City of London Corporation
Open Spaces
Bats in Trees Policy

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AMENDMENT HISTORY

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Introduction & Background

Throughout Europe especially in the last century it has been observed that bat populations and ranges have undergone significant declines. These declines have led to bats becoming listed as European Protected Species. Protection afforded to bats and their roosts are governed by strict laws. Trees and woodlands are a vital habitat for the life cycles of all UK bat species. Therefore, woodland and tree management could have significant impacts upon the population.

The City of London owns and manages almost 4,500 hectares (11,000 acres) of open spaces for public recreation, health and enjoyment. These open spaces are located in and around Greater London which support a diversity of habitats and biodiversity. This diversity of habitats also includes ancient woodland and trees found at Burnham Beeches, Ashtead, Highgate Woods, Hampstead Heath and Epping Forest which together support the largest assemblage of ancient pollarded trees within the UK. Tree and woodland management forms a significant proportion of habitat management within the open spaces. Unlike development sites or forestry operations where habitats may be permanently lost or drastically changed, tree and woodland management within the open spaces is largely undertaken to conserve and enhance habitats for the benefit of biodiversity including bats.

This guidance note aims to inform those who are involved in planning and undertaking tree work where European Protected Species (bats) maybe encountered, on how to conserve the UK's bat population and reduce the risk of an offence being committed. It explains the current legislation, the importance of demonstrating good working practices, appropriate levels of survey effort, when to involve an experienced bat ecologist, emergency tree operations, health and safety when handling bats and contacts. **Section 1** takes into account individual trees and **Section 2** woodland or groups of trees.

This guidance note should **not** be referred to in isolation. The information found within this guidance note has been drawn from the guidance documents listed below with which those undertaking bat roost surveys should familiarise themselves with.

NOTE 1: It should be noted very early on that this document and the 3 documents listed below are **guidance notes** only; there is not a "one size fits all" survey method approach. Survey design and the amount of survey effort required will be determined by the potential impact of the works, individual sites/situations and surveyor(s) judgement (see Section 1)

- *Bat Surveys for Professional Ecologists – Good Practice Guidelines - 3rd edition - Bat Conservation Trust*
- *Bat Tree Habitat Key – 2nd edition – Henry Andrews*
- *BS 8596:2015 - Surveying for bats in trees and woodland. Guide - British Standards Institution*

Summary of legislation for England

In England, Scotland and Wales the laws protecting bats are considerably stricter than they are for most other animals. In England, the main legislation affording protection derives from the Conservation of Habitats and Species Regulations 2010 (as amended) and the Wildlife and Countryside Act 1981 (as amended). Under the Conservation of Habitats and Species Regulations 2010 all UK bat species are afforded stricter protection as European Protected Species (EPS).

Offences under the Wildlife and Countryside Act 1981 (as amended):

- The intentional or reckless disturbance of a bat while it is occupying a structure or place it uses for shelter or protection (a roost)
- To intentionally or recklessly obstruct access to a roost.
- To sell, possess, offer or transport for sale a live, dead or any part of a bat.

Offences under the Conservation of Habitats and Species Regulations 2010 (as amended):

- Deliberately capture, kill or injure a bat.
- Deliberately disturb bats, in particular in a way likely to (a) impair their ability to survive, breed or nurture their young, or (b) significantly affect the local distribution or abundance of the species. This applies to anywhere (roosts, near roosts, foraging areas, flight corridors).
- Damage or destruction of a roost whether bats are present or not.
- To keep, transport, sell, exchange or offer for sale a live, dead or any part of a bat.

It is very important to note that damage or destruction of a roost is a strict liability offence under the Conservation of Habitats and Species Regulations 2010. Therefore, anyone who commits this offence even by accident is potentially open to prosecution. It is important to remember that it is not just the City of London that can be prosecuted but also individual officers, and their managers, in appropriate circumstances. A roost is defined as any place that a wild bat uses for shelter or protection, and the roost is protected **at all times** whether bats are **present or not**.

Offences are dealt with by the criminal justice system. Those found guilty of offences relating to bats are liable, on summary conviction, to six month's imprisonment and/or an unlimited fine.

It is strongly advised that the survey protocols set out within this document are followed to reduce the likelihood of an offence being inadvertently committed when tree management operations are planned.

