Natural England response to BCT statement of 12th June 2020

July 2020

Natural England appreciates the BCT's feedback relating to HS2 Phase One bat licences (link). We have provided some comments below in response to the points raised. We take our regulatory role very seriously and will continue to be rigorous in our assessment of licence applications, and in our compliance monitoring of HS2's licensable works affecting bats.

1. BCT Statement: *"It is not always possible to establish presence/absence of bats in tree features because they are not always safe to access for inspection and are sometimes too extensive for thorough inspection, even with equipment such as an endoscope. How can the absence of maternity colonies be established with certainty before permanent exclusion or soft felling in such cases?"*

A comprehensive package of bat survey data supported the bat mitigation licence applications, submitted by HS2 ltd Enabling Works Contractors for the sites where woodland clearance was/is required. Advanced Level Bat Survey Techniques (ALBST) have been implemented at various locations to identify roosts and obtain detailed information on affected bat assemblages. The use of ALBST has provided greater clarity in terms of understanding the locations of important maternity roosts and additional information on the affected bat populations.

Prior to felling, a strict and conditioned protocol is followed by Accredited Agents, working under the authority and supervision of the Licensed Named Ecologist. Where a tree cannot be fully inspected, the protocol requires the Named Ecologist or Accredited Agent to consider various options to identify whether bats are present and carry out works appropriately. Appendix A of this document explains the procedure that is applied where full potential roost feature (PRF) inspection is restricted. A Natural England compliance visit has witnessed the above procedure being implemented on a number of trees.

2. BCT Statement: *"If bats are found it is not always possible to establish whether or not they are breeding bats just from inspection surveys because the bats are tucked away deep into tree features. A small number of bats could represent a maternity colony in their own right or may be joined by others later, which is an especially high risk factor when carrying out such work early in the maternity season. How can breeding and non-breeding roosts be separated in such cases in order to protect the breeding ones?"*

Licensable works affecting trees in the maternity season have been carefully assessed on a site-by-site basis. Information provided to support the licence application has demonstrated whether the trees have previously been identified as an important roosting resource and the pre-felling inspections take a precautionary approach. We have only licensed works in the maternity season where there is considered to be a reduced likelihood of important maternity roosts being present.

Maternity roosts found through pre felling checks or trees suspected of containing a maternity roost would be left as per condition B13.

3. BCT Statement: *"Tree clearance works around a maternity roost, even if the roost itself is retained, could cause disturbance through noise, vibration and the removal of habitats important for the sustenance of the colony (including suitable alternative roosts). How are these impacts on maternity colonies being accounted for?"*

HS2 are required to implement the measures in their HS2 Code of Construction Practice (COCP) to avoid in-combination noise and vibration effects. A further site-specific mitigation measure is also applied which provides bat boxes (and other features) to replace trees being lost which support moderate and high potential bat roost features. Therefore not only confirmed roosts are compensated.

In addition, the following commitments have been made in the corresponding method statements:

"There will be no new lighting at the site post construction. No night time vegetation clearance work is proposed during the active bat season. No tree felling will be done in darkness. Where other clearance work is undertaken during the darker winter months, all lighting will be limited to 1-2 hours after dusk and prior to dawn, and flood lights will be angled away from tree line/woodland edges.

The noise (chainsaws and other machinery) resulting from clearance/felling of trees will be in daylight hours and may indirectly affect other roost sites in the licence area. Such noise will be relatively short term in nature and undertaken in conjunction with other ecologically supervised works associated with PRF inspections. Unnecessary noise by contractors will be managed through toolbox talks and direct supervision by qualified ecologists approved by the named ecologist for the Mitigation Licence."

4. BCT Statement: *"Tree roosting bats will utilise a number of trees within a woodland area over the maternity season. Concerns are that the significant loss of trees in these woodlands will have removed all, or the vast majority, of the alternative roosts available to the impacted colonies."*

ALBSTs have demonstrated that high numbers of roosts remain unaffected and the tree inspections have also identified moderate and high PRF trees that will remain present. As stated above, compensation is being applied for trees that are being lost that support moderate and high PRFs, therefore roosting opportunities for affected bat populations should remain stable.

Appendix A - Method Statement Section E2.2

The indicative timing of planned works is provided within Appendix A and within the Works Schedule.

