D F Clark Bionomique Ltd

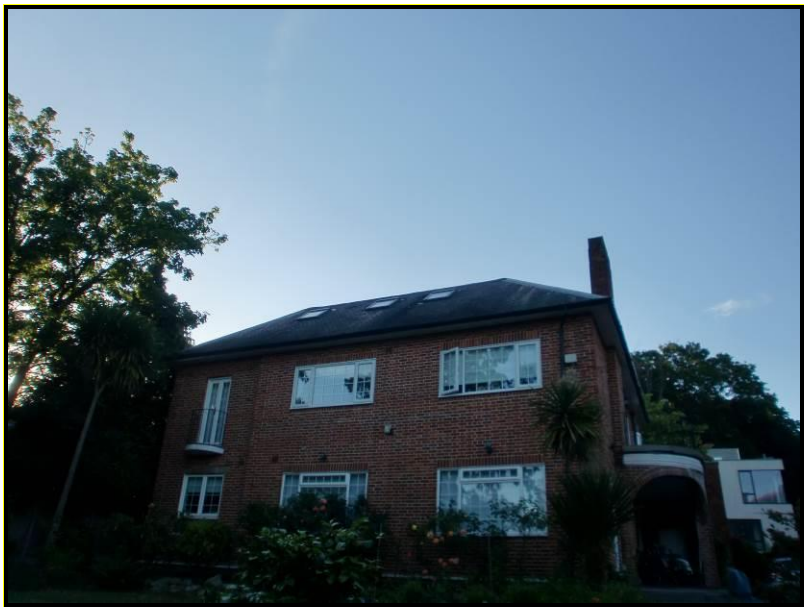
# Bat Survey

**of**

# 6 Nutley Terrace, Hampstead, London

**on behalf of**

## Shamim Shafi



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| Reference: | DFCP 3590 |
| Written by: | David Hope-Thomson BSc (Hons), MSc, MIEEM |
| Checked by: | Samuel Durham BSc (Hons), ACIEEM |
| Date: | 07th July 2015 |

## Contents



Tel: 01621 740876
Fax: 01621 742242

www.dfclark.co.uk

Email:
david.hopethomson@dfclark.co.uk

Andrews Farm
Burnham Road
Althorne
Essex
CM3 6DS

# 1.0 Summary

**1.1** No bat roosts were recorded, and it is unlikely that bats are roosting on site.

**1.2** Following a Phase 1 Habitat Assessment and a daytime bat inspection, undertaken by Middlemarch Environmental in January 2015, No.6 Nutley Terrace was assessed as having high potential to support roosting bats. In accordance with good practice guidelines, further bat emergence surveys were undertaken by D F Clark Bionomique Ltd during June and July 2015. This report contains the results of the further surveys.

**1.3** The surveys were undertaken to inform a planning application associated with the demolition of the existing dwelling and erection of a three-storey building comprising six apartments with associated hard and soft landscaping.

**1.4** The initial inspection, undertaken in January 2015 by Middlemarch Environmental, included an external inspection of the residential dwelling. No internal inspection was undertaken however, the presence of skylights confirmed that the loft space has been converted and is utilised. No evidence of bats was discovered though slipped/missing tiles along with a gap between the soffit and brickwork was identified. However, as the inspection only included areas safely accessible from a 3.5m ladder, a precautionary approach was taken and the building was assessed as having high potential to support roosting bats. Following the results of the initial two bat emergence surveys undertaken during suitable conditions during June and July 2015 by D F Clark Bionomique Ltd, the potential of the building to support bats was downgraded to moderate.

**1.5** The dusk surveys identified occasional foraging and commuting activity by individual common pipistrelle bats. No bats were identified emerging from the dwelling. The results have determined that a European Protected Species Mitigation licence will not be required, as no bat roosts have been identified. No further works in relation to bats are recommended. The findings of the survey remain valid for 18 months.

**1.6** The results indicate that the development is unlikely to result in the loss of any bat roosts. The development could incorporate appropriate landscaping and bat boxes to encourage the local bat population to utilise the area.

