

## A Note for Woodland Owners and Managers

### 1) Why are we running a Bat Roost Tree Tag scheme?

It is understood that woodland owners, managers, and contractors on the ground often have difficulty knowing which tree is a confirmed bat roost based purely on records provided to them. Some tree roosts can be difficult to find again, as GPS units will have reduced accuracy in a wooded environment, written description of locations may not be helpful and physical mapping may not be accurate enough or at a good enough scale on the ground. Trees may have also changed because of wind damage or the natural ageing process making them difficult to find again. In addition, changes in ownership and woodland managers can lead to records being misplaced, and result in the accidental loss and damage of important bat roosts.

UK bat species have evolved to use trees as roosts. Since bats are not able to bore holes or make nests, they use whatever gaps are available – including cavities, crevices and holes made by other animals or formed from natural processes like decay. Suitable cavities and holes can take many years before they become suitable for roosting and known roosts that are damaged or disturbed due to felling, besides likely being in breach of good practice and therefore the legislation protecting bats, will have a significant negative effect on the colony of bats affected. It is therefore important that these roosts can be found, to prevent any planned site work from being carried out that would impact known bat roosts.

### 2) What we hope to achieve.

The primary purpose of the bat roost tree tag scheme is to ensure trees containing confirmed bat roosts are easily identifiable. The presence of a tag on a tree is well recognised by forestry workers and site managers, so providing a bat roost tree tag will bring clarity to those on the ground about those trees already identified as bat roosts. This will give a significantly increased level of protection for bat roosts in trees.

As well as tagging a known roost, the project would like to gather some basic essential records (plus where possible additional information) about the tree roost and its immediate surroundings, though the amount of data gathered is dependent on the surveyor's experience and their availability (we recognise that there will be circumstances when the surveyor will have a limited time to survey a tree roost).

#### ***Data sharing with the Landowner***

For each site, records collected should be shared by the surveyor with landowners and site managers, to ensure the needs of the bat species using the tree and woodland are considered in any future management plans. When providing permission to tag and survey the tree roost, it is the landowner responsibility to remind the surveyor that they will need to share the records.

#### ***Data sharing with the Bat Tree Habitat Key***

Records collected will feed into two databases - the BCT and the [Bat Tree Habitat Key \(BTHK\)](#) databases. Both databases will enable us to build a picture of how bats use trees, from basic information on the tree species used and whether the tree is dead or alive to more complex records for the BTHK dataset that identifies and explores in greater detail how these different roost features are used by different bat species. The information collected will support research and conservation and will allow the BTHK to continue with its aim of "identifying and describing all features exploited by specific tree-roosting bat species native to the British Isles". By permitting the surveyor to share the tagged tree(s) records with BCT, the landowner will have agreed to BCT sharing these records with BTHK. Grid references will not be made publicly available on the BTHK database. Further details about the information we would like the surveyor to collect can be found in Tables 1 to 3 in the Bat Roost Tree guidelines which can be downloaded from the [bat roost tree tag scheme web page](#).

#### ***Data sharing with NBN Atlas***

BCT believes it is important to provide open access to data, where it can if it does not compromise the security of sensitive sites or the privacy of the landowner. If the landowner agrees, BCT will share records collected from the tagged tree(s) with the National Biodiversity Network Atlas (NBN Atlas <https://nbnatlas.org/>), an online database that registered users use to access relevant species records gathered from a wide range of sources

including wildlife recording schemes. Making this data available can inform bat conservation and research work so that informed decisions can be made on how to protect the UK's wildlife, inform development work (if permission is granted to share a high grid reference resolution) and will provide information to the public about the species occurring in their area.

#### ➤ *Public access*

Records will be made available under public access using a CC-BY open data licence. Public access enables registered users to download data from the NBN Atlas, but users will need to agree to the NBN Atlas data use terms and conditions before they can download the records (<https://nbnatlas.org/help/nbn-atlas-terms-use/>). Depending on the permission provided by the landowner records will be made available at either 1 km or 10 km resolution.

- TL63 - identifies the 10 km square in which the site is located
- TL6233- identifies the 1 km square in which the site is located

Only the following details will be made available via public access on the NBN Atlas:

- Survey date
- Bat and tree species, where known
- Grid reference (at either 1 km or 10 km resolution, as specified by the landowner)
- Type of roost, if known

Site names/ addresses and surveyor/landowner names will not be made available.

Please note for biodiversity data searches (BDS) that are used to inform development, a 1 km grid reference resolution will be more useful for informing where trees may be at risk than the 10 km resolution. We encourage that the 1 km resolution is selected. There will be the option to indicate on the landowner permission form if you do not wish for any records to be shared with NBN Atlas. We will respect your wishes on how the records are shared.

#### ➤ *Enhanced access*

Enhanced access is currently not available on NBN Atlas, but is due to be reinstated in the future. When it is reinstated, we would like to be able to share records collected from the tagged tree roost(s) when enhanced access data requests are made.

