchester; therefore both species' local conservation status should be considered ofto be important.

3.0 Bat Species in Greater Manchester

3.1 Up to 9 bat species have been recorded in Greater Manchester most of which use built structures, notably occupied residential properties, for roosting. The most frequently encountered species is the Common Pipistrelle bat (*Pipistrellus pipistrellus*) and its abundant status in Greater Manchester is reflected throughout the UK.

4.0 Survey Methodology

4.1 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.

4.2 In context with the above the survey was conducted by Mr J Styles (AMRSB), ecologist and accredited agent on the Class 2 Natural England bat license of Mrs K Wildling (CLS-14227), a highly experienced bat surveyor, accompanied by Mr M Pritchard, of The Tyrer Partnership. The results, conclusions, and recommendations have been assessed by Mr Irwin, director of The Tyrer Partnership and his assessment concurs with that of Mr Styles and Mr Pritchard.

4.3 A data search of localised bat/bird records was not sourced, as a sufficient level of information on which to establish the potential use of the building by bats, could be gathered during the site visit. It is also known that on occasions grounded bats have been found within the city centre.

4.4 The daytime survey was conducted on 12th January 2018 when the building that will be refurbished was inspected for potential places that may be of value to bats and to determine if evidence of use was present. A loft space is absent within the building; therefore, the interior was considered in terms of its suitability for roosting bats and inspected for evidence of bat use with the aid of high powered torch. All external elevations were investigated from ground floor level, with the aid of a high powered torch and close-focussing binoculars, for places that are frequently used by bats as roosts or as access into roost chambers. No trees were present within the survey boundary or immediate vicinity.

Criteria for roost assessment are based upon the following determinant which is based upon the Bat Conservation Trust 'Bat Surveys: Good Practice Guidelines' (2016): (Figure 2)

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 2 – BCT guidelines extract

4.5 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 the immediate and surrounding habitat in relation to foraging opportunities
- Condition of the building
- Presence/absence of a loft space
- Presence/absence of roost potential
- Value of roost potential – if present

5.0 Constraints

5.1 The survey was undertaken outside of the breeding season of bats, when maternity colonies have dispersed and bats are within their hibernation season. During the site visit, no access constraints arose during the building assessment, and a full internal appraisal and inspection of it was achievable in relation to assessing the level of bat roost potential that may exist.

5.2 Access onto the roof, whereby a more thorough external investigation of roof features could be achieved was not possible at the time of the survey due to safety hazards in accessing a hatch leading onto the roof. Therefore, a full external assessment of potential bat roost features/areas that may contain historic bird nests was not fully possible.

5.3 Notwithstanding the above it is considered that there were no significant survey constraints that would prevent the gathering of information on which to base conclusions and recommendations.

6.0 Daytime Results

6.1 The building at 8-16 Newton Street, which is the subject of the current planning application, is located in a highly urbanised environment located within Manchester city centre. The immediate habitat to the site consists entirely of hardstanding and buildings such as apartments, retail units and industrial complexes; no tree lines or significant stands of vegetation exist within a 1 kilometre radius which severely diminishes habitat suitability for the foraging/commuting habits of bat species, most notably the Common Pipistrelle (*Pipistrellus pipistrellus*) which is typically associated with both urban and rural environments.

6.2 The extending habitat follows to a similar nature as that of the immediate habitat with the addition of other environs including grassland, scrub, areas of woodland and tree lines; these are located at approximately 1.3 – 1.4 north-east in areas including Victoria Mill park and tree lines along the River Medlock . These habitats as described are favourable for the species for which the survey was undertaken, i.e. bats and breeding birds. An online search of Magic Maps revealed the presence of twelve EPSML's relating to bats within a 2km radius, all of which were for the non-breeding roosts of Common and Soprano Pipistrelle bat, this is with the exception of one EPSML to the eastern peripheries which is noted to be for a breeding Brown Long-Eared bat roost.

