



**Bat Conservation Trust Position Statement  
HS2 Phase One supplementary environmental statement and Additional  
Provision 2 Environmental Statement  
October 2015**

**Summary and Recommendations**

BCT has major concerns about the HS2 proposal and strongly urges that the following measures are applied:

- i) Statements within the report that refer to newly created compensatory planting as mitigation for well-established habitats are amended to acknowledge clearly the limitations associated with the replacement habitat and to reflect the actual loss of areas of key habitat in the short, medium and long-term.
- ii) A review is carried out into the impacts a loss of roosting, commuting and foraging habitat will have on the population viability of all species. This review should investigate the susceptibility of the Bechstein's bat population to genetic isolation. The use of DNA analysis of the Bechstein's bat populations would show the level of genetic diversity and the degree of interaction with other populations and provide an indication of the impact of the proposed habitat loss and fragmentation.
- iii) The classification of impact on Bechstein's bats should be reviewed to take into account the experimental nature of some of the proposed mitigation and the slow maturation rates of planting schemes.
- iv) Any habitat planting that is proposed as mitigation to provide alternative flight paths should be started as soon as possible.
- v) An independent third party with the appropriate expertise is recruited to carry out monitoring of the Bechstein's bat population.
- vi) Provision to protect, manage and monitor mitigation and compensation measures in the long-term is outlined clearly and well-designed prior to the commencement of work.
- vii) The Government meets its commitment to 'no net loss' of biodiversity, the maintenance of the existing area of ancient woodland and the conservation of rare species associated with ancient woodland.**

BCT remains concerned at the inadequate standard of mitigation proposed in the operational phase of the development, particularly its failure to acknowledge slow maturing habitats such

as woodland. This is particularly evident when considering the loss of ancient woodland and the nationally significant impact this will have on one of our most important and protected species, the Bechstein's bat. BCT believes that the government should stand by the commitments it has made to maintain ancient woodland and to ensure no net loss to biodiversity. Such commitments should not be forgotten or discarded in the face of economic pressure.

## **Introduction**

The Bat Conservation Trust (BCT) believes that wildlife protection can be balanced alongside economic priorities such as major infrastructure projects. However, this is dependent upon high professional standards and the application of best practice. As a government funded scheme HS2 should be an exemplar of best practice, not only of civil engineering but also of managing and successfully mitigating any adverse impacts on the natural environment.

BCT is pleased to see that in some areas additional mitigation has been proposed as a result of information gathered from additional survey work. However, BCT does remain concerned that the mitigation proposed fails to consistently meet the principles of the Sustainability Policy.

BCT's overarching concerns are:

### **(a) Impact of habitat loss and limitations of compensation are not fully acknowledged, especially when referring to irreplaceable habitat and slow maturation rates**

A major concern is the amount of mature woodland, including irreplaceable ancient woodland, that will be lost. Ancient woodland is widely recognised as irreplaceable and should be protected. The loss of irreplaceable habitat is unacceptable. In particular:

- Proposals for compensatory planting intended to mitigate the loss of ancient woodland are misleading. Ancient woodland cannot be recreated as the Environmental Statement (ES) suggests.
- Furthermore, the proposed mitigation or compensation will not be effective for the species associated with ancient woodland. This is due to the time it takes for newly planted habitats to achieve sufficient maturity to support the woodland features that those species require.
- The increase since the previous consultation in the amount of ancient woodland that will be lost.

BCT is also concerned about proposals in the latest statements to use crossing points, such as green bridges, as habitats to supplement foraging/roosting habitat<sup>1</sup>. Whilst these features are important for connectivity in the landscape and may develop into foraging habitats over time the slow maturation rate of planting has not been taken into account. Bat populations are very slow to grow or recover their numbers and the loss of core foraging habitats associated with a maternity roost may result in all the breeding females from an area being unable to rear young in that year, and possibly future years. This is particularly true if there are no suitable alternative roosts and foraging habitat nearby. In fact, the decline in Bechstein's bat that resulted in their classification as an Annex II protected species under the EU Habitats Directive has been attributed to the historical reduction of available habitat<sup>2</sup>.

BCT recommends therefore:

(i) that statements within the report that refer to the provision of newly created compensatory planting as mitigation for the loss of well-established habitats are amended. These statements need to acknowledge the limitations of replacement habitat and reflect the actual loss of areas of key habitat over the short, medium and often long-term.

(ii) a review is carried out of the impact a loss of roosting, commuting and foraging habitat will have on the population viability of all species. In particular the susceptibility of the Bechstein's bat population to genetic isolation should be investigated. DNA analysis of the Bechstein's bat populations could be used to show the level of genetic diversity and the degree of interaction with other populations. This would provide an indication of the effects of the proposed habitat loss and fragmentation.

**(b) The extent of 'temporary' impacts associated with the operational phase should be clearly acknowledged and mitigated for**

Mitigation has been extended in some areas as a result of further survey work that identified additional adverse effects. However, it is incorrect to classify the proposed extensive work at Sheephouse Wood and Bernwood Forest as having no significant impact on the local population of Bechstein's bats, particularly in light of the experimental nature of what is proposed as mitigation and the slow maturation rates of planting schemes.

BCT is extremely concerned with the statement in the ES that suggests the time lag between new planting and the point at which vegetation has matured constitutes a 'temporary' impact.

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<sup>1</sup> Non-technical summary - Page 103 – Amendment - Provision of green bridge at Radstone, changes to environmental mitigation and realignment of PRoW (AP2-014-006).

<sup>2</sup> Napal, M., Garin, I., Goiti, U., Salsamendi, E., Aihartza, J. Past deforestation of Mediterranean Europe explains the present distribution of the strict forest dweller *Myotis bechsteinii*. [Forest Ecology and Management](#) 293 (2013) 161–170.

The ES repeats this statement in a number of places and in several instances dismisses the temporary impact, deferring instead to the long term benefits of proposed mitigation. This is misleading particularly in the case of bats. It is essential for the time lag between planting and functionality for bats to be acknowledged and for the planting to be scheduled accordingly. Failure to do so would mean that mitigation of this type cannot be considered meaningful.

BCT fully supports the need to consider provision along the route that would mitigate for and enable safe passage for bats and other wildlife. Connectivity modelling in the absence of actual data would aid this approach.

BCT recommends that:

(iii) the classification of impact on Bechstein's bats is reviewed to take into account the experimental nature of some of the proposed mitigation and the slow maturation rates of planting schemes.

(iv) any habitat planting that is proposed as mitigation to provide alternative flight paths is started as soon as possible. This is necessary to give the mitigation measures a chance of becoming functional within the timeframes necessary to support the affected species.

**(c) Provisions should be made to ensure mitigation measures are maintained for the long term**

The on-going management and monitoring of habitat is an essential part of successful mitigation. This should be enabled by the provision of support through dedicated funding and resources to whomever the land is entrusted, particularly if ownership is passed to a third party such as a nature conservation body. Likewise, dedicated resources should be identified that will enable the future management of compensatory habitat and monitor the long-term impacts of the scheme. More information is required about how the impact of mitigation measures will be monitored and their criteria for success. Information about the long-term management / maintenance of mitigation measures and replacement habitats is also essential. If it is not possible to protect ancient woodland, as this scheme would suggest, then it is difficult to have any confidence that newly planted woodlands will be protected in perpetuity.

BCT recommends that:

(v) An independent third party with the appropriate expertise in this area is recruited to carry out monitoring of the Bechstein's bat population.

(vi) Provision to protect, manage and monitor mitigation and compensation measures in the long-term should be outlined clearly and well-designed prior to the commencement of work.