**1.7** Recommendations have been made to minimise any detrimental impact on local bat populations from any potential change in artificial light levels at the site caused by the proposals. If the recommendations in this report are implemented, the proposals are unlikely to impact negatively on local bat populations.

# 2.0 Introduction

## 2.1 Instruction

2.1.1 D F Clark Bionomique Ltd were instructed by CGMS on behalf of Shamim Shafi on 22nd June 2015 to undertake bat surveys at 6 Nutley Terrace, Hampstead, London (approximate central National Grid Reference TQ 2665 8498). The site consists of a single residential dwelling with associated garden approximately 0.15ha in size, dominated by amenity grassland with planted shrub beds, and several scattered trees. The site is surrounded on all sides by residential properties both in the immediate and wider surrounds.

2.1.2 Recommendations included within this report are the professional opinion of an experienced ecologist based on the client's initial proposals for the site and the site survey. Reference is also made to a previous site survey and reports carried out by Middlemarch Environmental (RT-MME-118690-01, January 2015 and RT-MME-118690-02, January 2015), which identified the need for bat surveys.

2.1.3 The surveys were carried out by two experienced bat surveyors. The surveys were co-ordinated by David Hope-Thomson, who has been a professional ecologist since 2008 and is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

## 2.2 Aims and objectives

2.2.1 The surveys and report aim to identify the level of bat activity within the site and assess the overall significance of the site for bats. The objectives are to:

- Confirm presence / likely absence of roosting bats on site;
- Identify any bat species using the site;
- Identify any important foraging and/or commuting habitats within the site; and
- Summarise the overall ecological value of the site for bats.

2.2.2 See Appendix 3 for a summary of the national planning policies and wildlife legislation relevant to bats.

# 3.0 Method

## 3.1 Bat Surveys

3.1.1 The bat surveys focused on 6 Nutley Terrace. All parts of the building are due to be demolished and were therefore incorporated into the survey.

3.1.2 Two dusk emergence surveys were carried out based on standard survey methodology recommended in industry standard best practice survey guidance, namely: *Bat Surveys: Good Practice Guidelines* (Bat Conservation Trust, 2012). The surveys were carried out in suitable weather conditions during June and July 2015, with suitable temperatures, no rain and low wind speeds.

3.1.3 The dusk surveys commenced at approximately fifteen minutes before sunset and concluded at approximately 1.5 hours after sunset. Sunset times were taken from the online sunrise/sunset calendar at www.timeanddate.com.

3.1.4 Surveyors were positioned at vantage points close to the building which would offer a clear view of any bats entering or exiting potential roost features and each surveyor was equipped with a Batbox Duet bat detector to allow otherwise unseen bats to be detected. Recordings were made during the surveys to enable post-survey sound analysis to be carried out where necessary.

3.1.5 A summary of the weather conditions can be found in Table 1 below:

**Table 1:** Weather conditions during bat surveys:

| Date | Time<br><br>Start/ Finish | Sunset time | Temp (°C) | Cloud cover (%) | Wind Speed (Beaufort scale 0-12) | Conditions |
|---|---|---|---|---|---|---|
| 29/06/2015 | 21.06 | 21:21 | 21 | 0 | 2 light breeze | Dry, no rain |
| | 22:36 | | 17 | 5 | 2 light breeze | Dry, no rain |
| 06/07/2015 | 21:17 | 21:19 | 20 | 5 | 1 light air | Dry, no rain |
| | 22:48 | | 18 | 10 | 1 light air | Dry, no rain |

### 3.2 Survey constraints

3.2.1 The second bat emergence survey commenced at sunset and therefore there is a low risk that emerging bats were not captured however, given the low activity during both surveys and the limited potential of the features present, this is not considered a significant constraint to the survey or the validity of this report.

3.2.2 Bats use buildings on a seasonal basis and, being mobile creatures, may arrive and start using a site after it has been surveyed, or be roosting offsite during the period that surveys were undertaken. However, this is a standard limitation for bat emergence / re-entry surveys and is not considered a significant constraint to the survey or the validity of this report.

