

## October 2017

### POST-BREXIT ECOLOGY



Having joined the RML team at the beginning of September as Senior Ecologist this is my first opportunity to write a newsletter, and write about a topic that is of some note in my field, as it were!

The recent publication by the UK Environment Law Association (UKELA) of their Brexit and Nature Conservation [Fact Sheet](#) which seeks to address some of the misrepresentation of environmental legislation in the UK, made me think why does such a wilful misrepresentation occur?

Up to and since the Brexit vote there has been much speculation about the possibility of reducing our environmental protections, with some believing this would be a benefit. The tabloids always seem keen to hype up stories where X protected species caused Y costs, huge delays etc. Some politicians and business leaders are always willing to talk about protected species and habitat legislation as a hindrance to development, a cost to the economy and a cause of delay to the building of much needed homes and infrastructure. However, these arguments seem to run counter-intuitively to the views of the public and published research.

The development of sites of nature conservation value are often met with [public protest](#). These protests could be accused of being an example of nimbyism, which in part they may be, but I do believe there is still a genuine desire by the public to protect our wildlife and for developers to be seen as helping to protect our wildlife.

UK wildlife legislation safeguards some of our most iconic and endangered species and habitats. An indirect impact of this legislation is that when an area of land is developed there is a requirement to retain, create and manage habitats to mitigate for any impacts on protected habitats and species. This results in the retention, creation and long-term management of areas of green space.

There are numerous studies which show that access to green space and the wildlife it supports can have positive health benefits, positive effects on land and property value and benefits with regards water management and adaptation to climate change. Green space within developments can also have multiple functions, mitigating for impacts not just on ecology but impacts associated with noise and flooding. The ultimate result of this for the developer is the potential reduction in the overall build costs and where applicable, a more desirable end product to sell. And although a resident, commuter etc. may never see a great crested newt or a bat for which an area of green space was retained or created, they ultimately benefit from having access to this space.



Left, Parc Lead Mine, Gwydyr Forest, before reclamation and an unsightly and desolate scar.  
Right, Dormouse, A487 Glandyfi Improvements.

## So why the misrepresentation?

Having to stop or delay building works goes against the long-established narrative that wildlife in the UK is something which is managed and does what we tell it. The imposition of legislation which seemingly prevents this ‘management’ of wildlife is something which some people have trouble embracing. However, this legislation protects our most valuable sites from development and where development is permitted, allows for wildlife to still be ‘managed’ just in a way which is more sympathetic. It is therefore not the legislation itself which is the problem but the lack of engagement with and understanding of the legislation.

In my experience, the majority of problems caused by protected species or habitats stems from a lack of planning or insufficient ecological data being gathered at the early stages of a planning application. The key to avoiding significant costs and delays to a development is early engagement with the subject matter;

- Have an initial discussion with or formally appoint a competent ecological consultant early on
- Undertake ecological surveys as early as possible in the planning process and where relevant consider ecological issues before the purchase of a site.
- Adequately plan for time constrained surveys so that surveys can be completed without delaying the planning application.
- Ensure that surveys undertaken and data gathered are robust and fit for purpose, following published guidelines.
- Once the ecological baseline is known then this information in conjunction with data from other disciplines should be used to inform the design of the development, with appropriate mitigation and areas of multi-functioning green space incorporated into the scheme from the outset.

This early engagement with ecology can ultimately result in the success of a planning application with significant benefits both for wildlife and the public whilst avoiding significant headaches for the developer.

Kind regards

**Jamie**

Senior Ecologist  
Richards, Moorehead & Laing Ltd.

'As every real estate agent knows, a poor house in good surroundings will sell for a higher price than a better house in poor surroundings, and in a town they confidently ask 25 percent more rent for a flat with a view of a park than for an identical flat with no view.'

Nan Fairbrother

Nan Fairbrother practised as a landscape architect and wrote several visionary books during the post-war period of austerity, then boom. She was one of those who worked on the development of the new towns and planned urban expansion. Along with her contemporaries she had to think on her feet to address the changes wrought by wartime destruction; and there were new problems, because never before had so much 'greenfield' land been transformed into towns and suburbs, new parks, roads and schools. Nan Fairbrother lived through a time of social engineering, and the trialling of tower block housing, system-designed housing estates and huge faceless trading estates. She saw how these would fail to solve the problems that they created. The failure to consider her ideas, and the ideas and the concerns of other critics, contributed to huge social problems from the 1960s onwards.