Section 1: Surveying individual trees

1.1: Good Working Practices

Surveying trees and woodlands for bat roosts is an extremely difficult and time-consuming operation. Even though individual detailed tree surveys prior to works may have been carried out, it is still possible that a bat roost might be encountered during tree operations, which may inadvertently lead to one or more offences being committed. Therefore, it is vitally important that officers can demonstrate that good working guidelines had been followed and that reasonable steps had been taken to avoid unlawful acts. Such an approach is likely to reduce the probability of a prosecution being pursued, improve the prospects of a successful defence, in appropriate cases, and may be viewed as mitigation even if there is a conviction. Therefore, a robust survey assessment of bat roost potential should form a routine component of any pre-tree work operations. **Good working practices** should begin at the planning stage of any tree working operations, all the way through to a robust filing protocol.

Table 1: Decision tree for European Protected Species (bats) to aid planning of tree operations for individual trees. **It should be noted that the diagram below presents a simplified version of the decision making process, please refer to the main text of this policy document for further guidance**

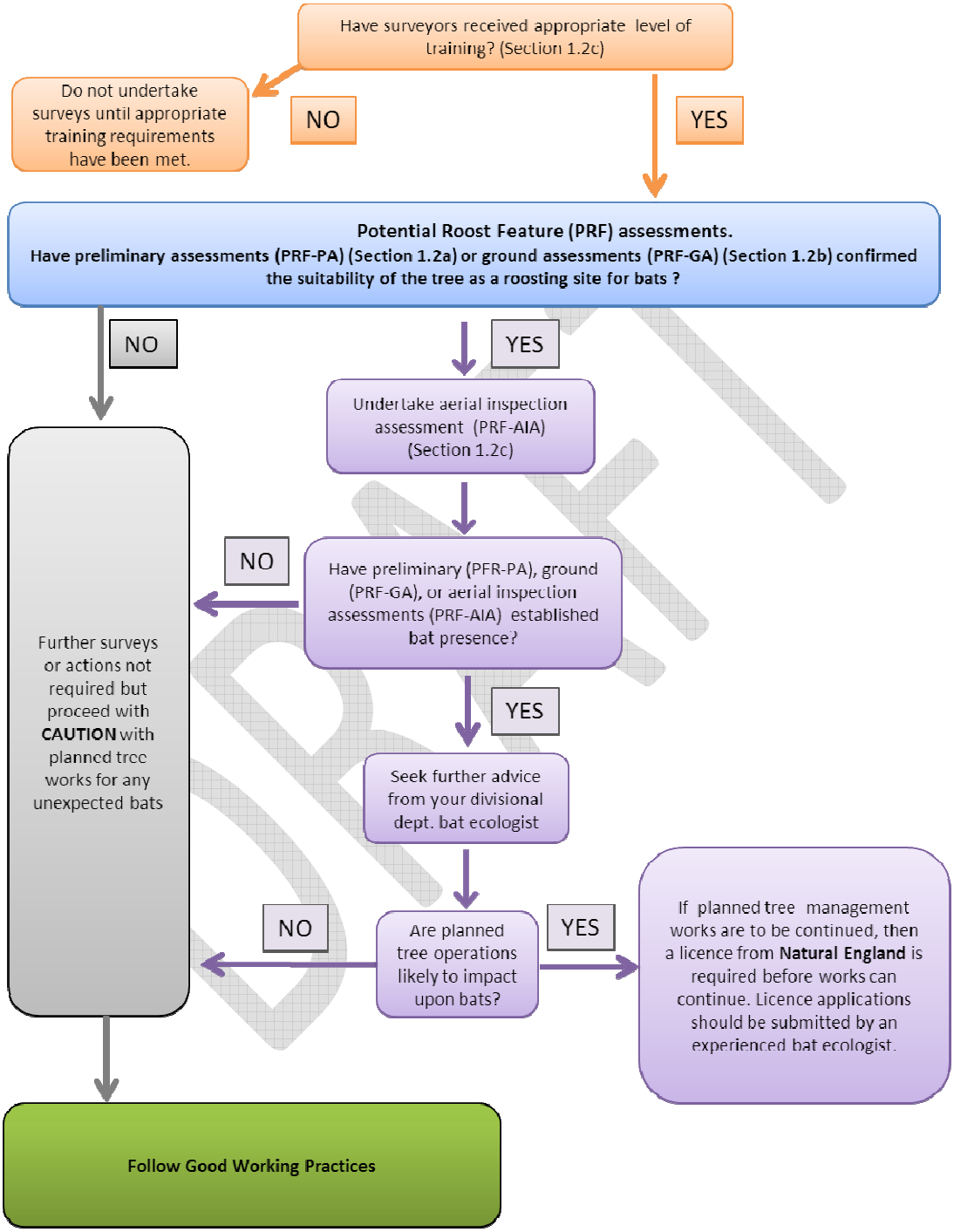


Table 1: illustrates survey protocol when assessing trees for potential bat roost features.