### 3.3 Assessment

3.3.1 The bat roost potential of the site was assessed by D F Clark Bionomique in accordance with criteria outlined in:

- *Bat Surveys: Good Practice Guidelines* (Bat Conservation Trust, 2012)

3.3.2 The survey effort allocated to this building was informed by this guidance document.

# 4.0 Survey Results

## 4.1 Surrounding Environment

4.1.1 The application site is located within a densely residential area. The site is dominated by hardstanding and buildings and provides only limited foraging habitat in the form of typical garden planting and street trees. To the wider north of the site is Parliament Hill, an area of open green space that is likely to provide more substantial areas of bat foraging habitat.

4.1.2 There are no UK statutory designated sites within 2km of the site, or European designated sites within 5km that are designated based on bat species presence. Belsize Wood Local Nature Reserve is located approximately 870m NE. Belsize Wood provides habitat of potential for use by foraging bats.

## 4.2 Preliminary Inspection

4.2.1 The external preliminary roost inspection survey undertaken by Middlemarch Environmental in January 2015 did not identify any evidence of roosting bats such as droppings, food remnants, scratching or urine staining. Features of potential for use by roosting bats were identified, including slipped/missing roof tiles and gaps between the soffits and brick wall.

## 4.3 Bat roost surveys

Dusk emergence survey 1: 29th June 2015

4.3.1 Sunset on the 29th June was at 21.21. Observations began at 21.41 and continued until 22.34. Two experienced bat surveyors carried out the survey, positioned around the previously identified roosting features. Weather conditions were good, with warm temperatures, clear skies, low wind and no rain.

4.3.2 No bats were identified emerging from the previously identified roosting features, which included the slipped/missing tiles or gaps between the soffits and brick wall.

4.3.3 The bat species recorded was soprano pipistrelle *Pipistrellus pygmaeus* foraging from all directions over the rear garden of the dwelling. The first bat activity was first recorded at 21.41, 20 minutes after sunset. Bat activity was then recorded throughout the survey with likely individual bats only. Overall, activity was low.

4.3.4 High levels of street and security lighting were noted illuminating many of the potential roosting features toward the front of the structure.

Dusk emergence survey – 6th July 2015

4.3.5 Sunset on the 6th June was at 21.19. Observations began at 21:17 and continued until 22:48. Two experienced surveyors carried out the survey, positioned around the previously identified roosting features. Weather conditions were good, with warm temperatures, clear skies, low wind and no rain.

4.3.6 No bats were identified emerging from the previously identified roosting features, which included the slipped/missing tiles or gaps between the soffits and brick wall.

4.3.7 Bat activity levels were approximately similar compared to the previous survey. The first bat was observed at 21:38, 19 minutes after sunset. This was a common pipistrelle bat *Pipistrellus pipistrellus*, which entered the survey site from offsite gardens to the south.

4.3.8 At 21:38, 19 minutes after sunset, the above referenced single common pipistrelle was observed frequently foraging within the rear garden area of the site. At 21:45, 26 minutes after sunset, a soprano pipistrelle bat was also recorded foraging over the garden. Foraging activity by individual common and soprano pipistrelles continued to be recorded by the rear garden surveyor until approximately 22:20, when activity reduced to intermittent commuting passes over the garden by individual bats until 22:39, nine minutes before survey conclusion.

4.3.9 As per the findings of the first survey, bat activity was low. As with the previous survey, high levels of street and security lighting were noted illuminating many of the potential roosting features toward the front of the structure.

# 5.0 Conclusions and Recommendations

## 5.1 Designated sites

5.1.1 There are no European designations within 5km or UK statutory designations within 2km of the site designated for their bat interest. The proposals for the site are therefore unlikely to impact on any known sites of international or national importance for bats.

## 5.2 Foraging and/or Commuting Bats

5.2.1 Bat foraging activity on site was low. Low numbers of bats were observed foraging/passing over the rear garden of the dwelling. The first foraging activity by soprano pipistrelle was identified 20minutes after sunset, indicating that the bat was possibly roosting nearby. Typically common pipistrelle bats emerge within 20 minutes of sunset. No bats were however, identified emerging from the dwelling during either of the surveys.

