

Edge Hill University's MSc Conservation Management students' visit to Worcestershire, April 2018

MSc students from Edge Hill University in Lancashire spent a few days visiting sites in Worcestershire to learn about their conservation management. The students wrote an account of their visit to the county – which they very much enjoyed – and made some comparisons with the habitats they are more used to seeing further north. Students from the course aspire towards a career in conservation. Worcestershire is the chosen destination partly because it is accessible from Lancashire within a few hours and hosts habitats sufficiently different to those 'up North'. It is also an area of staff research interest, from meadows (Dr Elizabeth Sullivan) to woodlands (Prof Paul Ashton).

Day 1: Lower Smite Farm

On the first day of our visit to Worcestershire we visited an extremely important site: the Worcestershire Wildlife Trust's Lower Smite Farm which I think is useful not just for the county but for the country. This farm aims at showing that agricultural practises, within agri-environment schemes, can benefit conservation as well farming for profit. They think beyond individual farms, looking at a national picture with their idea of the living landscape which does not view each conservation site as one unit but looks at connecting habitats wherever possible. The Trust is doing this in ways such as showing how 'dead' space, such as the edges of fields, can be used with no consequence to their profits but being a massive benefit to conservation, or by the shapes of the hedges or creation of small reed beds to filter run off. It gives areas for animals, birds and insects to shelter, with no impact on the farm being able to turn a profit. The site also experiments with unique ventures that could apply to a niche market and still be beneficial to conservation such as growing lavender or an array of pear trees which are important to Worcestershire's heritage. As far as I know there is no other site like this in the country and definitely not in Lancashire. The involvement of farmers in conservation is constantly encouraged and, having seen this site, it should be used as a template to create a new wave of conservation where more landowners are involved and invested in the conservation of wildlife and habitats of this country.

Day 2: Blackhouse Wood, Crews Hill Wood and the Malvern Hills

On our second day we had the opportunity to visit Blackhouse Wood, a Worcestershire Wildlife Trust Nature Reserve. After a winding drive into the Suckley Hills we arrived at the entrance to the

site. The immediately visible, newly-cleared area plainly illustrated the management techniques being employed by the Trust. As the site had previously been used as a commercial conifer plantation, felling had been carried out to remove these non-native species, providing the light and space needed for the preferred native trees — ash, hornbeam, field maple and the rarer large leaved lime — to flourish.

As we wound our way through the site, the hard work put in by the Trust and its volunteers was evident at every juncture. Rides had been created to provide habitat for woodland flowers and invertebrates, scrub had been cleared to prevent the shading of low-growing species, and protective guards had been utilised to protect young trees from the browsing of muntjac. Surveys were taken of the ground flora in an area which had seen conifer removal in the previous year; a wide variety of plants were found, including wood spurge, hairy bittercress, wild arum and rosebay willowherb. It was surprising to me that this woodland, which was in the process of restoration, showed a greater diversity of ground flora than the adjacent Crews Hill Wood — an area primarily dominated by wild garlic.

Following this we visited the Malvern Hills. The beauty of this area is undeniable and the heritage it holds is remarkable. The site exhibited a range of grassland and woodland species which served to further its appeal. As we rambled along the top of the hills, admiring the panoramic views and the history beneath our feet, we were ourselves an example of the largest conservation management quandaries pertaining to this site: the impact of humans on the environment. I am sure no one in our position would seriously entertain the thought of closing such a culturally important site away from those who wished to experience its brilliance, but the trampling of feet, the impact of dogs and the risk of careless littering all threaten the acid grassland habitat which has developed on this site.

As is the way with most conversation, the wants of the public need to be finely balanced against the needs of the ecosystem itself. In order to achieve this, work needs to be put in to educate the public, to foster a sense of stewardship, as well as forging an understanding of what can be done to protect and aid the nature people travel so far to admire. This trip helped me to realise that the hard work put in by groups such as the Worcestershire Wildlife Trust and the Malvern Hills Conservators is necessary to ensure these areas can be improved, restored and maintained — for the sake of the species that call them home, the people who want to enjoy them and for the future generations who may not otherwise have the opportunity.



Looking south from British Camp on the Malvern Hills

Day 3: Grafton Wood, Eades Meadow and Piper's Hill Common

Grafton Wood Nature Reserve is best known for being the centre of the Midlands' only population of brown hairstreak butterflies *Thecla betulae* which breed on the blackthorn which borders the wood. The site holds great floristic diversity and demonstrates how effective site management can positively influence and benefit the wildlife which it contains. Housing an understory which varies from wild garlic, to bugle and from marsh marigold to pendulous sedge,

Grafton Wood is also home to the muntjac deer, a species rarely found north of the Midlands which been the cause of some controversy in the area. The site hosts a variety of different woodland habitats, some of which have been managed in a traditional way through coppicing and some of which is plantation woodland which has largely been removed to open up the tree canopy to allow more light to benefit the rich flora which lies below.



Grafton Wood

Eades Meadow represents a site that has remained free from ploughing, pesticides, herbicides and fertilizers for over 100 years. As a result, the site is noted for its extremely rich floral diversity. As such it was one of the sites used by Dr Elizabeth Sullivan on her research into meadow connectivity. Even at a quick glance, the least experienced botanist would notice a difference in species composition and abundance compared to other traditionally managed

meadows north of the Midlands. Most striking in early spring is perhaps the green-winged orchid *Orchis morio* whose purple flowers stand proud in late April above the rest of the 180 other species which the site contains. A light cattle grazing regime, demonstrates how simple management and lack of intervention can promote the best in floristic diversity. .



Cowslips and green-winged orchids

Piper's Hill Common is home to many veteran trees which are immediately noticeable once you enter the site. Designated as a wood pasture common the site was home to a striking grassland under the canopy of some of the UK's oldest trees. In recent decades the tree saplings have taken over and the site is now used for

recreation and dog walking as opposed to cattle and sheep grazing. Worcestershire Wildlife Trust are striving to bring the grassland back by thinning the tree canopy whilst leaving the veteran trees in place as these support all three species of Britain's woodpeckers and rare saproxylic beetles.



Piper's Hill Common

Day 4: Brotheridge Green Railway Line and Meadows

On our last day we visited Brotheridge Green Meadows and the old Brotheridge railway line which is close by. Both sites are SSSIs for their neutral grassland which is now a rare habitat in the UK.

Lowland hay meadow is a rare sight in Lancashire so it was nice to see as many species-rich meadows as we did. The linear nature of the old railway site means that it acts as a fantastic woodland ride and even in April it was clear that it is a good site for invertebrates. I can imagine that the old railway line functions as a very useful wildlife corridor and badgers are evidently very much at home there. The meadows were a real treat for green-winged orchids and adders tongue fern. I was very glad to see the small size of the fields and their mature hedgerows which gives them an intimate and quiet character.

Text and photos by Katie Howe, Sam Richardson, Gabriel Dixon and Noah Hall

If you would like further information about the MSc Conservation Management course at Edge Hill University please contact Dr Anne Oxbrough oxbrouga@edgehill.ac.uk