THE TYRER PARTNERSHIP



Ecology Consultants/Surveyors
Specialising in Protected Species

12 Tyrers Close, Formby, Merseyside L37 4BE

Tel: 01704 875781 Fax: 01704 382304 Mobile: 07719 108429

Email address **bat.man@ blueyonder.co.uk**



2a Quadrant Mews, Buxton

Inspection & Assessment in Relation to Bats

Prepared for:

Graham Hitchen
Graham Hitchen Associates
13 Sherbrooke Avenue
Uppermill
Oldham
OL3 6EF

Issued : 21 December 2012

Table of Contents

1. Introduction and Reasons for Survey.....

2. Bats & Their Requirements.....

3. Bat species in Derbyshire.....

4. Survey Methodology .....

5. Constraints .....

6. Results.....

7. Conclusions.....

8. Recommendations & Implications.....

APPENDIX I - Site Photographs

APPENDIX II – Data Search

1.0 Introduction & Reason for Survey

1.1 As part of a proposed Planning Application at the 2a Quadrant Mews, Buxton an inspection and assessment was undertaken in relation to bats. Graham Hitchen Architects, on behalf of their client, commissioned the inspection and report. It is understood that the proposals for the site involve the conversion of the property but the main part of the roof will remain unaffected. 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.

1.2 The aim of the inspection was to initially ascertain if any of the property is of value to bats; if it were found to be suitable for bats or signs of use were located then more detailed surveys would be recommended i.e. dusk emergence or/and dawn re-entry surveys during the main active season of bats, which is May – August. If bats or their roost will be affected by the work then a European Protected Species Mitigation Licence 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. If potential was found to be moderate - high or the results of the survey were inconclusive then recommendations would include dusk emergence or/and dawn re-entry surveys during the breeding season of bats.

2.0 Bats & Their Requirements

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 2010. (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 2010 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 Furthermore where bat/s or a roost** may be affected by development then a licence to derogate from the Conservation of Habitats & Species Regulations 2010 would be required. Licences applications are processed and issued by Natural England subject to certain criterion being met.

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 2010 (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 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

3.0 Bat Species in Derbyshire

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

4.0 Survey Methodology

4.1 The survey was conducted on the 10th December 2012 by Mr S Irwin who has 28 years experience in relation to bat ecology/associated surveys and holds a Natural England Survey Licence (No 20121536 - all counties of England). The building was investigated for potential places that may be of value to bats and if evidence of use was present. A loft space is absent therefore the inspection focussed on the internal floor and walls which were searched for signs of bat use that mainly includes droppings or remains of prey items. The external elevations were investigated from ground level, with the aid of close focussing binoculars, for places that are frequently used by bats as roosts or as access into roost chambers

4.2 At the time of the survey bats will be within their hibernation period thus on external elevations evidence of use that may have been deposited during the summer breeding season is less likely due to the effects of wind and rain. However, evidence of previous internal use, if left undisturbed, can at times still be located; a number of factors are used for the survey methodology, which include:-

Knowledge of bat species relevant to the site location and geographical distribution
Nature of the immediate and surrounding habitat in relation to foraging opportunities
Condition of the building
Presence/absence of a loft
Presence/absence of roost potential
Value of roost potential – if present

4.3 During the survey the surrounding habitat was evaluated in relation to bats as very often roost selection is closely correlated with the surrounding habitat.

5.0 Constraints

5.1 Although the survey was conducted outside of the breeding season of bats a full appraisal and inspection of the building was achievable in relation to assessing the level of bat roost potential that may exist an if signs of use were present within the building.

5.2 Taking into consideration 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 Results

6.1 The data search resulted in seven bat species in the 2 kilometre radius although most records were from Poole's Cavern hibernacula; the closest record to the site is a dead Common Pipistrelle at approximately 100 metres.

6.2 Quadrant Mews is located within Buxton town centre amid a predominately retail and residential environment, notwithstanding the immediate built up nature there are parks, open spaces and tree lines in close proximity to the building; all of which will of value to bats for foraging. The foraging opportunities will be of value to most bat species that can be anticipated in the immediate area, notably for the Pipistrelle, which is the most frequently occurring species in both urban and rural environments. Where such 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.

6.3 The extending habitat to approximately 1.5 kilometres radius still remains largely built up residential areas but beyond that the landscape becomes more rural and is represented by extensive woodland, pasture and water bodies and as such the range of bat species will no doubt increase. All of the previously identified habitats can be considered as being of high value for the species for which the survey was undertaken, i.e. bats.

6.4 2a Quadrant Mews is a large single storey structure; it is brick built with slate pitched roof and a loft space or upper floor is absent; the interior is open to the underside of the ridge beam and it is light filled due a row of roof lights on one roof pitch. It is unoccupied and appears to be redundant from its former purpose and as a result has fallen into some disrepair due to a lack of occupancy and regular maintenance.