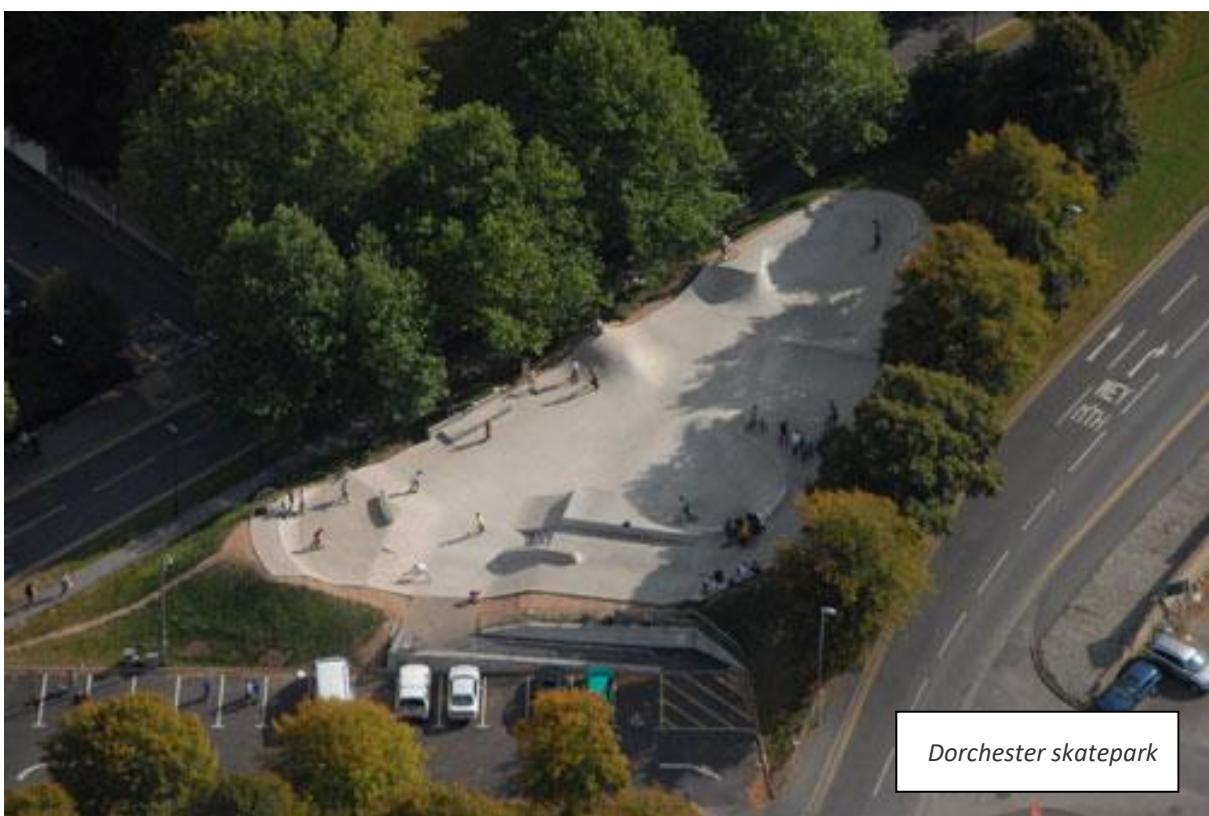
In '[New Lives New Landscapes](#)', Nan Fairbrother set out how she would transform the British urban and rural landscape to better serve the nation and to protect biodiversity. She retained that simple notion that '[A Garden is one of the few expressions of man's nature that is altogether benign](#)'. Many of her ideas, though over 50 years old, are still considered visionary.



*It's always sunny in North Wales, honest!*

Sadly, our world has changed once more with the Credit Crunch and Austerity. We have the steady erosion of the fine ideals of previous decades and now we see the harsh rules of raw commerce, in tandem with the inadequacies of the planning system, poised, if not petrified, as we try to solve the current housing crisis. People complain that their expensive new houses have bedrooms too small for the beds they are to hold and have inadequate storage space, while the gardens are barely large enough to contain a barbecue and garden chairs. So, perhaps public facilities can make up for the shortcoming of our housing stock? Not so! Parks are deteriorating through lack of investment, sports centres and libraries are closing to save money, perversely, we maintain the budgets of organisations whose purpose is to address social and health problems.

'Public Health and Landscape – creating healthy places', published by the Landscape Institute in 2013 states that 'A growing evidence base, reflected in national policy, suggests that spending on healthcare could be reduced if greater investment was made in preventing ill health before it has a chance to occur'. NHS spending continues to increase relative to GDP and 'it costs 27 times more to achieve a cardiovascular mortality through clinical interventions than it does to achieve the same result through local public health spending'. Interventions that improve our contact with good-quality landscape can improve our health and wellbeing and reduce the negative effects of social and economic deprivation.



