ANNUAL MEETING OF THE WORCESTERSHIRE RECORDERS IN ASSOCIATION WITH WORCESTERSHIRE BIOLOGICAL RECORDS CENTRE Saturday 10th March 2018

A NEW LOOK AT ANCIENT TREES AND WOODS

The main objectives of the 2018 Annual Meeting were to look at the importance and value of long-term recording and to encourage observers in Worcestershire to look for traces of woodlands that have disappeared. We were fortunate to receive presentations from two national speakers followed by local reports on Worcestershire studies.

Ian Rotherham spoke on *Shadow Woods* based on extensive studies around Sheffield and in Yorkshire. George Peterken spoke on 70 years of careful recording in unmanaged woodland at Lady Park Wood.

The meeting started with two short presentations Harry Green reminded us of the severe post-war intensification of farm management in Worcestershire countryside. Caroline Corsie asked "should more attention be focussed on restoring and creating hedgerow herbaceous habitats (yes) and how?"

These were followed by the main presentations by Ian Rotherham and George Peterken.

Then followed the local presentations.

Jayne Field reported on recording pollards in the parish of Wichenford.

Heather Rendall spoke on 19th century records and measurements of trees in Wichenford by John Moulding.

John Bingham gave a synopsis on the historical ecology of the Wyre Forest.

The following summaries of presentations by the speakers circulated to Worcestershire Recorders beforehand were as follows.

Shadow Woods - the search for lost landscapes. Ian Rotherham

The book, 'Shadow Woods: a Search for Lost Landscapes' is intended to change the way we see today's countryside as it examines ecological species as individual time-travellers through the centuries and the spaces in our countryside –'biodiversity timecapsules'. Now, evidenced by unnoticed, small, ancient trees, by indicator plants of 'ancient woodland' (but not in 'woods'), and by soils, fungi, and more, the 'Shadow Woods' provide remarkable insights into the lost landscapes of Domesday. Sites being discovered across Britain suggest a common origin of now distinct habitats such as moors, heaths, commons, bogs, fens, parks, forests, chases, and of course, 'woods'. Furthermore, the emerging vision of these past landscapes provides a glimpse perhaps, into the so-called 'primeval landscape' as envisioned by Frans Vera and the basis for many 're-wilding' initiatives.

The lecture will explain the thinking behind the ideas and explain the differences between 'Lost Woods', 'Ghost Woods', and 'Shadow Woods'. Excitingly too, there is enormous potential to search and discover your own 'lost landscapes' throughout much of Great Britain.

Long-term studies: 73 years of recording Lady Park Wood – George Peterken.

Long-term studies in ecology take many forms. The longest in Britain is a fertilisation experiment in meadows at Rothamsted, which has continued for over 150 years. Beside this, the longest in woodland, at Wistmans Wood, is a mere 97 years and the detailed study in Lady Park Wood is 'only' 73 years. I will talk about the value and practicalities of these with special reference to Lady Park, which has recently been written up as a book published by CABI. The human element of such studies is at least as interesting as the ecological findings.

The ancient trees of Wichenford .Jane Field & Heather Rendall Mapping and recording all the Pollarded Trees in Wichenford Parish Jane Field

The study of pollarded trees in the Wichenford Parish landscape began from a particular interest in trees, but most of all from a desire to understand why these apparently ancient forces of nature are dotted around the countryside in seemingly random positions; why there are so many of them, and why they have been left alone for, in some case, hundreds of years. Of course there have been, I think, many casualties but the surviving tracery poses, and often answers, questions, so thoroughly integrated are the trees within the history of our landscape and its inhabitants.

The study "metamorphosed" as the days passed and <u>many</u> days did pass! It was in no way scientific, although it became more so with the benefit of other studies, articles, information from locals and my own appreciation of the use of technology. Wichenford is a small and 'walkable' parish and a convenient area in which to confine a study, but it soon became apparent that such a study cannot be 'confined'. I hope others might be inspired to replicate it, albeit by more efficient methods, but had I planned its eventual scope, and even considered the possibility of a book, it is doubtful that the investigation would have begun. It is, I suppose, a story of exciting discovery which became so exciting that I needed to share it. The trees seemed to pose the questions and in finding the answers a whole new world opened up.

