Hampstead Heath Ponds Project

Bat Tree Inspection Report, December 2014

Job No. 141271

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Client: City of London	Cc: Clare Pugh; Sarah Nicholas; Sarah Yarwood-lovett; John Newton
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1 INTRODUCTION

1.1 The Ecology Consultancy was commissioned by City of London in November 2014 to carry out a climbed inspection of three, individual trees in the vicinity of ponds on the eastern side of Hampstead Heath. The trees were each assessed as having potential to support roosting bats during a ground based inspection by ECOSA in 2014 (Atkins Ltd., 2014).

1.2 All bats, and their roosts, are protected from disturbance and damage by 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). The inspection was therefore required to confirm the presence or likely absence of bats in advance of the proposed removal of the trees as part of the Hampstead Heath Ponds Project.

1.3 This memo report details the methodology of climbed tree inspections, together with the resultant assessments and recommendations. Relevant photographs are provided in Appendix 1 and details of relevant legislation are provided in Appendix 2.

2 METHODOLOGY

2.1 The tree inspections were carried out on 3 December 2014.

2.2 Any features that could potentially support roosting bats that were beyond the reach of a ground based inspection, were inspected for signs of use (e.g. droppings, staining and the presence of bats) from a rope and harness.

2.3 The trees were first observed from a distance to determine any overriding structural aberrations, such as suppressed canopy growth, areas of dieback or shear fissures that may indicate the presence of suitable roosting features for bats or hazard points for the tree climbing survey.

2.4 Where required, the trees were then climbed with the use of a single line and friction hitch ascension system, and industry certified harness, in order to closely inspect those features identified from ground level for bats and/or evidence indicating the presence of a roost.

2.5 Endoscopes and torches were used to explore the extent of any cavities. Care was taken when using the endoscope to avoid unnecessary disturbance to bats roosting within features being inspected.

2.6 **Inspection Criteria**

The potential for the trees to support roosting bats was identified by the findings of the current survey. The following criteria were followed to determine the level of assessed potential:

- Negligible – While presence cannot be absolutely discounted, no features that could be used by bats for roosting, foraging or commuting are identified.
- Low – Small number of potential roosting features, most likely less significant ones (i.e. not maternity roosts or hibernacula). Isolated habitat that could be used by foraging bats (e.g. a lone tree or patch of scrub but not parkland) present. Isolated site, which is not connected by prominent linear features (but if suitable foraging habitat is adjacent it may be valuable if it is all that is available).
- Moderate – Several potential roosting features in the tree. Surrounding

habitat is suitable to support foraging bats (e.g. trees, hedgerows, shrub, grassland or water-bodies). The site is connected with the wider landscape by linear features that could be used by commuting bats (e.g. lines of trees, hedgerows and scrub or linked back gardens).

- High – A tree with particular features of potential significance for roosting bats. Surrounding habitat of high quality and suitable to support (various species of) foraging bats (e.g. broadleaved woodland, tree-lined watercourses and grazed parkland). The site is connected with the wider landscape by strong linear features that would be used by commuting bats (e.g. river/stream valleys or hedgerows). The site is close to known roosts or other potentially valuable habitat resources.
- Presence confirmed – Evidence indicates a tree is used by bats, for example:
    - bats seen roosting or observed flying from a roost or freely in the habitat;
    - droppings, carcasses, feeding remains, etc. found
    - bats heard 'chattering' inside on a warm day or at dusk.

Where possible, the number of bats likely to be using the roost site, and the species of bat(s) would be determined from the evidence available. A European Protected Species Mitigation (EPSM) licence is likely to be required before the proposed works can commence on that tree.

3 RESULTS

3.1 Three trees identified as having potential to support roosting bats were inspected. The features on one of the trees were at a height of 1.5m and were inspected from ground-level. The two other trees were subject to a climbed inspection. The findings of the inspections are provided in Table 1, below.

