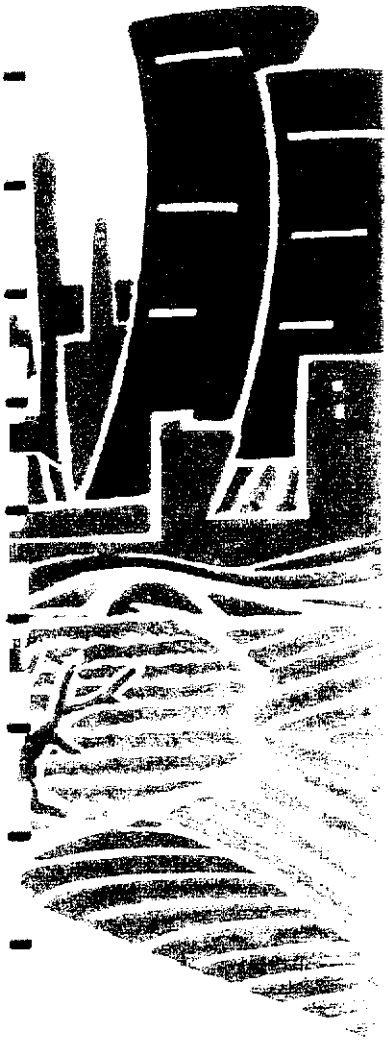


MEMORIAL HALL,
14 ALBERT SQUARE,
MANCHESTER -

BATS AND BARN OWL SURVEY
(APRIL 2006)
FOR
OMBLER IWANOWSKI



- 6 JUL 2006

Cheshire ❖ Ecological
SERVICES

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Compiled by: L A Yates **Date:** 10.05.06

Checked by: [signature] **Date:** 10.05.06

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CONTENTS

		Page No.
1.0	INTRODUCTION.....	1.
2.0	LEGAL PROTECTION FOR BATS.....	2.
3.0	LEGAL PROTECTION FOR OWLS.....	2.
4.0	BATS IN BUILDINGS.....	3.
5.0	OWLS IN BUILDINGS.....	5.
6.0	METHODOLOGY.....	5.
7.0	TIMING OF THE SURVEY.....	5.
8.0	LIMITATIONS OF THE SURVEY.....	5.
9.0	RESULTS.....	6.
10.0	CONCLUSIONS.....	6.
11.0	IMPLICATIONS & RECOMMENDATIONS	6.

PHOTOGRAPHIC PLATES

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1.0 INTRODUCTION

1.1 A bat survey was requested at the Memorial Hall Building, 14 Albert Square, Manchester.

1.2 It is proposed to convert the building into office accommodation and a restaurant.

1.3 Currently the site is vacant and had previously been used as a bar/nightclub and gymnasium.

Site description

1.4 The building is a Victorian Grade 2 Listed Building (Plate 1).

1.5 The flat roof is modern metal clad (new addition) with suspended ceilings below (Plate 2).

1.6 The interior has recently been soft stripped throughout. This was only completed about 2 weeks prior to the survey taking place.

1.7 The walls are generally well plastered and sealed, although areas have been removed during the soft stripping work (Plates 3 & 4).

1.8 The site is in the heart of the city centre surrounded by retail and commercial premises with no nearby foraging areas for either bats or owls.

Aims of the survey

1.9 To ascertain if bats or barn owls use, or have previously used, the site for roosting or nesting respectively.

1.10 To recommend any further actions necessary as a result of the survey findings.

Surveyor details

1.11 The survey was conducted by Mike Freeman, a professional wildlife consultant specialising in bats, badgers and birds. He has been a licensed bat worker since 1984 and a licensed bat worker trainer since 1989. He has been chairman of the Cheshire Bat Group since its formation in 1986 and is a voluntary Bat Warden for English Nature. He is an Associate member of the Institute of Ecology and Environmental Management (AIEEM). Lyndsey Yates assisted Mike Freeman during the survey.

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2.0 LEGAL PROTECTION FOR BATS

2.1 All British species of bat are protected under Schedule 5 of the *Wildlife and Countryside Act, 1981* (as amended). They are also included in Schedule 2 the *Conservation (Natural Habitats & c.) Regulations 1994*, which are the domestic implementation of the *EC Habitats Directive*. This legislation makes it illegal to:

- Intentionally kill, injure or capture (take) bats;
- Intentionally or recklessly disturb bats;
- Intentionally or recklessly damage, destroy or obstruct access to bat roosts.

In this sense a bat roost has been interpreted to mean any structure or place which is used for shelter or protection whether or not bats are present at the time.