To be followed by a brief illustration of 18th century records of trees by John Moulding, resident of Wichenford 1722-1745. Heather Rendall

Historical Ecology of the Wyre Forest. John Bingham

A summary of the changes to the landscape over the centuries leading to the present day forest we are familiar with. From a version of Frans Vera's wildwood to Medieval hunting forest and then slow progression of industrialisation of the woodland. Place names give clues to a lost ecology and ways of land management. The flora and fauna have adapted and changed to each stage but today we can still find remnants of the former deer parks, heathland and commons. Ancient woodland axiophytes are present in some numbers but equally so are indicators of heathland, grassland and fen habitats. The landscape has ghosts of former heathy commons and the outlines of boscage field pattern with unimproved grasslands. Valley woods and ancient hedgerows cross the area with hidden ancient trees of species now rare in modern Wyre.

A rant about waiting for the present to look like the past. Caroline Corsie

Hedgerows define the landscape character of much of the UK and are complex and important habitats for a wide range of native plant and animal species. In implementing the Wild Pollinator Health Check it became apparent that many of the hedgerows surveyed fall short of their full potential for herbaceous flora and this may be fuelled by a philosophy of wait and it will come (or not even paying attention in the first place ?!). Should more attention be focussed on restoring and creating this habitat (yes) and how?

Note : The condition of herbaceous flora is a UK Biodiversity Indicator for achieving European and UN biodiversity targets and the Hedgerow Habitat Action Plan includes targets to halt and reverse this decline.

A brief look at what happened in the Worcestershire countryside 40-50 years ago. Harry Green.

During an introduction to the programme I will show a few examples to remind us of the dramatic changes in Worcestershire Countryside 40-50 years ago. Hedgerow loss, stubble burning, ploughing ridge & furrow grasslands, excessive land drainage: can we find and record remaining traces and record future changes?

Following the meeting each speaker provided a more extensive account of their presentation as follows.

Shadow Woods & Scrub – the search for lost landscapes and future wood pastures

Ian D. Rotherham

Professor of Environmental Geography, Department of the Natural and Built Environment, Sheffield Hallam University

It seems to me that smaller trees, scrub habitats, and occasional patches of, for example bluebells, outside of typical woodlands are frequently overlooked. Indeed, it was Oliver Rackham on a visit to my home patch of Derbyshire who got me interested in veteran hawthorns, and then in species like rowan too. Along with these, I began to notice and then seek out smallish, dwarfed and frequently distorted and gnarled old oaks in remoter scree slopes and boulder clutters. This interested ran in parallel to research supported by government agencies, the British Ecological Society, and the Woodland Trust, into 'ancient woodland indicator plants' and which developed into an argument to provide an evidence-base defensible at Public Enquiries to help confirm 'ancient woodland status' for sites. However, from this work there emerged the fact that we could confidently identify sites of 'ancient' woods, but also that these were mostly originating as enclosed, managed 'woods' some time just before, or in the centuries after Domesday (i.e. 1086 AD). Furthermore, whilst the Domesday Book accounts are neither comprehensive nor totally reliable, they give a unique insight into the landscape of many areas of England at about the time of the Norman Conquest. Very often they paint a picture of extensive 'wood pasture' and only limited amounts of coppice woods; a situation that is reversed over the following few centuries. The story of the 'Shadow Woods' is in part one of a search for the bits of the Domesday wood pasture that were not enclosed into woods, and that in some tantalising cases seem to remain intact though obviously much-altered, to the present day. The search for these lost landscapes I think sheds light on the ideas of Dr Frans Vera and his vision of the ancient European and British landscapes, and furthermore, might provide some basis for natural re-wilding and some historic authenticity to ideas of extending, for example, upland treescapes in parts of England and Wales.

