

## Bats and trees

*For those working with trees where bats may roost. Woodland Managers, Garden and Parkland Managers, sub-contractors working on trees, Property Managers.*

### Key points

- Bats roost in trees, in obvious cavities, cracks and splits, but also in less obvious places such as under ivy and under loose bark.
- The damaged parts of a tree are the most likely places to find roosting bats, and they are the parts most likely to be cut off for safety, cosmetic or tree-health reasons.
- All bats and their roosting sites are protected by law from damage or disturbance.
- It is very difficult to locate bats in trees.

### 1. BACKGROUND

- All 17 species of British bats use trees to some extent, for feeding on associated insects, as territorial markers, for roosting in summer and winter and as navigation points.
- Many species also roost in other sites such as buildings and tunnels, but three bats (Bechstein's, barbastelle and noctule) are almost entirely dependent upon trees.
- Any tree can be used for roosting as long as shelter is provided – splits, cracks, holes and cavities in the trunk or branches, loose bark, ivy cover - but old oak, beech, ash and Scots pine are most frequently used. Bat roost sites can be at any height, although the upper trunk and branches are favoured.
- Entrance holes may be narrow slits on the underside of a branch that can be easily overlooked, as well as more obvious old woodpecker holes in the main trunk. Generally tree roosts of bats are hard to find. Occasionally on a warm summer day the bats may be heard as they “chitter” in the roost. Bats may “swarm” like bees around the roost tree at dawn.
- Bats commonly feed along the sheltered rides or glades amongst trees.
- They circle a prominent tree to feed, hold territory or gain their bearings at night.
- They use successive trees to guide them at night as they fly, often many kilometres, from roost to feeding area. Trees used by bats in all these ways may be in woodland, in parkland, in farmland or gardens.
- Unfortunately trees suitable for roosting bats may be hollow or have hollow or broken limbs. Such trees can appear to be a danger to the public and at risk of being trimmed or felled. In commercial woodlands they have little value and may be cleared.
- All roosting places and the bats themselves are protected by law from any disturbance or damage.

### 2. POSITION

The Trust values its trees and the wildlife associated with them. The care of the trees requiring surgery must be reconciled with public safety. Older trees tend to have more wildlife, including bats, than younger ones.

At the AGM in 2000, members voted that special efforts should be made to conserve veteran trees. Such trees are particularly likely to be used by bats as roost sites.

#### Policy:

We value and protect ancient trees, they are awe inspiring and important for wildlife. As they gradually decline and die the dead wood they produce contributes to the richness and diversity of the woodland wildlife. So far as possible public safety is maintained by diverting footpaths away from the most outstanding veterans rather than by tree surgery.

In all woodlands our aim is to maximise their value to people and wildlife, now and for the future.

Wildlife conservation in most woodland requires adjustments to the tree canopy to allow light to penetrate. Open glades and rides are part of a desirable structural diversity which also includes a sufficient age structure to ensure continuity. Fallen and standing dead wood is an important component of most woodlands.

National Trust Forestry Policy 2000

### 3. ACTIONS

There should always be a presumption to keep old trees and deadwood *in situ*. (eg see Guidance Note 7 “Old Trees, Decay and Dead Wood “ from Forestry section, Conservation Directorate).

#### Survey

A bat survey should be undertaken on any trees to be felled or needing tree surgery if there is any possibility of bats using them as roosts. This would usually be trees with holes, deep splits or loose bark. If local bat experts are not known, contact the local statutory nature conservation organisation (SNCO – English Nature, Countryside Council for Wales, Environment and Heritage Service in N. Ireland). See also Guidance Note 9 “Environmental Impact Assessment for Forestry Operations” from Forestry section, Conservation Directorate).

- If bats are found to be using a tree that is to be removed or worked on, then a special licence will be required (from DEFRA in England, NAW in Wales or contact EHS in N Ireland). This usually requires the employment of a professional bat consultant to carry out a survey, make the licence application, monitor its operation and provide details of suitable mitigation. Mitigation may include stipulating a suitable time to carry out work, replacing the bat roost tree by erecting bat boxes on nearby trees, building a special bat tower etc. Licences take nearly two months to be issued and no work can be carried out until that time. This means that bats should be planned into any felling or tree surgery operations at an early stage to avoid hold-ups.
- If no bats are found, yet possible roosting places have been identified, the best practice would be to carry out work in spring or autumn, lower the branches or trunk with possible roosting cavities to the ground by rope and leave for 48 hours for any bats to escape before carefully opening up the cavities. Contact the SNCO if bats are detected.

#### Maintaining trees which are known bat roosts:

- Trees with known bat roosts may become unstable with time. Seek specific advice in maintaining the tree from local experts so that the roost is not lost.
- Roosts in unstable branches can be saved by trimming off the end of the branch to lighten the load and using props or slings to support the remainder of the branch containing the roost. Roosts in the main trunk can be saved by using wire supports and collars to hold the trunk in an upright position. Again, removal of some higher branches may ensure the trunk stays upright in strong winds. For some trees pollarding will lengthen the life of the tree.
- Before carrying out any such work seek advice from the local SNCO as roosts are protected by law.

#### Remedial work:

- A tree or branch being used as a roost can be damaged by inclement weather or simply deteriorates with time. One remedy would be to saw off the section used by the bats from the fallen tree (first checking that any bats have been rescued) and strapping that section to a sound tree or branch nearby, preferably with the entrance pointing in the same direction as before. Bat roosting boxes can be erected on nearby trees (two on each, facing different directions).
- If there are few other suitable trees for bats to roost in (perhaps due to the species of trees or their age) then erecting bat roosting boxes can maintain the local bat population. Woodcrete boxes are low/no maintenance.

#### Feeding areas:

- In woodland, bats feed along the sheltered woodland edge, around water bodies, in glades and along fire breaks. Here insect prey tends to be most abundant.
- Mowing regimes along tracks to favour insects such as butterflies (leaving the outer few metres to remain uncut until late summer) will also benefit those insect species hunted by bats at night.
- For some species of bat (such as the horseshoe bats in Wales and SW England, Bechstein's and barbastelle bats in southern England) these feeding areas may be protected by European agreements as Special Areas of Conservation (SACs). In these areas seek advice from the SNCO before contemplating any major forestry work.

#### Flight lines:

- Bats use regular fly-ways at night to find their way in the dark from roost to feeding area. These could be hedgerows, tree-lines, forest edge and fire-breaks.
- For some species, the flight lines have a measure of protection under European law so seek advice if forestry work is planned in any SAC areas of woodland in south/south-west England or Wales.

#### Bat roost trees and footpaths:

- Trees with bats that may cause risk to the public through falling branches or collapse may necessitate the moving of the footpath. Explanatory notices help to keep the public to the new route.

#### Bats discovered during tree work:

- Occasionally, even after all precautions, bats are discovered when branches are removed or trees felled, particularly in winter. Carefully collect up any bats with gloved hands into a box and contact the local SNCO and bat group for advice. Usually this advice will be to release the bats at the site if the weather is favourable.

### Further information

Bats and Trees leaflet, Bat Conservation Trust 020 7627 2629

Bat Group Contacts list. Bat Conservation Trust 020 7627 2629. Also [www.bats.org.uk](http://www.bats.org.uk)

Trees and Bats – the Arboricultural Association, Guidance Note 1. 2003. [www.trees.org.uk](http://www.trees.org.uk)

Bats and the Law, Bats and Wildlife Corridors guidance notes: NT intranet.

### Conservation Directorate Guidance Note Information

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