Note 2: It should be noted that the outlined survey protocol is not necessarily a "one size fits all" survey method approach that applies to all trees. Sites, situations and individual trees are all different requiring a different survey approach which can only be determined by the on-site surveyor.

For example;

- undertaking dawn and dusk surveys within dense woodland is unlikely to establish bat roost presence/absence (unless aided by potentially expensive night vision, infrared, thermal imaging equipment) as view is restricted:
- a mature tree with important connectivity to the countryside may require more extensive survey efforts than a tree without connectivity:
- a tree is too dangerous to climb with no MEWP access therefore, inspection surveys not possible but consider dawn/dusk surveys:
- preliminary and ground assessments have determined that planned works are unlikely to impact upon bats therefore, further surveys not required:
- it may be more efficient to survey tree(s) especially if covered in ivy by employing dawn and dusk (section 1.4) methods rather than aerial inspection assessments (section 1.2c).

A bat tree roost assessment survey therefore, has to be site specific. However, in regards to the amount of survey effort that is employed at each tree, **it is very important that a written record is kept of your decision and how that decision was reached** (information obtained). **You are reminded that it remains your responsibility to ensure all actions comply with the law. Such bat roost risk assessment records should be kept as evidence of good working practice for at least 7 years after the event.** If actual roosts are found these should be recorded separately and retained indefinitely. The only survey methods that are constant are the preliminary (PRF-PA) and ground assessments (PRF-GA).

1.2: PRF (Potential Roost Feature) assessments (Methodology)

1.2a: PRF-PA – (Preliminary assessments) (non-specialist)

The aim of the PRF-PA is to collate and review existing bat records/information and site information to determine suitability of site in supporting roosting, commuting and foraging bats.

- Check internal records (such as *Recorder*, staff knowledge, *MapInfo* or *ArcGIS*) for information on known roost locations or species information.
- Contact local bat groups, local natural history groups or biological records centres for bat records. This baseline data gathering can be achieved on an annual basis rather than each time a tree is worked. If there is little or no baseline data for your site, consider approaching local bat groups for their help with survey work.
- Site/habitat information in relation to tree being worked, connectivity of tree to good foraging areas such as water-bodies, woodland. The size of area covered by these assessments will be determined by the potential impact of the proposed work.

Roost surveys for trees should be undertaken in a systematic order with PRF-PA (1.2a) and PRF-GA (1.2b) being the first step, followed by (if judged necessary or practical by the surveyor) PRF-AIA (1.2c) and dawn and dusk surveys (1.4).

1.2b: PRF-GA – (ground assessment) (non-specialist)
The aim of PRF-GA is to undertake a comprehensive visual examination of a tree (young, mature, veteran or ancient) to determine its suitability for roosting bats. This assessment should also take into account the location of the tree and its connectivity to suitable bat foraging and commuting habitat. The assessment should ideally be carried out during the winter months (with binoculars) noting all potential roosting features. Although this survey can be undertaken by an unlicensed non-specialist, it is recommended that surveyors have received basic **bat awareness training** (see Section 1.5). Findings from the ground survey will inform your continued survey method.

Note 3: External guidelines for assessing the suitability of trees and their associated habitat features found during PRF assessments are based on a suitability (negligible – high) category score which are then used to inform further survey decisions. Although, this is very useful, bats do not always follow the rules and turn up in unlikely places including trees judged to be of low potential, requiring no further survey effort. Therefore, for simplicity, if habitat feature(s) within a tree are suitable then assume potential presence. Trees should fall into just two categories **–**

SOME POTENTIAL or NO POTENTIAL.

