## Report on HS2 Ltd's Bowood Lane Mitigation site

29th August 2021

This report is written by Mark Keir, of Jones' Hill Wood.

I have no formal qualifications in ecology, but I do have RHS Advanced Certificate and 25 years or more experience as a gardener/horticulturalist.

Having been central to much of HS2 Ltd's recent angst in Court, I have also spent many, many hours studying HS2's Environmental Statement, Ecology Site Management Plan, Natural England Licences and other documentation relating to HS2 works around Jones' Hill Wood and the Bowood Lane mitigation site.

#### Overview

HS2's proposed route cuts through the SW corner of Jones' Hill Wood, an ancient woodland in the heart of the Chilterns AONB. The Act of Parliament specified extensive mitigation adjacent to the Wood to in some degree, ameliorate the destructiveness of the construction and to adhere to the often repeated aspiration to no net loss to biodiversity.

Further to the originally planned mitigation, Fusion JV (main HS2 contractor at this point) had been forced in October 2020 through Court action to survey Jones' Hill Wood for a first time, apply for appropriate licence from Natural England (WML OR 58) and draw up considerable extra mitigation works to comply with that licence.

The issue of the Licence was called to question through the Courts and was the cause of some considerable concern to HS2 Ltd and Fusion JV, highlighting as it did HS2's much vaunted environmental ethics and their ability/inability to demonstrate their adherence to same. It might be assumed therefore that holding rigidly to the licence conditions would be a priority, and that the very best mitigation work would be put in place.

This report looks at that mitigation, it's present standard and likely success going forward, and how it measures up to compliance with that licence.

The map in Fig 1 shows the parcels of land involved.

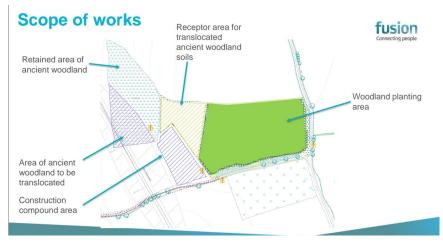


Fig 1

The areas of importance to this report are: "Receptor area for translocated ancient woodland soils", "Woodland planting area" and Jones' Hill Wood ("Area of ancient woodland to be translocated" and "Retained area of ancient woodland") itself.

What I have observed does not put HS2 Ltd in a good light. My observations have been made from the perimeter fence, with no access to the sites given to "protesters" or anyone else for that matter, but even from that sometimes distant vantage, there seems little to celebrate.

## **Receptor Site**

The receptor site host soil was compacted (Fig 2) pretty much daily with heavy machinery over the whole of winter '20/21 and was waterlogged much of that time. This was never ameliorated.



Fig 2

Translocated soil was placed well out of acceptable season in April/May '21. The translocated ancient hedge (possibly 1500yrs old) was moved in April in dry desiccating winds. The translocated trees including those for live specimens were moved as late as late May, even into June 2021. Other whips and pot grown stock were planted May/June '21 None of these movements come even close to standards laid out in the Environmental Statement.

Of the translocated ancient hedge, it appears one plant is surviving, six barely surviving and unlikely to succeed. The other seventeen are quite dead including yews and hollies (Fig 3).



Fig 3

Few if any of the translocated trees taken for live specimens in the site have survived (Fig 4). In the receptor site there is a large empty space possibly equivalent to over a third the total area suggesting the area of mitigation falls well short of area of woodland destroyed (Fig 5) In addition to this the long new front to the ancient woodland, composed of newly exposed etiolated weak trees suggests that there will be much secondary damage unaccounted for in ecologists assessments.



Fig 4



Fig 5



Fig 6

The supposed bat flightline trees within the receptor site are, as far as bats are likely concerned, lost amid a jumble of erratically placed considerably larger trees and monoliths (Fig 7).



Fig 7

Bat boxes placed within the receptor site are unlikely to see any shelter from weather or light for at least 30 years. Presumably the fragmentation of habitat so ruthlessly executed will likely not be repaired any time before that.

A 2m wide strip of heavy weed infestation along the hedge line appears to have had an application of herbicide in August '21

There are many smaller whips and pot grown plants added to the hedge and throughout the translocated site. These tend to be deep in weeds so only a rough estimate of around 25 - 30% attrition can be given (Fig 8)



Fig 8

The immediate impression of the site is of something reminiscent to a WW1 battlefield. The Jones' Hill community long ago referred to this area as "The Graveyard".

# **Bat Flight Lines**

There are two main lines of nursery grown semi-mature trees planted as flight corridors for bats, planted across the receptor site and the woodland planting site. Within the receptor site, as mentioned above, it is unlikely that these trees form any legible guide to bats (Fig 7).

The majority of these trees appear heading toward untimely death. (Fig 9, Fig 10)



Fig 9



Fig 10

Along the contiguous northern perimeter of the receptor site and woodland planting site there are 37 of these trees, all with watering bags, but 24 are stressed to very stressed with a 10 probably dead. Many of these despite being given quite substantial supports (some months after planting) are leaning at precarious angles (Fig 11) and, furthermore, the ties to those supports are poorly executed (Fig 12) with only a small handful of trees actually benefitting from that support. Most will soon be seriously damaged by chafing at a critical height as wind rocks the trees on the hard supports. The water bags have only been seen being filled twice since planting in April.



