

Carol-Anne OCallaghan

3rd December 2021

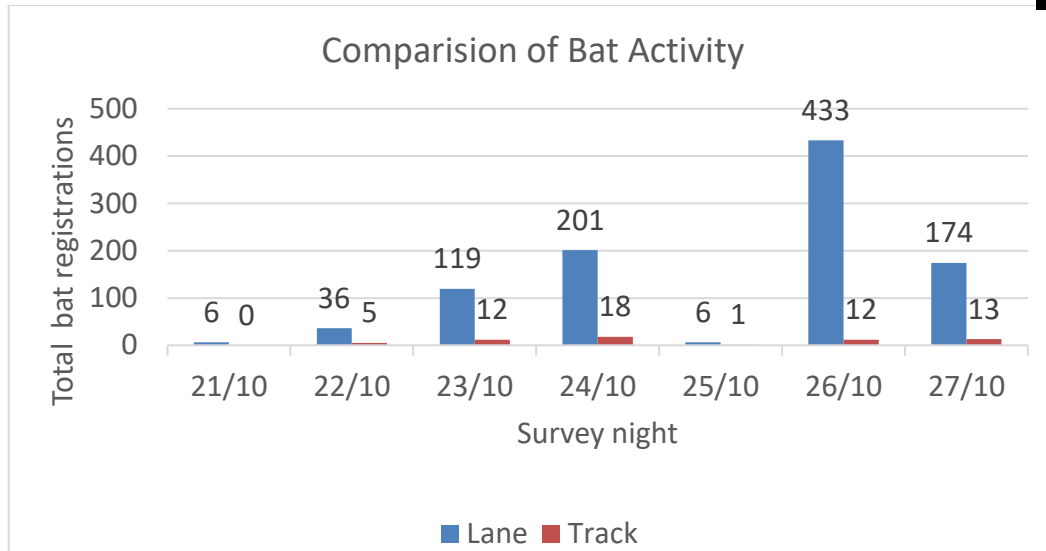
Dear Carol-Anne,

Thank you for sending me the latest bat activity data. I understand that this was collected over the period 21st to 27th October 2021, from two anabat express detectors running concurrently, one located at the lower end of Leather Lane and the other located at the mid-point of the gap created in the hedgerow and tree line where the track crosses the lane.

Although the survey period is outside of the main bat activity period, as the data were collected simultaneously, any influence of the weather on bat activity will have effected registrations at both location and so I am satisfied that the two data sets are comparable.

The results of the analysis of the data are provided in the table below and shown on the following graph.

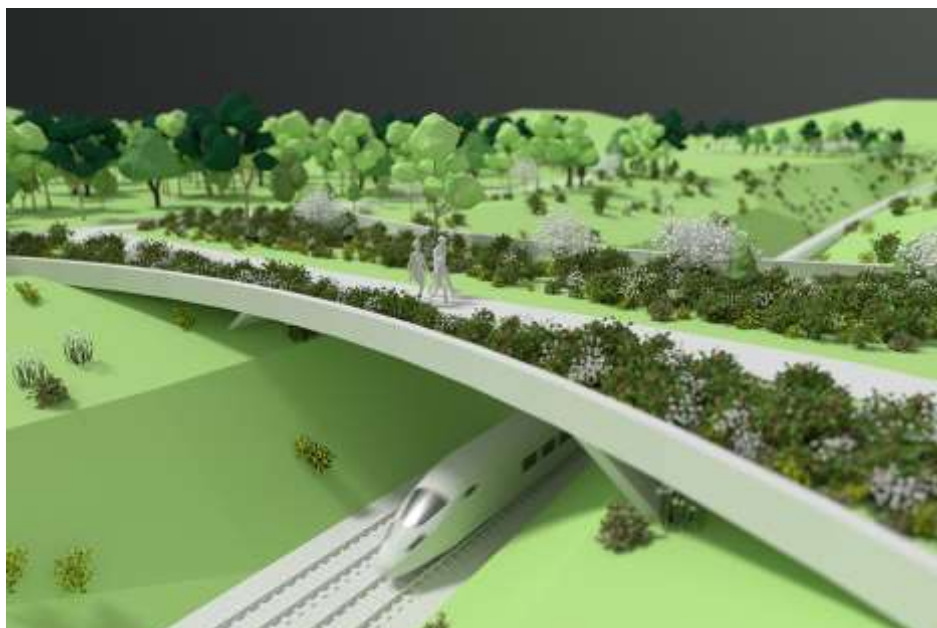
Survey night	Location	Common pipistrelle	Soprano pipistrelle	Pipistrellus species	NyctEpte	Barbastelle	Unidentified bat	Total
21/10/21	Track	0	0	0	0	0	0	0
	Lane	4	0	1	1	0	0	6
22/10/21	Track	4	1	0	0	0	0	5
	Lane	36	0	0	0	0	0	36
23/10/21	Track	10	1	0	0	0	1	12
	Lane	105	13	0	0	1	0	119
24/10/21	Track	18	0	0	0	0	0	18
	Lane	198	2	0	0	1	0	201
25/10/21	Track	1	0	0	0	0	0	1
	Lane	5	0	0	1	0	0	6
26/10/21	Track	12	0	0	0	0	0	12
	Lane	432	1	0	0	0	0	433
27/10/21	Track	13	0	0	0	0	0	13
	Lane	173	0	0	0	1	0	174



The data show a clear difference in the bat activity at the two locations, with significantly more bat registrations recorded by the detector on the lane, compared to the detector on the track crossing. The only discernible difference in the parameters at these locations is the absence of a c40m length of the tree line and hedgerow where the track crosses Leather Lane. I can only conclude from this that this lack of vegetation is an obstacle to bat movement and that the corridor function of leather lane has been significantly denuded due to this vegetation clearance.

As has been shown from the data collected earlier in the year and which I also noted during my own dawn surveys in 2021, Leather Lane is clearly an important and significant bat corridor within the landscape, used by at least seven species, including by the very rare barbastelle bat *Barbastella barbastellus*.

On the basis of the above, mitigation for the impact of the track crossing must include a green bridge over the track to replace the removed linkage and reinstate this important wildlife corridor. I note that HS2 promote the use of green bridges¹, as shown below and Leather Lane is a clear case where this mitigation option must be applied.



Furthermore, any additional removal of the trees will only increase the impact of HS2 on this corridor

¹ Source - <https://www.gov.uk/government/news/hs2-launches-plans-for-unprecedented-green-corridor-stretching-alongside-the-railway>

Sam Watson

and all options for retaining the remaining trees and hedgerow must be implemented, such as routing the replacement over-road on the north side of Leather Lane, before further removal of the trees and hedgerow can be considered acceptable.

I hope the above is of assistance and please get in touch to discuss anything further if necessary.

Regards

A handwritten signature in cursive script that reads "SWatson".

Sam Watson MCIEEM BSc (Hons)
Principal Ecologist