Examples Features - (although this is not an exhaustive list) that a bat may utilise within a tree include –

- Woodpecker holes
- Included bark cavities
- Trunk, stem, branch cavities/scars (horizontal & vertical)
- Unions of double leaders/compression forks
- Ends of broken branches
- Cracks/splits (horizontal & vertical) & hazard beams
- Loose/lifting bark/ivy

1.2c: PRF-AIA – aerial inspection assessment (non-specialist & specialist)
There are inherent difficulties with finding bats or evidence of bats within trees compared to buildings. Good indicator signs such as droppings do not persist or are lost within the void/cavity of the tree; there is limited or difficult inspection access and many tree roosting bat species demonstrate roost switching behaviour. **Confirming absence of bat roosts within a tree is extremely difficult. Therefore, it should be assumed before any tree management works are undertaken that a bat roost may very well be present which could be disturbed, damaged or destroyed.**

The aim of the PRF-AIA is to determine the presence/absence of bats and to also categorise the habitat features highlighted from the ground surveys. The purpose of categorising habitat features is to ensure that if additional dawn and dusk surveys are required time is not wasted surveying unsuitable features, also to down or upgrade features found from ground assessment. Generally, a PRF-AIA involves the use of climbing equipment (rope and harness) or MEWP to gain access into the tree for a more detailed inspection.

PRF's are examined closely for evidence of bat usage (see 1.3 below) in the form of droppings, live and dead bats and some other less obvious characteristics. Inspection surveys can be undertaken by unlicensed non-specialists except at **known** roosts.

Unlicensed non-specialists are legally permitted to use torch and endoscope techniques to survey cavities but these methods should only be employed to dismiss PRF's once other techniques have established no evidence of bat usage. Artificial light (torch and endoscope) techniques have the ability of causing disturbance to bats (an offence). Therefore, it is essential that any unlicensed non-specialist receives appropriate training (see Section 1.5) in their use before undertaking any such survey.

If bats or evidence of bats are discovered during an inspection survey by an unlicensed non-specialist, operations should stop immediately and a licenced bat worker/ecologist be informed. Further surveys and subsequent mitigation recommendations and licence application (if tree operations are to continue) should be undertaken by an experienced bat ecologist/specialist

If bats or evidence of bats are discovered during an inspection survey by an unlicensed non-specialist, operations should stop immediately and a licenced bat worker/ecologist informed. Further surveys and subsequent mitigation recommendations and licence application (if tree operations are to continue) should be undertaken by an experienced bat ecologist/specialist.

1.3: Roost indicator signs

As mentioned previously bat roost indicators in trees are difficult to find. Possible indicators to look for are listed in the sub-sections below.

1.3a: Examples of Primary Signs:

- Live and dead bats.
- Bat droppings – Other than observing actual bats, droppings are probably the best indicator to be aware of. They resemble mouse droppings which are extremely hard, unlike bat droppings which when dry, crumble to dust very easily. Droppings can be found in and around the roost entrance or at the base of the cavity. Droppings caught in cobwebs, or on vegetation beneath a roost access point, are as likely to be found.
- Cavities that extend above the opening which appear smooth and free from dust and debris.

1.3b: Example of Occasional signs:

There are a number of additional signs for the surveyor to be aware of but these are very difficult to judge and may only be evident in features supporting a large number of bats.

- Urine stains
- Other staining- Caused by the natural oils in the bats fur.
- Scratch marks
- Audible squeaking

Actual bats and their droppings are the only real conclusive evidence. For further guidance on identifying indicator signs and undertaking surveys read:

- *Bat Surveys for Professional Ecologists – Good Practice Guidelines - 3rd edition - Bat Conservation Trust*
- *Bat Tree Habitat Key – 2nd edition – Henry Andrews*

1.3c: Equipment required when undertaking inspection surveys include:

- MEWP, Arboreal climbing equipment, Ladder
- Small torch, Endoscope
- Small mirror
- Camera (for photographic evidence)
- Thermal and/or infra-red imager
- Specimen pots/tubes for dropping collection (for DNA analysis)

1.4: Dawn and Dusk activity surveys (specialist)

Dawn and dusk activity surveys may be required to provide additional information because, for example:

- no definitive evidence of bat presence has been recorded PRF surveys have not been able to rule out the potential of a feature to support a bat roost;
  OR
- there is restricted access due to health and safety issues relating to climbing the tree or gaining access to the features using a MEWP. (see NOTE 2, page 5).

These surveys should be undertaken, designed or at least led by an appropriately experienced bat ecologist/specialist and should follow the appropriate timings and seasons as described within the *BCT – Good Practice Guidelines – 3rd Edition.*

Note 4: : It is very important to note that dawn and dusk surveys carried out at any of the Open Spaces Dept.'s sites are only likely to generate useable information if thermal or infra-red imagery techniques are employed. Therefore, the correct equipment would need to be available to make these surveys an effective use of time and resources.