Licensing Procedures

2.2 In the case of development works, exemption from the protection afforded for bats under Section 39 of the *Conservation (Natural Habitats, & c) Regulations 1994* can be granted by means of a licence from the Department for Environment, Food and Rural Affairs (DEFRA). Three tests must be satisfied before DEFRA can issue a licence under Section 44 (2) (e) to permit otherwise prohibited acts:

(i) Section 44 (2) (e) states that licences may be granted by DEFRA "*to preserve public health or public safety or other imperative reasons of overriding public interest including those of the social or economic nature and beneficial consequences of primary importance for the environment*".

(ii) Section 44 (3) (e) states that a licence may not be granted unless DEFRA is satisfied "*that there is no satisfactory alternative*".

(iii) Under Section 44 (3) (b) a licence cannot be issued unless DEFRA is satisfied that the action proposed "*will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range*".

DEFRA consults English Nature for advice on the third Test relating to maintenance of favourable conservation status.

3.0 LEGAL PROTECTION FOR OWLS

3.1 All species of wild bird, their nests and eggs are protected under the *Wildlife and Countryside Act 1981* (as amended) and, amongst other things, it is an offence to, with certain exceptions, intentionally or recklessly:

- Kill, injure or take any wild bird
- Take, damage or destroy the nest of any wild bird while it is in use or being built
- Take or destroy the egg of any wild bird

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3.2 Additionally, under the provision of the *Wildlife and Countryside Act* 1981 (as amended) the barn owl (*Tyto alba*) is listed in Schedule 1 – Part 1 of the Act and is protected by special penalties AT ALL TIMES. It is an offence to disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

4.0 BATS IN BUILDINGS

4.1 Buildings provide a choice of safe, dry places made from materials like timbers, bricks, stone, tiles and slates.

4.2 Buildings present a whole range of potential roost sites for bats e.g.: -
In walls:

- Behind external hanging tiles or weatherboarding
- In cavity spaces
- At the top of solid walls

In eaves:

- Above soffit, or behind fascia and barge boarding

In roofs:

- In tunnel under ridge tiles
- Between underfelt and tiles or slates
- In roof space along ridge beams and at timber joints, at gable ends or around chimneybreasts.

4.3 The most obvious use of buildings by bats is between May and August, when the pregnant females gather in maternity roosts to give birth and raise their young.

4.4 Females and young often remain in one site all summer or move about using several roosts.

4.5 Most summer colonies will have dispersed by the autumn, though brown long-eared bats (*Plecotus auritus*) often appear early in the year (early April) and leave later (October or later). These bats occasionally use the roost throughout the entire year.

4.6 Buildings may also be used as temporary or "transitional roosts" by small numbers of adult and immature bats of both sexes, particularly in spring and autumn.

4.7 Many outbuildings are attractive to bats for temporary night-time roosts or as sheltered feeding perches. The latter are indicated by the presence of a lot of insect remains, particularly of moths or large beetles and some droppings.

4.8 Cool, undisturbed, humid places are important as hibernation sites. Most species will tuck themselves into small crevices e.g. between bricks/stonework, and can easily pass the winter there unnoticed.

4.9 Bats are usually concealed in crevices, behind roofing felt, in cavity walls, behind soffits and barge boards, in old timber joints or under ridge tiles and are only occasionally seen out in the open in lofts. Consequently, the key

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identification feature is the presence of droppings. Sometimes droppings may be found on the outside of buildings e.g. on windows, walls or windowsills. Droppings found in loft spaces beneath ridge-boards and around chimneys or gable ends is also typical of bats. Hibernating bats leave little or no field signs.

4.10 Bats are sometimes drawn to open water tanks in lofts in search of a drink. They fall into the tank, cannot get out and eventually drown. Dead bats are often found in these 'open' tanks in roof spaces where bats habituate.

4.11 Another clue to the presence of bats is a characteristic odour. A polished or clean surface near a place where light enters may also indicate habitual usage by bats. Sometimes bats can be heard "chittering" but this is usually in warm summer weather or when they are about to leave the roost to forage at dusk.

4.12 The species most commonly occurring in buildings (usually modern houses in summer) are the two pipistrelle species (*Pipistrellus pipistrellus, Pipistrellus pygmaeus*). These highly gregarious small bats use buildings for breeding during the summer and, in general, the bats disperse during the autumn. They often roost behind soffits, in cavity walls or behind external cladding. In such cases droppings are often found on external surfaces below the roost entrance/exit. The most likely place to find droppings in the roof void are at the gable end wall and along the eaves. In some cases, the bats may roost beneath ridge tiles, on top of the ridge beam or under insulation close to the eaves. Pipistrelles are frequently found overwintering deep in the cracks, crevices and cavities of usually uninhabited buildings (e.g. barns) and in such cases they leave little or no field signs.

