Response to HS2 Consultation From the Selborne Society

1. Introductory comments

1.1 The Selborne Society is the oldest conservation society in the UK. It owns and runs Perivale Wood, which is the second oldest 'public' nature reserve in the UK. As well looking after Perivale Wood, the Selborne Society's remit extends to conservation generally, particularly within the London Borough of Ealing.

1.2 The proposed HS2 route passes directly next to Perivale Wood and we therefore have a particular interest in the proposal. In view of the reserve's nature conservation importance, its status as the premier nature reserve in the borough of Ealing, its sensitivity and its historical significance, we would expect detailed discussions with HS2 Ltd or its agents in order to prevent damage and disturbance to Perivale Wood. Our comments in this consultation are without prejudice to our position once more detailed proposals are seen.

1.3 The Selborne Society supports the principle of improving the rail network, including high-speed rail. This is because generally rail has a lower environmental footprint than competing modes of transport, namely road and short-haul flights. This is particularly the case for greenhouse gas emissions – vital because global warming a huge threat to nature and to mankind. However, this proposal does not achieve any significant benefits – see 2.8.

2. General comments on the proposals

2.1. While the Society supports the principle of high speed rail, we have severe doubts about the benefits of this proposal. The benefit of shaving a few minutes off a journey to Birmingham would not seem to justify the £16-18bn cost.

2.2 National economic benefits are being touted as the major reason for this large national project. The main text of the consultation document which deals with economic issues is: "*The size of the scheme, its ability to provide major reductions in journey times between London and Birmingham and beyond, and the possibility of enhanced international connectivity, means HS2 would provide substantial economic and social benefits locally, regionally and across the wider UK economy.*" Page 27 says "*Fast track to prosperity: A new high speed rail network would transform the country's economic geography. It would bring our key cities closer together, enable businesses to operate more productively, support employment growth and regeneration, provide a genuine alternative to domestic aviation, and create a platform for delivering long-term and sustainable economic growth and prosperity.*" This is hype. Such extraordinary claims need extraordinary evidence.

2.3 Only a minority of rail travel is for business purposes. It seems far-fetched suggest that the current levels of connectivity and service are a significant impediment to the economy. For example, a half hourly service from London to Birmingham taking just 90 minutes and an hourly service to Manchester taking well under 3 hours would not appear to be a hindrance to the economy. If such counter-intuitive claims for national economic benefits are being made, they need to be backed up by very solid evidence.

2.4 Examination of 'The economic case for HS2' reveals that the biggest benefits are reduction of travel time for business travellers. The benefit is calculated by taking a high value of time, related to pay, and loading on a series of overhead costs. However, there is no evidence given that the time

saved would be used in productive work and that the size of the economy, measured as, say, GDP would be increased. Either the traveller will work on the train, in which case working time is not saved, or the traveller will relax, in which case the time is more akin to leisure, which has a far lower economic value and no overheads.

2.5 It appears from 'The economic case for HS2' that the 'external costs' of damage and pollution arising from HS2 have been ignored. This is very concerning as it will bias the result. We note that an economic benefit has been claimed for reduced noise and air pollution from roads (4.3.14 of the eoncomic case document). If benefits are claimed for reduction of impacts on roads while increased impacts (from zero) of the railway are ignored in an economic analysis, this would represent blatant bias.

2.6 There will undoubtedly be local economic impacts along the route and increased economic activity in construction and ongoing operations. There will be employment associated with the economic activity. However, this is not an economic argument for the project. If the £18bn proposed for HS2 were instead spent instead on public (or private) projects of almost any other type, this would equally generate economic activity and jobs. Thus the economic activity and employment arising from HS2 is not a net gain to the economy. The detailed study of local impacts, while of interest and relevance to the communities concerned, is not germane to the decision.

2.6 HS2 will increase capacity on the rail network, but this will only benefit the environment if it takes traffic off the road or out of the air. If its main effect is to generate more travel – encourage 'hyper-mobility' – then it will have a net adverse effect on the environment.

2.7 The non-technical summary of the Appraisal of Sustainability (AoS) and the 'carbon' leaflet indicate that any even if optimistic assumptions are made, reductions in CO2 emissions will be very small - 28 million tones over 60 years. If less optimistic assumptions are made, there will be an increase of 24m tones. Given the importance of action on climate change, this is an appalling environmental return for an £18bn public infrastructure project.

2.8 Much of the AoS is taken up with how the environmental damage will be 'mitigated' ie reduced. While relevant, this is by no means the only or the most important role of an AoS. Its main role should be to show what the impacts are likely to be, not just how they may be mitigated from even more severe impacts.