1.5: Training

It is recommended that inexperienced, unlicensed individuals undertaking any stage of the PRF assessments described above attend both of the Bat Conservation Trusts training courses:

- *Arboriculture and bats: Scoping surveys for arborists*
- *Arboriculture and bats: Secondary roost surveys for arborists (including endoscope use)*

1.6: Tree Operations

If PRF assessments (& dawn and dusk if required) have not established bat roosts within the tree, then tree management works can continue but operations should be undertaken with caution in case unexpected bats are discovered. As bats demonstrate roost-switching behaviour it is recommended that planned tree works are undertaken within 48hrs (maximum) of surveys and, ideally, immediately after surveys. For trees with known roosts the licence application process and mitigation report will specify timing of tree works. The length of the licence application process is likely to depend on the complexity of the case. Further guidance can be found at - https://www.gov.uk/government/collections/bat-licences

Section 2: Woodland management and groups of trees

Section 2 refers to conservation management of woodlands as City of London-owned open spaces are not subject to the permanent loss of habitats through development.

2.1: (PRF) assessments (Methodology)
Survey methodology/design should follow the same route as an assessment for an individual tree as explained in Section 2 and Table 1. The amount of survey effort employed will be determined by the potential impact of the works, survey findings, surveyor's judgement and individual sites and situations (see note 2 on page 5).

2.2: Additional survey assessments.
Depending on the complexity of the site and the findings from the surveys, additional survey methods may need to be employed. Further guidance on when to employ additional surveys in regards to woodland management can be found in the documents listed at note 1 page 2.

Section 3: Emergency Tree Operations and Protected Species

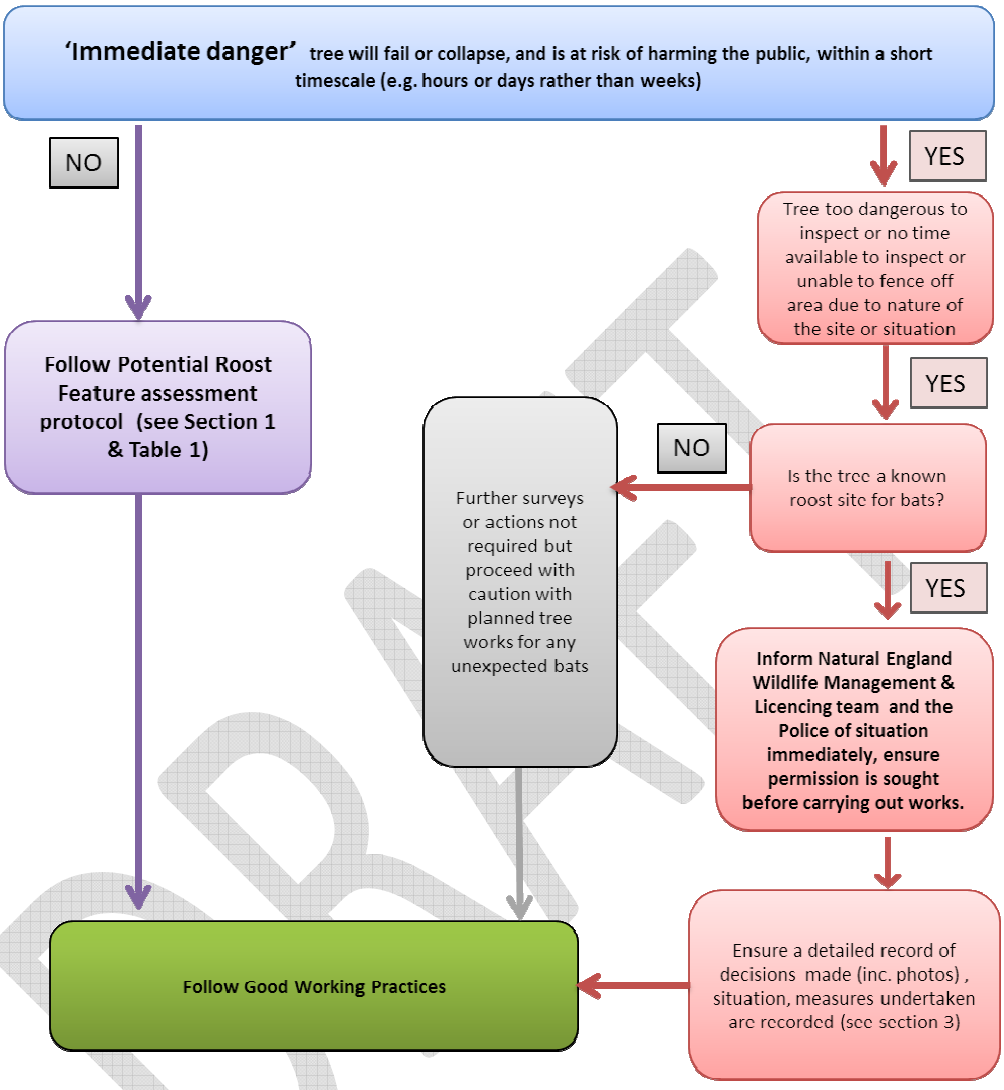
The following guidance has been abstracted from BS 8596:2015 - Surveying for bats in trees and woodland -