NBN Atlas users requiring enhanced access to the data will need to submit an enhanced access request outlining their intended use of the data, which will be granted automatically. If there is a clear need or a positive conservation benefit to releasing the information, enhanced access will be automatically granted. This level of enhanced access will benefit local planning authorities, developers or their consultants, conservation organisations and academic researcher where a higher grid reference resolution will be detailed enough to be useful. If there isn't a clear need for the data, further information will need to be provided to support the request before access is granted. Depending on the permission provided by the landowner, records will be made available at either 10 m or 100 m resolution.

- TL62933380 - identifies the 10 m square in which the site is located
- TL629338- identifies the 100 m square in which the site is located

Records will be made available under enhanced access using a CC-BY open data licence. Users granted enhanced access will need to agree to standard terms and conditions for data use before they can download the records (<https://nbnatlas.org/help/nbn-atlas-terms-use/>). However, certain users will need written permission from BCT via a data-sharing agreement. Certain users include Local Environmental Record Centres (LERCs) and bat groups who will be permitted to disseminate BRTT records in response to a record search request to inform local bat conservation. A condition of the data supply agreement will be that LERCs/bat groups and any third party must

not publish site locations at a grid reference resolution greater than 10 km. Same with researchers who will be permitted to use the data for academic research purposes on the condition that they do not publish site locations at greater than 10 km resolution.

For enhanced access, only the following details will be made available when granting enhanced access requests:

- Survey date
- Bat and tree species, where known
- Evidence of bat use
- Grid reference (at either 10 m or 100 m resolution, as specified by the landowner)
- Type of roost, if known
- Type of bat survey

Site names/ addresses and surveyor/landowner names will not be made available.

Please note for BDS that are used to inform development, a high-resolution grid reference will be more useful for informing where trees may be at risk than the 10 km or 1 km grid reference resolution. We encourage that the 10 m resolution is selected unless there are concerns about site sensitivity or landowner privacy. There will be the option to indicate on the landowner permission form if you do not wish for any records to be shared with NBN Atlas. We will respect your wishes on how the records are shared.

#### ***Data sharing with researchers***

Using a data use agreement, we may also share the tree roost dataset with researchers to enable us to gain a better understanding of roosting bat ecology. By permitting the surveyor to share the tagged tree(s) records with BCT, the landowner will have agreed to this. Grid references will be made available to researchers at the resolution selected for sharing with the NBN Atlas under enhanced access. Researchers will be permitted to use the data for academic research purposes on the condition that they do not publish site locations at greater than 10 km resolution. Site names, addresses, contact and personal details will not be shared with researchers.

### **3) What role will landowners and site managers have and how can they be involved?**

The bat roost tree tag system is aimed at surveyors with bat survey experience i.e. a professional or voluntary bat worker. In most cases tree roosts will be identified from emergence and dawn counts, surveys of tree features using an endoscope and occasionally from radiotracking surveys.

#### ***Providing Permission***

Surveyors must seek permission from landowners in advance before entering woodland sites with restricted access and before trees are tagged and tree roost and species records are collected, whether it is on the public forest estate or private land. A permission form will be provided by the surveyor, which should be checked and signed off by the landowner. On the form, the landowners can also specify their chosen grid reference resolution for sharing the tree roost and species records via public and enhanced access to the NBN Atlas. Once completed this permission form will be shared with BCT.

It will be the responsibility of the surveyor to share the records with the landowner and/or site manager. We recommend when providing permission that the surveyor is reminded of this to ensure all the records gathered are shared.

#### ***Contributing your own data***

At some woodland sites, confirmed tree roosts may have been previously identified by surveyors. This information should have been shared with the landowner/manager. Landowners and site managers wanting these confirmed tree roosts to be tagged can be part of the project but will need to supply the essential information highlighted in bold in Table 1 of the Bat Roost Tree Tag guidelines which can be downloaded from [here](#).

### **Condition of the tag**

Tree tags have been fixed to trees over the years, but there is very little information available to tell us exactly how long they last. We are using anodised aluminium which has a long service life, and we are supplying thicker tags (1.2 mm thickness), so they will not easily buckle or be engulfed in the tree. We are encouraging surveyors and landowners to be responsible for the ongoing care of the tree tag and check the tag condition every few years if in the area. Please do consider replacing the tag and purchasing another tag, if you find it has eroded, fallen off or is engulfed by the tree. This will allow us to update our records and ensure that the tree roost continues to be protected.

On the public forest estate, the condition of the tree tag is likely to be checked every 5-10 years as part of ongoing operations, which means tree tags can be checked. On private land, we recommend a similar procedure should be followed.

A tag condition feedback form can be downloaded from [here](#). Any feedback where possible, from the surveyor or landowner/site manager, is appreciated as this will inform us on how long the tags are lasting.

