The Impact of the Metrolink Light Rail System on Local Biodiversity in South Manchester

During the summer of 2011 I noticed that, because of the ground disturbance, in the vicinity of the new St Werburgh's Road Metrolink stop in Chorlton, hundreds of arable 'weeds' had appeared on the newly created embankments. The seeds of such plants can remain buried but viable for decades (perhaps even for a century or more) and disturbance, and subsequent exposure to sunlight, causes them to germinate. Many of these weeds would have been familiar to the old Chorlton farmers and their farm workers (they probably cursed such plants – but they were trying to maximise crop yields). There were poppies, wild pansies, wild radish, fumitories and many more. Many of these plants were recorded in the local floras from the mid-19th century and in the local collection in Manchester Museum Herbarium. And it was not just me that appreciated these profusely flowering plants – they were also covered in bees, butterflies and other pollinating insects.

When I returned, a few days later, with my note book and camera, to record all of this richness, I found that the whole bank had been sprayed with herbicide. This is, of course, the 'traditional' response to wildlife: "Not wanted here – kill it!"

But in their <u>'Wildlife Habitat and Tree Replacement' policy</u>, Transport for Greater Manchester (TfGM) have published some very specific promises about 'protecting' and 'enhancing' local biodiversity and 'mitigating' for any losses, and given such promises perhaps they (or their contractors) should not have automatically reached for the herbicide spray in the situation that I have described above.

The loss of my weedy bank is just one of many losses that we have suffered, and are due to suffer, as a result of the recent and planned Metrolink extensions. The old railway cuttings between Chorlton and Old Trafford and Chorlton and East Didsbury had developed into rich wildlife habitats in the 50 or so years since they had been abandoned. Many species of native mammals, birds, amphibians and plants flourished in them. Some sections were flooded and provided good habitats for the amphibians and several species of water plants; both of these groups are now locally scarce because of the very severe shortage of ponds and wetlands. The loss of these wildlife refuges is particularly catastrophic given that so much green space has been lost in this region over the last 20 years or so. In this period we have seen an approach to development which has overwhelmingly favoured the needs of developers and led to the infilling of countless green spaces – including many large gardens.

But worse was, and is, to come; the line to the airport goes straight through the Lower Hardy Farm Site of Biological Importance (SBI) in Chorlton. I have known this site for nearly 40 years and considered its plant life to be particularly important. On the south side of the river a number of mature Beech trees, near Jackson's Boat riverside pub, have been destroyed and at Sale Water Park a large green space will be tarmaced over to create a 300 vehicle car park. The line will then run parallel with the M60 for some distance. In the 1990s much habitat, in this area, was lost as a result of motorway widening; now this transport corridor is to be made even wider.

Recently, we lost over thirty large trees along Mauldeth Road West in Chorlton – all cut down to make way for Metrolink. These were mainly London Planes (*Platanus x hispanica*) and Common Limes (*Tilia x europaea*). Both of these taxa are 'man-made' hybrids, often planted as street trees. Nevertheless, they were big, handsome trees of some age and of considerable amenity value.

It's often assumed that such trees are not as important for biodiversity as native trees – but the devil is in the details! Recently, I've been investigating an unusual local phenomenon: on a number of local roads some London Planes have a particular species of fern growing on them (a phenomenon known as 'epiphysis'). One would expect to find epiphytic ferns on old, native Oaks, in ancient woodland in, Devon or Cornwall – but not on street trees in a major city? I had an opportunity to discuss this subject with a national fern expert and he told me that he had not encountered epiphytic ferns on London Planes in any other British city – and it could be unique to South Manchester; but now TfGM have destroyed around a third of the population before it's even been properly studied.

Even more grievous is the impending destruction of veteran native Oak trees in Wythenshawe. Alison Hunt, who is Biodiversity Officer for the West Didsbury Residents' Association, noted that along Poundswick Lane (in Wythenshawe) veteran Oak trees were not being protected from the ongoing Metrolink works. Alison has described these trees as: "... veteran Oak trees of great historic and ecological value, specifically retained from the countryside in the design of Wythenshawe ... The trees are of huge amenity value and retain important green links in the urban landscape."