Fig 11



Fig 12

The second line of trees runs diagonally from Jones' Hill Wood to the unnamed wood at top of Bowood La. From a standpoint behind the northern fence, only 14 are assessible. 8 of those are clearly stressed, some possibly dead. 7 are close enough for the base of the tree to be discernable, and there are no water bags to be seen (Fig 13). Supports and tying follows the same pattern as above.



Fig 13

I believe these trees were originally considered supplemental, it seems odd they have taken on role of compulsory compliance requirement.

I have never seen any watering beyond the two bag fillings noted above. No bowser has been seen on the site or adjacent compound.

## Woodland planting site

This area was mostly decompacted February/March '21. There was no other preparation.

Planting of whips took place March through April '21.

Overall the whips seemed well placed and in May '21 or later, sometime after planting, were provided with canes and paper rabbit guards (first time I've seen HS2 use these rather than plastic, good to see!).

According to HS2's documentation there was a proposed 22000 plants across this site, but pacing out, and looking at planting density I see scope for little more than 8 or 9000 plants here.

Given ponds have been added to the original plans for unexpected licence compliance requirements, and that there are large unplanted areas in the centre of the area, I suspect plant numbers are markedly below original quotes, to an extent that needs to be questioned. Is this a policy followed elsewhere? How is this to be reflected in the proclaimed 7 million trees to be planted?

Plans I have seen show hedging along a serpentine edge to the fence line, but what has appeared is a straight line (Fig 14).



Fig 14

The majority of whips seem to be progressing, though an attrition of about 25-30% looks likely.

Most of the area is under a major infestation of weeds with the majority of whips quite invisible (Fig 15).



Fig 15

That same weed infestation and associated seed fall will have major implications for any seeding of open "glade" at centre of this area.

There appears to have been an application of herbicide along the north and east hedge boundaries (Fig 13), possibly to reduce wind blown seed contaminating adjacent agricultural land. If this is the case it looks to be a futile underperformance. There is a very considerable seed bank here which the local farmer must wince painfully when he sees.

#### Jones' Hill Wood

Over a third of the Wood was actually felled. The expressed need for speed in Court was to facilitate constructing the urgently required haul road. As of September '21, there is little sign of any road building. Does this mean better mitigation could have been in place before felling? Does this mean more appropriate seasons for translocating and planting might have been found? Does this mean asking to waive the regulators rules for the sake of costs incurred was misleading?

Even now, the Woodland Management Zone is full of various detritus of the massive security presence posted there since October '20.

Still this beleaguered strip that is now a wide open front to the Wood is floodlit every night (Fig 16), though lamp numbers have been reduced. The noisy generators now only run at night, coming on after sun down.

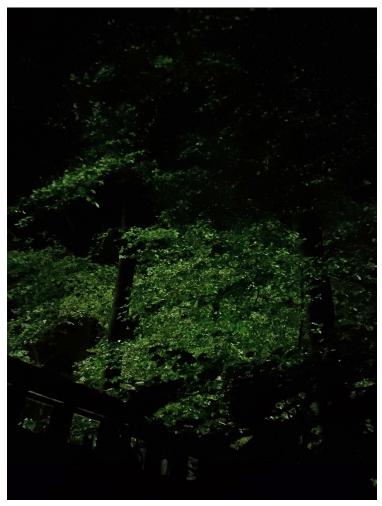


Fig16

The flood lights still lie under some of the bat boxes sited here in April.

As mentioned above, the Wood now has a very wide open front allowing light and weather penetrate right through the heart of the Wood and already some weaker specimens on the supposedly safe side have sadly succumbed (Fig 17).



Fig 17

It is worth noting too, that the three prime potential roost site standing deadwoods are now frontline to the weather (By experience I can attest to the windiness of this Woodland!) and have been seen rocking significantly in fairly gentle winds.

#### https://photos.app.goo.gl/4knGxzkp8jLTGoZT7

Numbers of glis glis in the Wood seem much reduced, possibly many of them burrowed in the soil extraction area over winter. There may be a corresponding increase in grey squirrel numbers.

Tawny owls have recently started moving back in.

The bat population seems considerably less than prior to HS2 Ltd's engagement with this iconic Chiltern wood.

Over all, Jones' Hill Wood now looks set for further serious deterioration.

## **Summary**

The work done on behalf of HS2 Ltd in and around Jones' Hill Wood has appeared shambolic, hurried, mis-timed and mismanaged. What has resulted is far from adequate. Although some of the work has been executed with seeming care, it is unlikely that given lacklustre and/or dismal work surrounding, that this was any more than box ticking. If this is the standard that Fusion/HS2 Ltd attain in full public glare and whilst a very public legal case on this very topic was ongoing or just recently finished, it does not bode well for HS2's work elsewhere. HS2 Ltd seem a very long way off claims of no net loss to biodiversity and of a green corridor of rich nature-scapes. The failure on so many counts suggests little faith can be put in HS2 Ltd or their contractors to adhere to the Environmental Statement.