2.9 The consultation systematically and seriously understates the impacts on sites of conservation (biodiversity) importance. For example the non-technical summary says (9.2) "*No sites of international significance would be adversely affected and impacts to nationally protected sites would be restricted to just a few locations .. A number of impacts on local and regional sites are also likely, including some loss of ancient woodland in the Chilterns.*" There is no hint in such statements that there at some 16 important wildlife sites in London alone, including Perivale Wood, which are likely to be affected. There is no suggestion that 4 Wildlife Trust reserves, 10 Sites of Special Scientific Interest (SSSIs), more than 50 ancient woodlands and numerous local wildlife sites lie in the route of the proposed High Speed Rail route.

2.10 No details have been given that enable us to assess properly the impacts on sites on or near the route. This is a very serious matter because it prevents us and others making fully informed comment on the proposal. The plan is, according to the consultation document, to have a 'hybrid bill' taken to Parliament. Only at that stage will an Environmental Impact Assessment (EIA) be carried and only then will we be see what the impacts will be. This consultation is therefore of

limited value. We would expect to be fully consulted when the EIA is prepared and before the bill goes to Parliament.

3. Impacts on Perivale Wood

3.1 Directly adjacent to the railway embankment is an old neutral grassland. The grassland is grazed, ie a pasture, and has not been seeded or fertilized. As a result it has a rich diversity of plant species. The plants include adder's tongue fern (Ophioglossum vulgatum), soft shield fern (Polysthichum setiferum), bugle (Ajuga reptans) and several species of violet (Viola sp), all growing within a few metres of the embankment. These plants are locally uncommon or rare.

3.2 The pasture has a rich diversity of invertebrates as one would expect in an ancient grassland. There are number of locally rare moths, including the obscure wainscot (Mythimna obsolete). The locally rare butterfly white-letter hairstreak (Satyrium w-album) breeds in the blackthorn scrub at the edge of the pasture.

3.3 Ancient grassland cannot be replaced and damage cannot be mitigated to any extent. It is therefore essential that there is no land take for the railway. It is also essential that the pasture is not used during the construction process, because vehicles or machinery would damage it. (Access by foot for inspection of the embankment and works should not be a problem.) Fortunately, the embankment is very wide adjacent to Perivale Wood and it already carries 4 tracks, two being the Central Line.

3.4 One of the most important features of Perivale Wood is its tranquility. This is important for certain wildlife. It has been shown that noise reduces the density of breeding birds in woodland. There is woodland within about 20m of the embankment and the wood has a high density of breeding birds including blue tit, great tit, robin, blackbird and wren. Greater spotted woodpecker and green woodpecker breed and the hobby, a very rare bird in London, also breeds here some years.

3.5 Quietness is also important for people and is one of the great attractions of Perivale Wood. Tranquil green open spaces have been shown to have mental and physical health benefits. We have members of the society visiting the reserve every day and there are frequent visits by groups including school classes. If the reserve were to become more noisy and thereby less pleasant, there would be big negative social impact.

3.6 High speed trains are very noisy, in contrast to the London Underground trains. It is therefore essential that there is an effective noise barrier to keep the sound away from the reserve. To avoid an increase in disturbance above the current levels, the maximum noise level, $L_{a,max}$, for high speed trains should be no more than for the current underground trains (without a barrier). The average noise level, L_{eq} due to high speed trains plus underground trains should be no more than present due to underground trains.

3.7 Nature reserves are also sensitive to light pollution. Moths and nocturnal birds can be severely affected by light at night. It is therefore essential that there are no lights visible from the reserve and no significant reflected or diffused light.

3.8 The embankment, although not part of the reserve, is a useful habitat. It has about 100 species of flowering plant including mature oaks. It support many other species and is useful 'green corridor'. It also acts as a valuable buffer zone for the reserve. (The value of buffer zones around the reserve is officially recognised in the borough's planning policies.)

3.9 We recognise that there will have to be destruction of some embankment habitat while HS2 is being constructed. However, we urge that the best possible mitigation and 'greening' is carried out. This should seek to restore habitat and restore the buffering for Perivale Wood.

4. Conclusions

4.1 Please ensure that the above comments are taken fully into consideration before decisions are made on HS2.

4.2 Because the consultation does not indicate what the impacts might be on Perivale Wood, we have to assume the worst. We therefore oppose HS2 on the route proposed, pending sight of the EIA.

4.3 Would you please acknowledge receipt of this response.

5. Contact

Nic Ferriday: 6 Boston Gardens, Hanwell, London W7 2AN ; nic.ferriday@ntlworld.com ; 0208 930 4119