She has measured the girths of these trees and found them to be around 3m – this would make them somewhere between 100 and 200 years old.

She wrote to TfGM who replied as follows:

"I understand that you are aware of our tree replacement policy which provides that more trees will be replaced than are removed. TfGM and our contractor, MPT, discuss all tree removals, tree planting and maintaining the safety of trees during construction with Manchester City Council. The trees that you have photographed [i.e. the old Oak trees] will be removed as part of the ongoing works. However, the current draft tree planting proposals include the potential replanting of 30 new trees (plus other soft landscaping) along Brownley Road."

Green Party member, Anne Power responded to this by commenting:

"How do you plant veteran English Oaks???? Outrageous!

It certainly is outrageous - but is it crass and ignorant ... or deeply cynical?

Planting, what I call, Mac-saplings to compensate for the destruction of priceless, irreplaceable old Oaks, like those on Poundswick Lane, evokes for me an image of a contractor walking into the Sistine Chapel, gazing up at

Michelangelo's masterpiece and saying: "Hmmm! We're going to have to sandblast this ceiling, you know. But don't worry – when we've finished we'll give it a nice coat of whitewash!"

And TfGM can't even seem to get the tree planting right. In early 2011 700 saplings were planted on a site near St Werburgh's Road. By August of that year, 540 of those saplings – that's 77% - were dead. Ironically it wasn't necessary to plant trees in that particular site because it was already full of self-sown trees!

So, what has TfGM done so far to "mitigate" for all of these losses and to "protect" and "enhance" what's left? Well, as far as I can see, very little. A lot of trees have been planted (some very ineptly) and two or three cheap pond liners installed in some fairly inaccessible spots (one, in Withington, has been sited on top of a narrow embankment – hardly an ideal site for a pond!). It should be noted that the pond liners were installed up to two years after the amphibian habitats had been destroyed. One wonders what the amphibians were supposed to do in the meantime!

It should be noted TfGM does know precisely what it's destroying. The policy document, mentioned above, states: "As part of the planning process for capital schemes (such as Metrolink extensions), comprehensive habitat surveys should be conducted, including specific surveys for protected species such as bats, badgers and voles. An Environmental Statement should be prepared for each scheme that includes measures to reduce the impact on biodiversity."

From where I'm sitting it looks as though TfGM spends public money on having (independent) surveys conducted, ticks the box labelled "survey conducted", files the survey report, destroys what the surveyor has found and then ... well ... plants some trees in 'compensation'. It's worth quoting the great woodland expert, Oliver Rackham here: "Planting trees is not synonymous with conservation; it's an admission that conservation has failed."

But TfGM should be making far greater efforts. I'm not even convinced that it is even meeting its obligations under the Natural Environment and Rural Communities Act, 2006 or under Planning Policy Statement 9.

Section 40 of the NERC Act, 2006 reads:

"Every public body must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity."

HM Government's recent white paper, 'The Natural Choice: securing the value of nature (2011)' and the Lawton report (2010), from which it draws much of its inspiration, both recommend that we make a step-change in our approach to nature conservation and start thinking on a landscape scale. They note that the previous approach to wildlife, in which it is confined to specific sites such as nature reserves or SSSIs, is not working very well. Lawton's report, entitled 'Making Space for Nature' recommended that we:

- Improve the quality of current wildlife sites by better habitat management.
- Increase the size of existing wildlife sites.
- Create new sites.
- Enhance connections between sites, either through physical corridors or through 'stepping stones.
- And reduce pressure on wildlife by improving the wider environment.

A key concept in both of these documents is that of the 'ecological network whereby key sites are linked together within a landscape so that wildlife can move as freely as possible between the sites.

But constructing such a landscape scale network in Greater Manchester is likely to be problematic. If you look at the region on Google Earth you will see that it is very heavily built-up, with relatively little green space. In 2008 the Greater Manchester Ecology Unit, in collaboration with Salford University, published a report entitled, 'An Ecological framework for Greater

Manchester'. A sophisticated spatial analysis which they conducted revealed that:

"... developing such a 'conventional' landscape-scale ecological network model in the GM sub-region is likely to be difficult, except at the fringes of the conurbation ... [key] node sites are generally small and very fragmented. [And] there are large areas where there are no node sites at all, particularly in built up urban centres."