5.2.2 During the construction phase, the loss of vegetation cover and increase in human activity, noise, dust and light levels is likely to have a detrimental impact on bat foraging activity within the survey site. In the absence of mitigation, this will have a low, short-term adverse impact on the foraging resource available to the local bat population.

5.2.3 The development is likely to provide a minor decrease in bat foraging habitat in the long-term. However, the foraging habitat onsite is minor in comparison to the remaining suitable habitat within the wider area. It is considered the site is not of significant importance to any local bat population as it is used by small numbers of common species only.

## 5.3 Roosting Bats

5.3.1 No roosts were recorded. No bats were seen to emerge or enter the residential dwelling, and bat activity was not recorded close to any of the potential roosting features.

5.3.2 No further survey or licensing in regards to roosting bats will be required.

## 5.4 Mitigation Measures

5.4.1 As there are low levels of foraging on site, it is recommended that landscaping is included within the design for the project. The addition of flowering native shrub planting and/or using climbing plants on trellis, walls or fencing is a good way to maximise the area of habitat for wildlife where planting space is limited. Locally native species with recognised benefit to wildlife should be favoured over purely ornamental varieties, for

example species with berries or nectar rich flowers. Night scented flowers will attract moths which, in turn will provide a food source for bats. The installation of bat boxes (see Appendix 2 for a range of bat box options) as part of the proposal would enhance the proposal and benefit bats in the long term and are recommended as an enhancement opportunity. Bat boxes of potential for use by roosting bats include, 1FR Schwegler which, can be installed on the external walls of buildings, either flush or beneath a rendered surface. The 2FE Schwegler wall mounted box provides a summer roosting opportunity and like the 1FR can be installed on the side of buildings.

5.4.2 To maintain the foraging potential of the site, artificial lighting should be kept to a minimum. Motion sensitive security lighting is optimal and it is advised that lighting around the site should be hooded, cowled or shielded and directed to the ground to avoid light spillage onto potential bat commuting or foraging edge habitats and surrounding trees (BCT/ILE 2009).

5.4.3 In the unlikely event that a bat is found during site works, all works must cease immediately and a licensed bat ecologist should be contacted immediately for advice.

### 5.5 Conclusions

5.5.1 Soprano and common pipistrelle bats are widely distributed throughout the UK (BCT National Bat Monitoring Programme (NBMP) 2014 Results).

5.5.2 The implementation of the recommendations given above will ensure that there is no adverse impact upon the favourable conservation status of local bat populations. The recommended landscaping will also enhance the site for bat species given the continued food source associated with the proposed planting. Whilst the recommended bat boxes will increase roosting opportunities on site.

# 6.0 References


Bat Conservation Trust (2009) *Bats and Lighting in the UK*. Available from: http://www.bats.org.uk/data/files/bats_and_lighting_in_the_uk__final_version_version_3_may_09.pdf

Bat Conservation Trust (2012) *Bat Surveys: Good Practice Guidelines, 2nd edition.* Bat Conservation Trust, London

Bat Conservation Trust (2014) National Bat Monitoring Programme Results

Middlemarch Environmental (January 2015) 6 Nutley Terrace*, Hempstead, London, Phase 1 Ecology Assessment*. Middlemarch Environmental.

Middlemarch Environmental (January 2015) 6 Nutley Terrace*, Hempstead, London, Daytime Bat Survey*. Middlemarch Environmental.

Institute of Ecology and Environmental Management (2006). Guidelines for Ecological Impact Assessments in the United Kingdom.