Dorchester skatepark

At the moment, about 90% of the global population living in cities is exposed to particulate matter that exceeds the World Health Organisation air quality guidelines. A study by a US-based environmental body found that the average reduction of particulate matter near a city tree is between 7-24%, while the cooling effect is up to 2C (3.6F). Dr Rob Macdonald, the lead author stated that "Trees are cost competitive with other options. When you change a bus from diesel to gasoline, for example, you reduce

particulate matter pollution, and trees are certainly in the same ball park”.

I’m sorry for what I think was an unintended pun.

Kind regards

**Andrew**

Principal Landscape Architect  
Richards, Moorehead & Laing Ltd.

BRING BACK THE BEAVER



One of the ‘occupational hazards’ of years as a [Japanese Knotweed](#) specialist is the tendency to spot the offending vegetation in the background when everyone else is focused on some more interesting foreground. So for this reason it’s no surprise that during a wildlife programme the other night my attention was distracted from the beaver family in the water to the ‘suspicious’ foliage behind them. Repeated inspections of the leaves convinced me that they were Japanese Knotweed and, to some surprise, the beavers were chewing away at them.

The beaver family was part of a group which has apparently become established on a river near Loch Lomond, following escapes from a wildlife sanctuary nearby. They cut knotweed stems and drag them into the water amongst other branches which form their food store, and have formed part of their lodge in a knotweed-infested stretch of river bank.

The TV programme commented on this strange choice of food plant, but didn’t say whether the beavers had any controlling effect. Some of the cut stems do get washed downstream and so this could be one mechanism for spreading knotweed, though flooding and erosion have this effect on any river so it is unlikely that beavers are significant in this means of spread.

A typical ‘invasive species’ runs out of control because it has been introduced to a location where there are none of the other species that act to balance its growth in the natural range. Japanese Knotweed in the UK is only browsed by animals when shoots are very young and still tender, and no invertebrates or fungi attack the mature leaves. There has been considerable publicity about the efforts to find and introduce natural ‘predators’ from knotweed’s native Japan. Perhaps there is a species much nearer home which could also form part of the solution?

Learn more about this trial of beaver re-introduction in Scotland at  
<http://www.scottishbeavers.org.uk/>

and in Wales at <http://www.welshbeaverproject.org/home/>

If you have any invasive species questions we would be pleased to hear from you.

Kind regards

**Jamie**

Senior Ecologist  
Richards, Moorehead & Laing Ltd.

"Not only is there one way of doing things rightly,  
but there is only one way of seeing them,  
and that is seeing the whole of them."

John Ruskin

The Government's recent announcement that it will commit to banning the sale of all new diesel and petrol cars by 2040 in a bid to encourage people to switch to electric and hybrid vehicles has attracted a lot of attention. The move is in response to growing concerns about air pollution, and particularly the concentrations of NOx in congested urban centres breaching limits set by the EU. In the shorter term, there are suggestions that fuel taxes may be adjusted to persuade drivers to switch back to petrol cars instead of the diesels which are seen as a greater source of NOx and particulates.

But didn't we adopt diesels over the last 20 years because they consume less fuel and emit less greenhouse gases than petrels? There's a danger that one environmental objective will be overtaken by the need to deal with another.

This is having an impact on our work now, as we carry out route selection studies for major highways schemes and assess the various environmental impacts of the options being studied – NOx being one of the parameters modelled.



Steve heading home after a busy day in the office

In practice, the emissions from a car depend on how and where it is driven. In my own case, I rarely drive into congested towns and cities. My daily commute into Ruthin is short, and most of my driving is through rural areas where NOx is not the main concern (i). The environmental impact of emissions from my car is from the greenhouse gases, and so a small diesel is considerably better than the equivalent petrol car. The trip computer is showing a 'real world' 65mpg – and I would expect the petrol version to give under 50mpg.

Pushing me into swapping for petrol would not improve air quality in towns and cities, but would increase my greenhouse gas emissions by maybe 20%. A tax policy applied across all drivers might achieve the NOx objective, but the other consequences should be carefully evaluated first. A policy targeted with more finesse might be able to improve urban air quality without increasing greenhouse gas emissions. Funding to replace old diesel buses, and ensuring that diesels are properly maintained, would help considerably.

Environmental scientists can and should press politicians to view these matters as a whole, and consider the details before rushing to policy announcements.