Table 1: Climbed inspection results

Tree tag number	Tree species	Inspection Method	Ground based bat roosting potential (Atkins, 2014)	Climbed inspection bat roosting value	Inspection results
0029	Pedunculate oak *Quercus robur*	Ground based	Moderate	N/A	This tree was identified as having moderate potential to support roosting bats in the Technical Note provided to The Ecology Consultancy (Atkins 2014), identifying cavities on the south-western side of the tree at a height of 1.5m. This tree was inspected by The Ecology Consultancy and no features suitable to support roosting bats were recorded. The identified features were present on the adjacent tree 0030.
0030	Pedunculate oak *Quercus robur*	Ground based	Negligible	N/A	Cavities were identified on the south-western side of the tree at a height of 1.5m. This tree was inspected by The Ecology Consultancy and no evidence of use by bats was identified, and the crevices were found to be relatively shallow. The tree was therefore, re-assessed as having low potential to support a summer day roost.
0088	Common ash *Fraxinus excelsior*	Climbed	High	High	A cavity was identified within an upper branch. The feature had clear access and was in a sunny south-western facing location. The climbed inspection noted three potential entrances to the cavity, which then extended in both directions into the branch; the cavity was rough and dry. No evidence of use by bats was observed and the upward cavity contained cobwebs, indicating not recent bat access. Although no evidence of bats were recorded, the cavity still has a high potential to support roosting bats.
0168	Weeping willow *Salix babylonica*	Climbed	High	Negligible	A split branch cavity in the eastern aspect of the tree, and multiple broken limbs were identified. The climbed inspection recorded no evidence of use by bats. The split branch cavity was found not to extend into the branch and no cavities had been created by the broken limbs. The tree was therefore, re-assessed as having negligible potential to support roosting bats.

4 DISCUSSION AND RECOMMENDATIONS

4.1 No bats or evidence of bats was recorded during the ground or climbed tree inspections. It is, therefore, considered that bat roosts are likely absent from trees 0030, 0088 and 0168.

4.2 Owing to the mobile nature of these species a precautionary approach to the work should be adopted. The features on trees 0030 and 0088 should be inspected by an ecologist immediately prior to felling to ensure that no bats are present at the time. In the unlikely event that a bat is found during works, then all works must cease immediately and a licensed bat ecologist must be consulted prior to works re-commencing on that tree.

4.3 Tree 0168 was assessed as having negligible potential to support roosting bats and may be felled with no further constraints with regards to bats.

5 RFERENCES

Atkins Ltd. (2014) *Hampstead Heath Ponds Project Tree Climb-and-inspect Surveys. Technical Note for City of London.* Atkins Ltd.

Appendix 1: Site Photographs

Photograph 1
Shallow crevice on tree 0030 with low potential to support roosting bats.

Photograph 2
Crevice in upper branch of tree 0088 with high potential to support roosting bats.

Photograph 3
Feature identified on tree 0168, found not to have formed a crevice and with negligible potential to support roosting bats.

Appendix 2: Legislation

BATS

All species of bat are fully protected under The Conservation of Habitats and Species Regulations 2010 (as amended) through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. all bats)
- Deliberate disturbance of bat species as:
  a) to impair their ability:
    (i) to survive, breed, or reproduce, or to rear or nurture young;
    (ii) to hibernate or migrate
  b) to affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place (strict liability)

Bats are also currently protected under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. This is subject to the defence: incidental result of an otherwise lawful operation. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance of an animal or obstruction of access to any place of shelter or protection,

The NERC Act 2006 states that 'every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity', otherwise known as the Biodiversity Duty. Under Section 41 of the Act, the Secretary of State must publish a list of the living organisms and types of habitat which in the Secretary of State's opinion are 'Species of Principal Importance for the purpose of conserving Biodiversity' (SPIBs). This list is based on priority species recognised by the UK Biodiversity Action Plan (BAP), and in addition to Annex II species listed under The Conservation of Habitats and Species Regulations 2010. The S41 SPIBs list replaces the list published under Section 74 of the Countryside and Rights of Way (CRoW) Act 2000 as those species of material consideration to the planning process.

How is the legislation pertaining to bats liable to affect development works?

A European Protected Species Mitigation (EPSM) licence issued by the relevant competent authority (e.g. Natural England) will be required for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

The legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded *de facto* protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost.

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