"*Under normal circumstances a licence from the relevant licensing authority is required if work is intended to take place on a tree which is used as a bat roost, where that work is likely to result in damage to the roost or disturbance to bats. However, unplanned works that need to take place immediately, for public health and safety reasons, might not allow the time required for a licence to be obtained.*

Acting without a licence is likely to be justifiable only where there is a serious and immediate threat to public safety and where all other appropriate options (such as fencing and warning signs) cannot resolve the problem satisfactorily. The trees condition should be assessed by an arboriculturist experienced in tree risk assessment. In this situation, if a roost is known or suspected, the relevant SNCO [Natural England for City of London Open Spaces] *or a bat specialist should be contacted prior to work commencing and the police informed of the proposed operation. If this is not possible, they should be contacted as soon as possible afterwards. Ideally, a bat worker should be in attendance during the work to provide guidance as necessary. Care should be taken to avoid unnecessary damage to bats and roosts during such tree work operations, and mitigation measures should be implemented where safe to do so".*

'Immediate danger' should reasonably be interpreted to mean that the tree will fail or collapse, and is at risk of harming the public, within a short timescale (e.g. hours or days rather than weeks) and thus gives little scope for obtaining a licence. You should expect to have to justify your actions and, if you are unable to do so to the satisfaction of the police, you may face prosecution.

Table 3: Decision tree for European Protected Species (bats) where emergency tree operations (tree safety) are required. **Please refer to Section 3 in the main text of this policy document for further guidance**



In emergency situations where a known bat roost is involved:

1. Immediately inform Natural England Wildlife Management and Licensing Team (details below) and the police and explain current situation. **Do not under any circumstances proceed without permission/guidance first, unless the nature of the emergency situation does not allow time.**
2. Inform your department's bat specialist or ecologist.
3. Ensure a detailed written record of all your actions, decisions made and why, persons involved/contacted and timelines is made in case you are asked to demonstrate the reasons for actions taken.
4. Ensure photographic evidence is taken before, during and after works.
5. If time allows, ensure a suitably licensed/qualified bat specialist is present to deal with any protected species affected by the operation.

Section 4: Health and Safety

4.1: Handling bats

Some bats in Europe carry a rabies virus called European Bat Lyssavirus (EBLV). This is very rare in UK bats. EBLV is not the classic rabies associated with dogs, but a rabies-like virus. There are two known strains of EBLV: EBLV1 and EBLV2. The virus is passed by bite, scratch or the bat's saliva entering a wound or mucus membrane such as eyes or mouth. The risk of contracting the EBLV virus is extremely low but should the need arise to handle a bat, for instance if the bat is on the floor or to remove it from immediate danger, then the person handling the bat should ideally be trained to do so, having also been vaccinated against rabies, and, in doing so, should always be wearing appropriate gloves. If any other individuals need to handle a bat for any reason then expert advice should be obtained before doing so.

See Open Spaces Departmental Risk Assessment & Safe Systems of Work on handling bats.

Annex A - Contacts

Natural England
Wildlife Management and Licensing Service
Tel – 0845 601 4523
Email – wildlife@naturalengland.org.uk

The Bat Conservation Trust Helpline (for grounded bats)
Tel – 0845 1300 228
Email – www.bats.org.uk

GOV.UK
Webpage for information on Rabies in bats
www.gov.uk/guidance/rabies-in-bats

Annex B – Risk assessment
Annex C - forms