4.13 The brown long-eared bat is the second most common species in Britain but is the one most likely to be encountered in roof voids and may occasionally be seen clinging on to timbers near the apex of the roof. Like the pipistrelle, highest numbers may be seen on hot days between June and September when breeding colonies may be present. During the autumn and in cool weather, bats remain concealed in crevices or hollow walls but may appear on mild days or if disturbed. Brown long-eared bats tend to fly around in the open roof void and hang from the ridge during the night, so droppings are usually found scattered over the floor or concentrated in piles beneath favoured roosting areas, typically beneath the ridge beam. In hipped roofs, piles of droppings may also be found in the junction between two hips.

4.14 A number of other species - serotine (*Eptesicus serotinus*), greater horseshoe bat (*Rhinolophus ferrumequinum*) and lesser horseshoe (*Rhinolophus hipposideros*) are dependent on roofs but are not found locally in the area, though there has been the occasional record of serotine in the North West.

4.15 Whiskered (*Myotis mystacinus*), Brandt's (*Myotis brandtii*), Natterer's (*Myotis nattereri)* and Daubenton's (*Myotis daubentonii*) bats may be present in the area and may be found in roofs but they are not particularly common in such sites. Roosting position is variable but they will be found in the same sorts of places as other species.

4.16 There are six different types of bat roost (A M HUTSON 1993)

(i) Spring gathering roosts

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(ii) Maternity roosts
(iii) Mating roosts
(iv) Night roosts and feeding roosts
(v) Prehibernal roosts
(vi) Hibernation roosts

Bats regularly move from site to site even within the above categories.

5.0 OWLS IN BUILDINGS

5.1 There are 5 species of owl resident in the UK. However, only the tawny owl (*Strix aluco*) barn owl (*Tyto alba*) and little owl (*Athene noctua*) use buildings for nesting.

5.2 Owls, in common with other birds of prey, gulls, crows and others, disgorge "pellets" consisting of indigestible food material like bones and fur. When dry, owl pellets are usually grey and it is characteristic that they always contain well-preserved remains of the prey's bones. These pellets are a characteristic field-sign of the presence of roosting or nesting owls.

5.3 Pellets from the different owl species can usually be distinguished on the basis of their size, shape and contents as well as the location where they were found.

6.0 METHODOLOGY

6.1 The building was searched throughout for evidence of bat and/or barn owl usage as described in Sections 4.0 and 5.0 respectively.

6.2 Two surveyors carried out the work using powerful hand lamps and a fibre optic endoscope as aids.

7.0 TIMING OF THE SURVEY

7.1 The survey was conducted on the 25th April 2006.

7.2 The weather was cloudy, grey skies but dry with a temperature of 13° C.

8.0 LIMITATIONS OF THE SURVEY

8.1 The building had recently suffered a high degree of disturbance due to the complete internal soft stripping which included the removal of suspended ceilings, fixtures and fittings and some plasterwork. Such a disturbance would have adversely affected any wildlife that may have been present and removed any evidence of usage.

8.2 Bats can sometimes roost singly or in very small numbers and leave little or nothing in the way of field signs to indicate their presence. In view of this they can easily be overlooked in inaccessible areas.

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8.3 This survey was a daytime survey only. Evening emergence surveys were not conducted due to the lack of evidence and unlikely nature of the site.

8.4 Any field signs of bats on the outside of the buildings associated with previous roosting e.g. droppings on walls, windows etc. may have been washed off during periods of rain and wind.

9.0 RESULTS

9.1 The building was searched throughout including stairwells, fire escapes and basements (Plates 5 & 6). No evidence of bat or barn owl usage was found anywhere.

9.2 The rooftop could not be accessed but photographs supplied by the client showed no features that might be attractive to either roosting owls or bats (Plate 7).

10.0 CONCLUSIONS

10.1 No evidence of bat or owl roosting was found anywhere in the building.

10.2 The building did not look to be particularly attractive for bat roosting, though due to inaccessibility not all cracks and crevices could be searched particularly on the outside of the building.