Mitchell-Jones A. J. (2004). *Bat Mitigation Guidelines.* English Nature, Peterborough

The Institute of Lighting Engineers (2007). *Bats & Lighting in the UK*

# Appendix 1:

# Site Enhancement: Roosting Habitat Features

## 1FR Schwegler Bat Tube

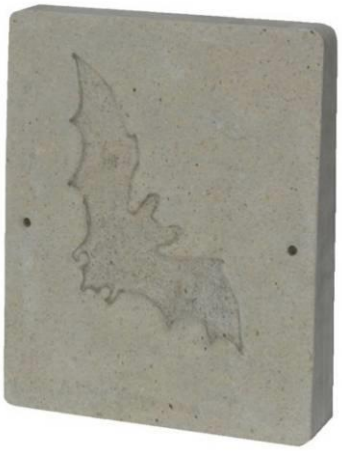
The 1FR Bat Tube is designed to be installed on the external walls of buildings, either flush or beneath a rendered surface. Ideal if you wish the box to be discrete as only the entrance hole will be visible. It can also be painted to match your building with an air permeable paint if desired.

The roost requires no maintenance because droppings fall out of the entrance ramp.

To allow access into existing cavities in buildings use the 2FR Bat Tube.

(Available at: www.nhbs.com)

## 2FE Schwegler Wall-Mounted Bat Shelter



The Wall-Mounted Bat Shelter provides a summer hideaway for bats.

Made from durable, Schwegler wood-concrete, and are to be painted with air-permeable paint only.

The bat shelter is maintenance-free as bat droppings simply fall out.

## 3FN Schwegler Bat Box

The 3FN bat box is manufacture from long lasting Woodcrete, making it ideal for long term mitigation projects.

The 3FN has two entrances, one at the back of the box next to the tree trunk and the other at the front of the box. The small front entrance provides protection against natural predators. The entrance area is stepped providing protection against small predators, draughts and bright lights.

Due to the opening on the bottom, this bat box is partly self-cleaning but will require some maintenance if it is being used by a large number of bats. The front panel can be easily removed for inspection and cleaning. Please note that once bats have inhabited a roost site they may only be disturbed by licensed bat workers.

# Appendix 2:

# Summary of Relevant Legislation and National Planning Policy

## Legislation

All species of British bats are fully protected through their inclusion on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2010 (as amended).

Combined, these two Acts make it an offence to:

- Kill, injure or capture a bat
- Disturb a bat
- Deliberately or recklessly destroy or obstruct access to a bat roost (even if bats are not present at the time)
- Possess, transport, sell, exchange or offer for sale/exchange any live or dead bat or any part of a bat.

These offences are punishable with fines of up to £5000 and up to 6 months imprisonment. It should be noted that actions affecting multiple bats can be construed as separate offences and therefore penalties can be applied per animal affected.

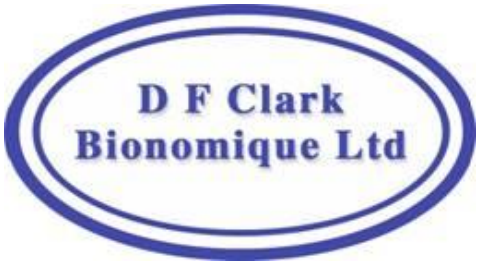
Under certain circumstances licences can be granted by the Statutory Nature Conservation Organisation (Natural England in England) to permit actions that would otherwise be unlawful.

## National Planning Policy

The UK Post-2010 Biodiversity Framework forms the government response to the 2010 Convention on Biological Diversity, and replaces the UK Biodiversity Action Plan with five internationally agreed strategic goals and targets, including reducing pressures on biodiversity and safeguarding ecosystems, species and genetic diversity. The government's Biodiversity 2020 strategy aims to halt the loss of biodiversity and the degradation of ecosystem services by 2020, to include restoration where feasible. These are used as a guide for decision makers such as local authorities to fulfil their obligations under sections 40 and 41 of the Natural Environment and Rural Communities Act 2006 to have regard to the purpose of conserving biodiversity in carrying out their duties.

The National Planning Policy Framework (NPPF) states *the planning system should contribute to and enhance the natural and local environment by...minimising impacts on biodiversity and providing net gains where possible.* Furthermore, the NPPF states *when determining planning applications, local planning authorities should aim to conserve and enhance biodiversity...* and *opportunities to incorporate biodiversity in and around developments should be encouraged.*

Effectively this means that the total biodiversity value of a site rather than purely in relation to protected species should be considered prior to determining a planning application and councils are recommended to refuse planning permission where inadequate information is provided.

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