Site Location

6.5 Although some of the nearby habitat is suitable for the loft dwelling Brown Long Eared bat (*Plecotus auritus*) the building is of no realistic value to them and within the building no recent or historic evidence was located to indicate their presence or that of any other bat species.

6.6 Whilst inspecting the interior it was noted that a type of loose fabric lining is present beneath the slates on the south east roof pitch and the opposite roof pitch is bare slate. Although one elevation faces south east at which in most circumstances would receive a high level of sunlight during the day that would favour a maternity colony, it is overshadowed by an adjacent building and as a result will block out sunlight for most of the day. The presence and type of lining on only one roof pitch along with the shaded nature of the building will decrease the potential for a maternity roost of crevice dwelling bats, such as the Pipistrelle (*Pipistrellus)* whereby they often roost in the gaps between underfelt and roof slates, subject to external access being available. Breeding roosts of Pipistrelle bats are proportionally higher in occupied residential dwellings where the warm, dry conditions favour the requirements of a maternity colony; however other structures are also used for other roost purposes.

6.7 The external inspection of the building revealed that the ridge tiles are tight fitting as are the roof slates with no opportunities for bats to access and typical gaps in places favoured by crevice dwelling bats such as soffit/facia and barge boards are absent to all elevations. However, there are minor opportunities for bats at some areas of the lead flashing around the roof lights that could potentially provide opportunities for solitary bats by way occasional/transitional use or for hibernation.



Overshadowed nature of the building

7.0 Conclusions & Implications

7.1 From the survey results it can be concluded that opportunities for loft dwelling bats is absent as is high value potential for crevice dwelling bats although minor gaps were noted at some areas of lead flashing. Due to the unoccupied status of the building along with a lack of heating and underfelt beneath the roof tiles, breeding roost value is significantly reduced.

7.2 It can further be concluded that the value of roost potential is considered as being very low and as such dusk emergence or/and dawn re-entry surveys are not considered necessary thus there are no apparent implications in relation bats and the proposed work.

8.0 Recommendations

81 Although roost potential is considered as not being moderate – high there are areas identified as containing very limited opportunities for bats and they will be affected during the work schedule; therefore, and purely as a precaution it is recommended that the where roof lights are to be replaced all lead flashing should be carefully lifted and observations undertaken for the possible presence of bat/s. It is also recommended that as a further precaution this work should be conducted outside of the hibernation season which is broadly October – end of March. If at anytime bat/s are encountered then as a legal requirement work should immediately cease and a bat ecologist contacted for further advice.