### **4) Extra important advice to consider before any woodland management work is carried out**

- A walkover in advance of any planned work should be carried out with the woodland/forest contractor who will be carrying out any management work to highlight the tagged confirmed roost trees.
- In advance of any large mechanised woodland management work, where possible all tagged confirmed roost trees should be temporarily marked up with hazard tape or paint. This will make it easier for the contractor to see trees that should not be felled or disturbed. Remember any operation that opens up the woodland canopy around confirmed roost trees could subtly change the local environmental conditions making the roost unfavourable for bats. Equally, the removal of sheltering trees immediately adjacent to a roost will make the resident bats more vulnerable to predation and might force them to abandon the roost, so it is important to retain a buffer zone of trees and understorey around the tree roost, so the environmental conditions are maintained. A buffer zone, a width of two tree canopies or vegetation around the tree is recommended. Also, ensure the tree roost and trees in the buffer zone are not isolated from the rest of the woodland and wooded corridors or linkages to the rest of the wood are kept.
- We also recommend that if the public forest estate, environmental Non-Government Organisation, or a public body has access to any GIS resources, that a map of all the locations of interest is provided as part of any contract paperwork i.e., within a constraints layer.

Although tags cannot be fixed to trees with high or medium bat roost potential (only confirmed bat roosts), it is important to ensure these potential roost trees are protected and kept where possible. A definition of these tree roosting categories taken for the Bat Surveys for Professional Ecologists: Good Practice Guidelines (3<sup>rd</sup> edition) can be found below:

| Suitability | Description roosting habitats                                                                                                                                                                                                                              |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Negligible  | Negligible habitat features on site likely to be used by roosting bats.                                                                                                                                                                                    |
| Low         | A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.                                                                                                           |
| Moderate    | A tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat.                                                                                                       |
| High        | A tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. |

Retaining these trees will also provide a continuity of potential roost features for the future. This is important for our UK bats, especially woodland bats, as they switch roosts regularly and will need sufficient trees roosts within their territory. Tree dwelling bats will also need roosts with different environmental conditions at different times of the year depending on their requirements, so features with high or medium potential may be of importance throughout the year, not just features that have been confirmed as a roost. To retain trees do consider:

1. retaining dead and dying trees with suitable features (i.e., crack, loose bark, woodpecker holes).
2. avoiding felling and disturbing any high or medium potential roost tree where there are only a few trees offering roost potential.
3. only felling a proportion of potential roost trees in any 10-year period where there is an abundance of suitable potential roost trees.
4. leaving a significant proportion of the area undisturbed within a 10-year period, when felling or thinning woodlands with an abundance of suitable potential roost trees.

A diverse age structure will provide a range of different aged trees that will supply suitable roosting sites long term. Further information on managing woodlands with bats can be found on the [GOV.UK website](https://www.gov.uk/guidance/managing-woodlands-with-bats).

Whether trees with potential are surveyed to confirm they are a roost is a decision for the landowner or site manager to make. Specialist bat roost assessment should be undertaken on any tree with high /medium potential if work to a tree cannot be avoided. It is important to carry out a bat roost assessment before any work is carried out in case the tree in question is a roost. This is because bat roosts are legally protected, so it is an offence to destroy a bat roost.

## **5) Links to good practice guidance and relevant toolkits**

Below are some links to good practice advice and toolkits relevant to bats and woodland management.

*Woodland Wildlife Toolkit –*

<https://www.bats.org.uk/our-work/landscapes-for-bats/bats-and-woodland/woodland-wildlife-toolkit>

*Managing and protecting woodland wildlife -*

<https://www.gov.uk/guidance/manage-and-protect-woodland-wildlife>.

*Woodland management advice for Bechstein's bat and barbastelle bat –*

<http://publications.naturalengland.org.uk/publication/93012>

*Bechstein's bat: An introduction for woodland owners –*

[https://cdn.bats.org.uk/uploads/pdf/Bechsteins\\_bat\\_woodland\\_guide\\_2nd\\_Ed\\_2013.pdf?v=1541085201](https://cdn.bats.org.uk/uploads/pdf/Bechsteins_bat_woodland_guide_2nd_Ed_2013.pdf?v=1541085201)

*Guidance on managing woodlands with bats in England –*

<https://cdn.bats.org.uk/uploads/pdf/england-protectedspecies-bats.pdf?v=1549298354>

*Guidance on managing woodlands with bats in Wales*

[https://cdn.bats.org.uk/uploads/pdf/Woodland\\_management\\_in\\_the\\_presence\\_of\\_bat\\_species\\_Wales.pdf?v=1549305855](https://cdn.bats.org.uk/uploads/pdf/Woodland_management_in_the_presence_of_bat_species_Wales.pdf?v=1549305855)

*The British Standard for surveying bats in trees and woodlands –*

<https://shop.bsigroup.com/ProductDetail/?pid=000000000030273056>

*Managing woodlands with ash dieback and bats - current guidance and information –*

<https://www.bats.org.uk/our-work/landscapes-for-bats/bats-and-woodland/current-guidance-to-help-manage-woodlands-with-ash-die-back>

*Managing ash in woodlands in light of ash dieback: operations note 46 –*

<https://www.gov.uk/government/publications/managing-ash-in-woodlands-in-light-of-ash-dieback-operations-note-46>