All bat related tree works will be undertaken by the Named Ecologist and / or the 'accredited agents'. Accredited agents will be suitably experienced ecologists with Natural England Level 2 Class (CL18) licences who have been approved by and will be working under the direction of the Named Ecologist.

All activities will be supervised by an Ecological Clerk of Works (hereafter the ECoW Site Supervisor) approved by the Named Ecologist, and all works, actions and bats encountered will be fully documented

A pre-fell decision tree has been developed (as shown in Appendix B) to ensure consistency in decisions made by accredited agents and the Named Ecologist. Guidance with examples on suitable one-way exclusion devices is provided in Appendix C in addition to guidance detailed in the Bat Workers Manual (see section 'E2.2 e' above).

Re-grading of the potential of trees (high / moderate / low) to support bats will be undertaken at the discretion of the accredited agents or the Named Ecologist. The loss of obscuring vegetation in winter allows for a clearer assessment of trees and Potential Roost Features (PRFs) from the ground in early spring. Any re-survey via ground-based inspection (BT1) or tree climbing inspection (BT2) will be documented and reported to Natural England as part of a preliminary/interim licence return. The following protocol therefore applies to all trees subject to felling that are considered by the accredited agents or Named Ecologist to have PRFs suitable to support roosting bats.

All trees declared clear of bats and approved for felling by the accredited agents or Named Ecologist will be marked and recorded.

Additional non-standard protocols not covered by Natural England conditions a-h:

1. For trees that are safe to climb and with Potential Roost Features (PRFs) that can be reached / accessed, pre-felling climbing inspections will be undertaken on the same day as the planned tree felling. All climbing surveys will be undertaken by accredited agents equipped with an endoscope (with 1m minimum length cable);

2. Where a PRF contains bats they will be removed in line with Natural England capture and release procedures (see sections a-h above). The tree roost will be declared clear for felling by the Named Ecologist or accredited agent.. Felling will take place on the same day as the climbing inspection or the roost will be made permanently unsuitable for bats, via destruction, soft felling or exclusion of bats. The action undertaken will be recorded.

3. Where a PRF contains no bats the tree will be felled following confirmation by an accredited agent or the Named Ecologist that no bats are present. Should there be delays to felling, the PRF will be made unusable for roosting bats via removal of the PRF (destruction, soft felling or exclusion of bats).

   In the event that exclusion of bats is not possible or is reported to be ineffective the PRF will be re-inspected prior to felling.

4. Where bats within a roost cannot be captured or excluded using one-way exclusion devices consideration will be given to the range of options available to the Named Ecologist or

accredited agents to establish whether bats are present or absent and how best to fell the tree. The options include undertaking additional emergence / re-entry surveys, repeat climbing inspections, or soft felling as detailed in point 6 below. A decision on the approach to be taken will be based on the nature of the PRF, associated safety considerations, the anticipated effectiveness of emergence / re-entry surveys given the time of year, and the ability to soft-fell safely.

Where emergence / re-entry surveys are undertaken, these will make use of thermal imaging (TI) or Infra-Red (IR) cameras in-line with BCT Guidelines (Collins, 2016).

5. Where a tree cannot be climbed or inspected due to safety the considerations and measures outlined in point 4 above will be followed.

6. Where soft felling is required as the presence of bats within a PRF cannot be determined, the feature will be soft felled in conjunction with an experienced arborist. This will PRF sections to be cut away and lowered to the ground (anchored from MEWP or adjacent trees) and inspected by an accredited ecologist or the Named Ecologist. Any bats found will be moved in line with Natural England capture and release procedures (see sections a-h above) with consideration given to anchoring the section felled PRF into a nearby suitable tree. PRFs will be left in-situ on the ground within a 10m exclusion zone for 24 hours; and,

7. Following successful bat capture by an accredited agent or the Named Ecologist, a health check of the bat will be undertaken (see NE capture and release procedures a-h above). The bat will then either be transported immediately to a pre-installed bat box / roost mitigation feature in the same woodland parcel where access is possible, or kept in a suitable container until dusk and released near the site of capture. Bats kept in captivity and released at dusk will be cared for in line with the Bat Care Guidelines (Miller 2016).

8. All licensable works, bats captured and subsequent actions will be recorded and documented by the accredited agents approved by the Named Ecologist.

Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London

Miller, H. (ed.) (2016) Bat Care Guidelines (2nd edn). The Bat Conservation Trust, London.