10.3 The location of the site right in the heart of the city centre is not favourable habitat for either bats or barn owls. However, it is recognised that some Manchester city areas have had bats recorded in them and so, whilst the site is unlikely habitat, usage by bats cannot be ruled out on this basis alone. There is no known barn owl activity in the city centre of Manchester, and barn owls being found here is, in the surveyors opinion, far less likely than bats. In Britain, barn owls can be found in a wide variety of habitat types but are almost always associated with open grassland and woodland edges free from human disturbance.

11.0 IMPLICATIONS AND RECOMMENDATIONS

11.1 As no evidence of bat roosting was found, a DEFRA licence need not be applied for at this stage.

11.2 No evidence of barn owl nesting was found at the site, therefore no mitigation measures are required.

11.3 Obviously, if roosting or nesting is found subsequently then the situation will change.

11.4 In the unlikely event that bats are accidentally discovered during the building operations they should be left as undisturbed as possible and a bat consultant contacted immediately and their advice followed. For health and safety reasons site workers should not handle bats, this should be left to trained bat workers.

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PHOTOGRAPHIC PLATES

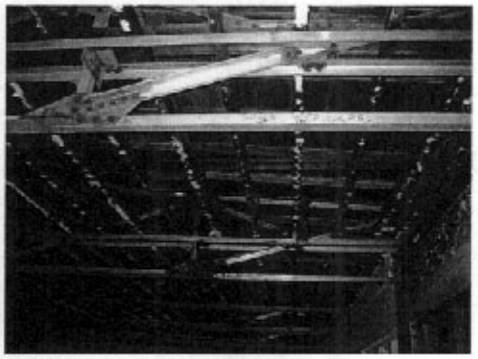
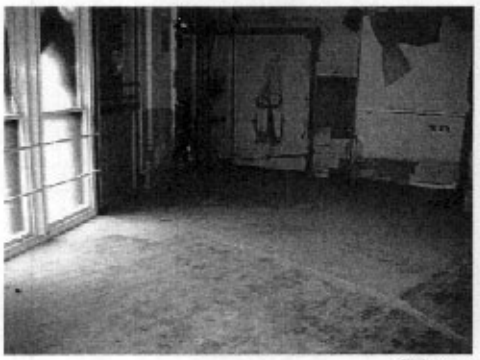
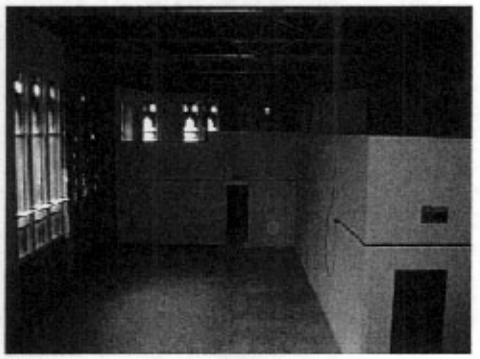
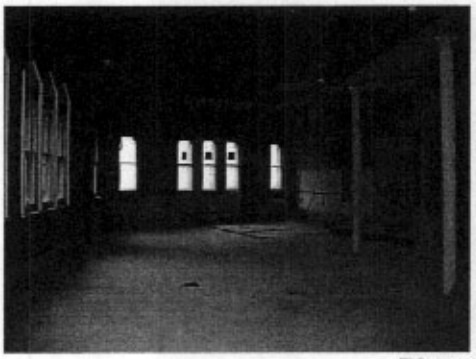
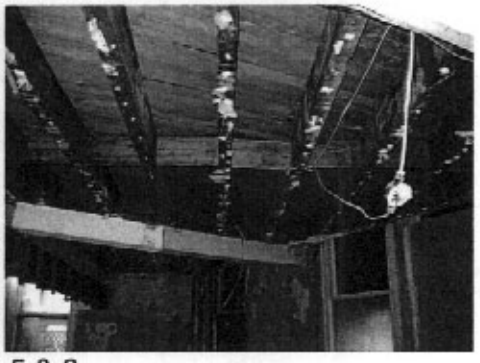



Plate 1 & 2

Plates 3 & 4

Plates 5 & 6

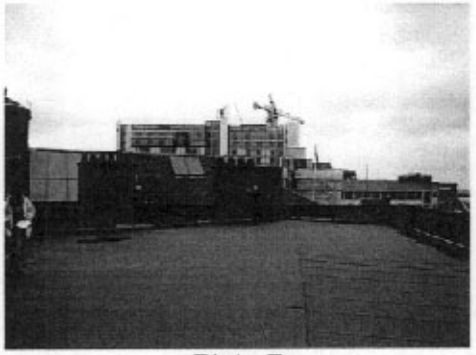


Plate 7