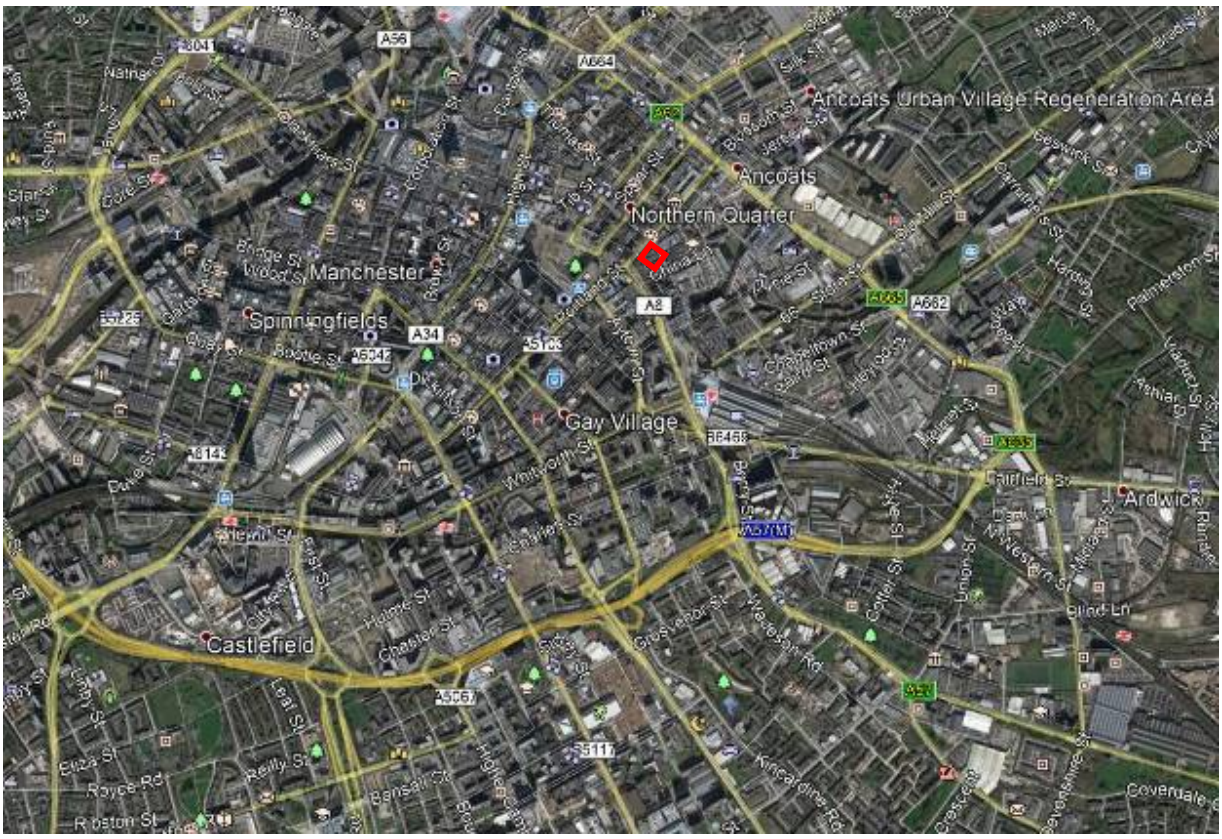


Figure 3: Approximate location of the study site within surrounding landscape (Google maps, 2018)

6.3 The building comprising of 8-16 Newton Street, Manchester that is to be refurbished, is a relatively large 5 storey building of brick construction; roof elements incorporate both slate pitched and flat roof elements. The building is mainly redundant of any former purpose and dilapidated with the exception of some of the basement areas that are used for residential purposes and a restaurant, overall it is to the approximate dimensions 23 metres by 42 metres by 20 metres in height.

6.4 An internal inspection revealed that the interior of the building lacks a loft space or roof void; it is fully illuminated in all compartments and hence, entirely unsuitable for the breeding/roosting requirements of loft-dwelling species of bat - notably the Brown Long-Eared Bat (*Plecotus auritus*); this is a species that, for breeding, prefers large, darkened loft spaces that allow free flight and have consistent temperatures. No evidence of loft-dwelling species was located during the inspection and the immediate habitat offers no suitable foraging/commuting potential to meet the specific foraging requirements of this species group.

6.5 Beneath slates throughout all upper floor compartments lime-mortar finish is evident and underfelt was determined to be absent across the entire roof. Underfelt, where present, can increase the possibility of occupancy within a building by crevice-dwelling species of bat, whereby they roost between primary roofing material and underfelt; this most notably includes the Common Pipistrelle (*Pipistrellus pipistrellus*) bat.

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.

6.6 An external assessment revealed that potential for bat ingress into the building exists to all aspects beneath gaps in slates, at the roof verge and within holes in brickwork. Notwithstanding the presence of potential roosting spaces surrounding the building, the immediate habitat consists entirely of busy main roads and highly urbanised infrastructure that lacks connective features such as hedgerow or trees and is fully illuminated by street lighting. On consideration of both immediate habitat and lack of underfelt throughout the building, the structure has been categorised according to current BCT guidelines as possessing 'negligible' suitability for both loft and crevice-dwelling species of bat (Bat Conservation Survey Guidelines: 2016 3rd edition).

6.7 Evidence of roosting birds was present throughout the upper floors (fourth and fifth) of all compartments in the form of abundant feathers and faeces relating to Feral Pigeon (*Columba livia-domestica*), although no historic nests were located. Both interior and exterior elevations of the building provide platforms which could be used by this species for nesting and crevices exist internally which could contain historic nests.