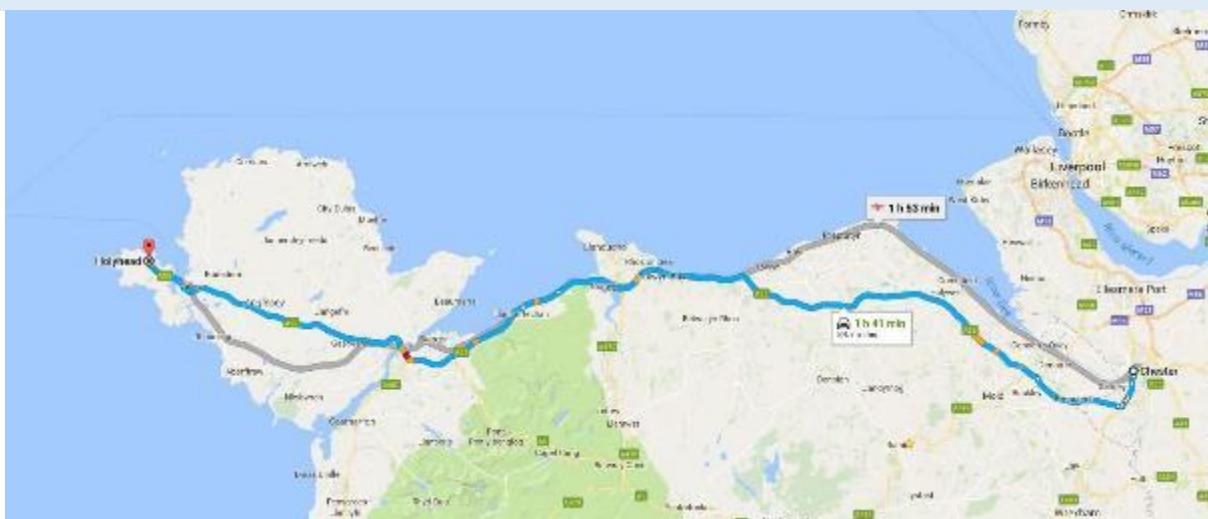
- i. NOx leads to health concerns at the higher concentrations found close to very busy roads but is quickly dispersed in rural areas.

Kind regards

**Steve**

Principal Landscape Manager  
Richards, Moorehead & Laing Ltd.

## A VERY BRITISH DISEASE



Patchy prosperity is the real British disease – Ed Conway - The Times 22nd September 2017.

At RML we do so agree with what Mr Conway is saying and especially with the conclusions of a report from the London School of Economics (LSE) on which he was commenting. The report says that clustering is very important and a great deal depends on connectivity. Clustering hubs along the M4 is where the strongest economic activity in the UK is to be found. Reading, Swindon and Bristol are clearly benefiting from the impact which connectivity provides by way of the motorway.

Improving the M4 around Newport has economic argument in its favour.

It seems that connectivity is the main issue that is creating growth problems for the 'Midlands Engine' rather than innovation and productivity.

In North Wales RML are working on 3 projects that are focussed on improving connectivity within the area, improving connectivity with the North West of England and into Europe. The A55 is a European route and there are only two roundabouts between Holyhead and Warsaw, both are in North Wales.

We are close to completing initial design of highway improvements in the Deeside area, have commenced work on the provision of a new crossing of the Menai Straits and the removal of the roundabouts on the A55 just west of Conwy. Landscape design on the Port Dinorwic bypass was one of our projects a good many years ago.



RML were involved for more than 15 years in the design, construction and management of the A55 dual carriageway across Anglesey. Do you remember the travails of using the old A5?

We understand the importance of goods and ideas being moved around and that connectivity is the key if these movements are to have a positive impact.

I have written before how important dissemination of skills and knowledge has been in the development of societies. Some people may think that dissemination was important in bygone times when it involved individuals moving from one settlement to another. But today dissemination is more than exchanging digital images, personal contact is still important, ask any business man. Removing the problems of getting from A to B are vital in the English Midlands ask Sir John Peace of Midlands Engine about it, he was late for an important meeting this week because of traffic hold-ups.

So RML's role in improving highway connectivity is key to our region becoming more productive.

What we would like to do is disseminate our experience of good practice to a wider audience and help reduce the patchiness that Ed Conway was talking about.

Have you asked us for a copy of the printed version of some of our early Newsletters that dealt with the significance of soil and vegetation in civil engineering? Just let us have your address and we will put a copy in the post.

Kind regards

**Ivor**

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