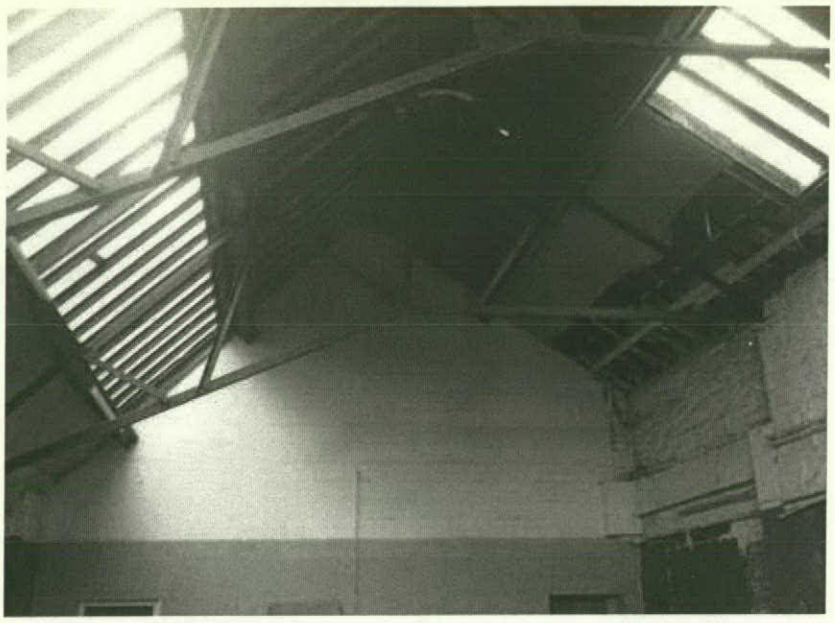
APPENDIX I
Site Photographs



Front elevation



Minor potential at lead flashing



Light filled nature of warehouse interior

Appendix II

Data Search

Appendix II Data Search

Results of record search for bats around Quadrant Mews, Buxton



Common name	Record	Date	Map Ref	Roost Code	Number	Comments
Bat	2599	07-Sep-06	SK055737		1	Bat in living room, escaped.
Bat	2328	19-Mar-98	SK0673		1	Bat with hole in wing, care, released later.
Bat	4153	01-Jun-92	SK0572	40308650	119	Date approx only, assumed 1992. 119 bat counted from roof.
Bat	922	26-Oct-88	SK0573		1	Bat seen flying in area of Old Station House.
Bat	913	16-Jun-88	SK0573		1	Bats in house
Myotis bats	5731	19-Jan-10	SK049725	321	1	NBMP Temp & humidity recorded
Whiskered/Brandt's	5727	16-Feb-09	SK049725	321	1	NBMP Temp & humidity recorded
Whiskered/Brandt's	5726	30-Jan-09	SK049725	321	1	NBMP Temp & humidity recorded
Whiskered/Brandt's	5725	14-Feb-07	SK049725	321	2	NBMP Temp & humidity recorded
Whiskered/Brandt's	3067	14-Dec-06	SK049726	321	2	Hibernation roost. Whiskered/Brandt's.
Natterer's bat	5724	07-Feb-12	SK049725	321	4	NBMP Temp & humidity recorded
Natterer's bat	5723	17-Jan-12	SK049725	321	2	NBMP Temp & humidity recorded
Natterer's bat	5722	08-Feb-11	SK049725	321	2	NBMP Temp & humidity recorded
Natterer's bat	5721	19-Jan-11	SK049725	321	1	NBMP Temp & humidity recorded
Natterer's bat	5720	18-Feb-10	SK049725	321	5	NBMP Temp & humidity recorded
Natterer's bat	5719	19-Jan-10	SK049725	321	1	NBMP Temp & humidity recorded
Natterer's bat	5718	16-Feb-09	SK049725	321	2	NBMP Temp & humidity recorded
Natterer's bat	5717	14-Feb-07	SK049725	321	4	NBMP Temp & humidity recorded
Natterer's bat	5716	12-Feb-07	SK049725	321	4	NBMP Temp & humidity recorded
Natterer's bat	3066	14-Dec-06	SK049726	321	4	Hibernation roost.

© The Derbyshire Bat Conservation Group 10 December 2012

Common name	Record	Date	Map Ref	Roost Code	Number	Comments
Natterer's bat	2424	09-Oct-06	SK049726	321	1	1 on right hand side of entrance to Pooles Cavern, deep in crevice, small number in cave itself. Occasional Natterer's on woodland edge throughout night.
Natterer's bat	3065	12-Feb-06	SK049726	321	4	Hibernation roost, plus one unidentified bat.
Noctule	2427	09-Sep-06	SK049726		1	Single hawking up and down NE side of wood near Poole's Cavern.
Pipistrelle bats	646	20-Aug-03	SK0573	233	0	Bats getting into living area. Droppings presentbelow access point.
Pipistrelle bats	317	07-Nov-00	SK060723	18	0	Up to 10 bats in living area over 2 years none at time of visit
Pipistrelle bats	2323	17-Sep-98	SK060723	18	0	Bats in living area, this and last autumn. V few old droppings in roof space.
Pipistrelle bats	2332	13-Jul-93	SK053736	63	100	Possibly bats present for 6yrs. Also present in property 2 doors away.
Pipistrelle bats	3216	18-Jun-90	SK044729	40308509	40	
Common pipistrelle (45)	6195	19-Jun-12	SK069742		1	Ad M found dead on path
Common pipistrelle (45)	5477	12-May-08	SK058735			VLA Data M Adult
Common pipistrelle (45)	2805	12-Apr-07	SK0573		1	Injured bat found, into care, died later.
Common pipistrelle (45)	2426	09-Sep-06	SK049726		20	Up to 2 dozen coming from housing and feeding in woodland area near Poole's Cavern.
Common pipistrelle (45)	2185	13-Feb-06	SK044729		1	Injured bat, died later.
Common pipistrelle (45)	476	21-Jun-99	SK048736	94	5	Bats seen previous years but this is first time droppings noticed.
Soprano pipistrelle (55)	2425	09-Sep-06	SK049726	321	2	One in crevice, emerged joined by second feeding in cave entrance. Approx dozen coming from housing and feeding in woodland area
Brown long-eared bat	5730	07-Feb-12	SK049725	321	1	NBMP Temp & humidity recorded
Brown long-eared bat	5729	08-Feb-11	SK049725	321	2	NBMP Temp & humidity recorded
Brown long-eared bat	5728	19-Jan-11	SK049725	321	1	NBMP Temp & humidity recorded
Brown long-eared bat	2485	29-Sep-05	SK053727	326	0	No bats at visit. Droppings present.
Brown long-eared bat	1742	21-Sep-04	SK0573		1	Juvenile found during building work, care, released later.