6.8 Black Redstart have been known to breed successfully within the Manchester Piccadilly basin from 1992 and records of breeding are held in very close proximity to 8-16 Newton Street; no evidence of historic nests were located to the exterior of the building. Notwithstanding not locating historic nests, much of the roof was not visible as access could not be gained and their presence within the breeding season is deemed possible.

6.9 Peregrine falcons are present in Manchester city, with the most recent nesting sites including local landmarks such as the town hall and Arndale centre. Although nesting is not known from the surveyed building, ledges capable of supporting Peregrine nesting exists throughout the exterior of the building and their presence within the breeding season is deemed to be possible.

7.0 Conclusions & Recommendations

7.1 As identified within the survey results, the building at 8-16 Newton Street possesses negligible bat roost potential for both crevice and loft-dwelling species of bat, which instigates no further action in relation to bats according to BCT guidelines. Notwithstanding the negligible categorisation assigned to 8-16 Newton Street, it is recommended that a precautionary approach is undertaken during re-roofing operations. Roof slates, ridge tiles, and any lead flashings should be removed in a controlled and careful method *i.e.* vertically lifted and not laterally removed. The underside of the ridge tiles, the top of the ridge beam, behind lead flashing should be checked for actual bat/s or evidence of bat use. Once roof slates have been removed the exposed wall cavity, if present, should be investigated for actual bat/s or evidence of bat use.

In the event that bat/s or evidence of bat use is/ are found it/ (Plate 1 & 2) it/they should be left in-situ and afforded shelter whilst ensuring that bat/s can exit the location. As a legal requirement contractors should not touch or handle bats or cause them to move in any way. All work should then immediately cease and the bat ecologist contacted for further advice.

Where bat/s or their roost/ place of rest/ shelter would be affected a European Protected Species Mitigation Licence (EPSML) would be required before the works can legally re-commence.



Plate 1: Pipistrelle droppings



Plate 2: Pipistrelle bat

7.2 Given that the surveyed building could support Schedule 1 bird species, it is recommended that if site operations are undertaken within of the breeding bird season (March-August) the building should be re-investigated by an ecologist for the presence of nesting birds; furthermore provisions for Black Redstart and Peregrine Falcon should be incorporated within the proposals (see Appendix II). If a complete "green roof" cannot be incorporated then the method identified in Appendix II could be achieved with several larger "planters"

7.3 The planning applicant may wish to seek advice for a pest control company relative to the presence of feral pigeons.

Appendix I – Site Photographs



Plate 3: Front elevation of 8-16 Newton Street building



Plate 4: Flat roof platform



Plate 5: Side elevation of building



Plate 6: Dilapidated interior of building



Plate 7: Interior of upper floor compartment showing lime-mortar finish beneath slates



Plate 8: Interior compartment within building



Plate 9: Feral Pigeon droppings and feathers in upper floor compartment

Appendix II – Nesting Bird Enhancement Specifications

Nesting Birds

Black Redstart

The integral Black Redstart nest box is intended to be built into walls to provide nesting cavities. This provides much needed nesting cavities for species specifically including Black Redstart. Constructed from FSC certified WoodStone this nest box will not deteriorate like a traditional wooden nest box.

https://www.nhbs.com/equipment/black-redstart?q=&fR[hide][0]=false&fR[live][0]=true&fR[type][0]=5&hFR[subjects_equipment.lvl1][0]=Nest%20Boxes%2C%20Habitats%20and%20Feeders%20%3E%20Bird%20Boxes%20%3E%20Bird%20Boxes%20by%20Species%20%3E%20Black%20Redstart&qtview=200428



Green roof elements can be inorporated onto areas where flat roof exists (as below) and planting should 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 green roof area include the following:

- Perforate St John's Wort *Hypericum perforatum*
- Yellow-wort *Blackstonia perfoliata*
- Common Centuary *Centaurium erythaea*
- Kidney Vetch *Anthyllis vulneraria*
- Common Bird's-foot-trefoil *Lotus corniculatus*
- Black Medick *Medicago lupulina*
- Dove's-foot Crane's-bill *Geranium molle*
- Common Eyebright *Euphrasia nemorosa*
- Betony *Stachys officinalis*
- Ribwort Plantain *Plantago lanceolata*
- Selfheal *Prunella vulgaris*



Peregrine Falcon

These boxes have been developed as a result of experiments carried out over many years, and with the biological knowledge that has been gained about their breeding requirements. The main features include the provision of a spacious, protected and securely attached breeding space for these birds of prey and a robust, long-lasting structure that requires little maintenance

The spacious interior offers the birds plenty of room in which to create a nesting site, and in particular the young have enough space to exercise and develop their flight muscles. The built-in "balcony" makes it easier for the birds to leave and return to the box. A perch is also included, and this is important because the young birds are prone to falling out of the nest site. Webcams can be installed inside the box for monitoring or observation purposes.

https://www.nhbs.com/schwegler-peregrine-falcon-nest-box