They proposed that an ecological framework be created instead. Such a framework would provide a context within which wildlife could flourish through the development of a set of principles to guide habitat creation, repair and management. They noted that this wider framework would be perfectly capable of incorporating smaller scale networks nested within the whole.

It's not too hard to see that Metrolink corridors have the potential to provide an important element of a smaller scale network in South Manchester by connecting together domestic gardens, urban parks, miscellaneous green spaces and the Mersey Valley. Indeed, TfGM emphasises the importance of connectivity in their 'Wildlife Habitat and Tree Replacement' policy but they do not discuss, or detail, the principles, ecologically sound or not, they intend to apply to habitat creation, repair and management – more on this later.

Increasingly concerned about these circumstances and a few more, which will be made plain below, I decided to ask TfGM a series of eight questions. I originally posed the questions to TfGM on the 28th February this year – but received no reply. I then tried sending the questions as Freedom of Information (FOI) requests. TfGM received my questions on 19th March and

told me that only two of them qualified as FOI requests and would be answered within 20 working days; I'm still waiting!

The first six questions are as follows:

Q1. Does TfGM intend to revise its biodiversity policies (e.g. 'Wildlife Habitat and Tree Replacement Policy') so that they fully conform with the principles contained in HM Government's White Paper, 'The Natural Choice: securing the value of nature' (June 2011)?

Q2. Given that TfGM is not listed as a partner in the 'Manchester Biodiversity Action Plan, 2012 – 2016', does TfGM intend to contribute to the achievement of the plan's objectives?

Q3. Is TfGM exempt from contributing to the plan's objectives?

In the government's 'Natural Choice' white paper, mentioned above, it undertakes to encourage and support the creation of Local Nature Partnerships. Such partnerships are intended to demonstrate local leadership on matters relating to the natural environment and to raise awareness about the vital services and benefits that a healthy natural environment brings for people, communities and the local economy. Such a Local Nature Partnership has recently been established for Greater Manchester. In view of this I asked TfGM the following question:

Q4. Given that TfGM controls so much land with wildlife habitat potential in Greater Manchester, why wasn't it represented at the Greater Manchester Local Nature Partnership consultation workshop held at New Central Hall, in central Manchester, on 3rd February, 2012?

Q5. When the Greater Manchester Local Nature Partnership is set up later in 2012 does TfGM intend to join and to take an active role?

Q6. Given that so much local biodiversity has been lost in South Manchester as a result of the latest Metrolink extensions does TfGM have any further plans (apart from recent tree planting and pond liner installation) to "mitigate" for these losses and to "protect" and "enhance" what remains?

I asked two more questions related to the management of Metrolink embankments and, for reasons which escape me, these questions were judged to meet the criteria for FOI requests!

It is generally agreed that if the biodiversity of a particular site is to be maximised then sensitive management of that site is essential. Many designated wildlife sites in South Manchester and Trafford have not been managed for wildlife for many years and have deteriorated badly as a result. The two questions that I asked TfGM are as follows: Q7. Have ecologically sound management plans been written for all

Metrolink embankments and other TfGM land?

Q8. If such plans exist, could I see an example, please?

In spite of asking these questions under FOI, I still haven't received any answers. Every time that I pose the questions again, I am told that the plans are in preparation and will be available in "4 to 6 weeks"; this has been going on since April!

In conclusion I would like to say that I am not against the Metrolink light rail system and, in fact, I believe that it has already benefited Greater Manchester and will do so in the future. But the latest extensions to the system have caused considerable damage to our local biodiversity - even though, through their 'Wildlife Habitat and Tree Replacement' policy, TfGM have promised to protect and enhance it. This is, surely, not good enough!

At present we are living through a biodiversity crisis on both national and international scales. This crisis is particularly acute in Greater Manchester because it is such a densely populated conurbation with relatively little green space. Under these circumstances developers, such as TfGM, should be working much harder to fulfill their promises and to meet their obligations with respect to local wildlife.

David Bishop, October 2012

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