The account of this journey of discovery is the story in the book, *'Shadow Woods: a Search for Lost Landscapes'*. The intention of the book is to change the way we see today's countryside as it examines ecological species as individual time-travellers through the centuries and the spaces in our countryside –'biodiversity time-capsules'. Now, evidenced by unnoticed, small, ancient trees, by indicator plants of 'ancient woodland' (but not in 'woods'), and by soils, fungi, and more, the 'Shadow Woods' provide remarkable insights into the lost landscapes of Domesday. Sites being discovered across Britain suggest a common origin of now distinct habitats such as moors, heaths, commons, bogs, fens, parks, forests, chases, and of course, 'woods'. The emerging vision of these past landscapes provides a glimpse perhaps, into the so-called 'primeval landscape' as envisioned by Frans Vera and now the basis for many 're-wilding' initiatives.

Excitingly too, as described in the book, there is enormous potential to search and discover your own 'lost landscapes' throughout much of Great Britain. Some of these areas are 'lost woods' or 'ghost woods' which exist in place-names, field shapes, and boundaries, sometimes into the heart of urban areas. Some are still present as indicator plants in hedgerows and roadside verges, or even in small woodland fragments, to mark out the location of former woods or other ancient treescapes. The 'Shadow Woods' are different since they still exist but are mostly overlooked or at least mistaken in identity and nature. These shadows in the landscape are perhaps most abundant in upland-fringe landscapes such as around the Pennines or the Uplands of North Yorkshire and Northumbria for example. However, they are also abundant along the western side of Great Britain from Devon and Cornwall, through Wales, the Lakes and north into western Scotland. In lower-lying areas the shadows occur in Rackham's 'ancient countryside' in former heaths and commons, (which were often historically wooded commons), and in ancient parklands, other unenclosed areas of countryside, and in fragments of great medieval hedgerows and along older sunken green lanes and the like.

Take a closer look at areas of scrubby grassland or heath and you see the tell-tale signs of the Domesday shadow woods still persisting. Furthermore, in some cases it seems that landscapes that may reemerge from the shadows as open scrub-woodlands could perhaps, if managed effectively, generate new wood pastures for tomorrow. Some of these sites may have their ancient origins in the medieval wooded commons and wood pastures, and as such have a suite of indicator species already in tow. Other sites may be grasslands or heaths now experiencing a pulse of scrub and tree regeneration perhaps linked to reduced grazing associated with a change in farming or maybe the impacts of myxomatosis temporarily wiping out once-abundant rabbits. If this is the case, then there is a clear parallel with the processes experienced in the great medieval parks, forests and chases, where we see cohorts of great trees often in groups two hundred or more years apart and linked to the temporary release from grazing brought on by rinderpest, foot-and-mouth disease, anthrax, or even warfare. In the modern landscape we can find evidence of an ebb and flow of scrub and tree regeneration that follows human events, extreme weather incidents, and increases or decreases in grazing pressures. Over the twentieth century, much of the evidence of the ancient shadows and of the associated scrub habitats has been removed or at least eroded. However, recent research has confirmed that a surprising amount remains, and that a landscape as rich and as ancient as the countryside pn and around Worcestershire should be a very productive hunting ground for those searching for our shadowy past.



Rotherham, Ian D. 2017. *Shadow Woods. A search for lost landscapes*. Wildtrack Publishing, Sheffield



Lady Park Wood in the Wye Valley. Old-growth stand 150 years after it was last coppiced. George Peterken

Long-term Ecological Studies in Lady Park Wood.

George Peterken Woodland ecologist and author.

Long-term records come in many forms, from the 'first cuckoo in spring' phenological records through to carefully designed scientific experiments. In Britain, the longest ecological studies are at Rothamsted, where the Park Grass plots were started in 1856 and the Broadbalk Wilderness was set aside in 1870: the former has been treated and recorded every year since, whereas the Wilderness has only been recorded a few times in 150 years, yet it still shows the main features of natural succession to woodland on agricultural land.

Outside Britain, the earliest woodland plot record seems to be in southern Bohemia at Boubinsky Prales, which was first plotted in 1847 and not recorded again until 1968, when the old plot was rediscovered. If one allows that any observation that can be tied to a particular location counts as a long-term study, then one can include, for example, the list recorded in 1839 by a local doctor of the plants growing on the remains of Tintern Abbey: one can repeat the list now and appreciate the changes.

Against this background, the long-term study started in 1944 at Lady Park Wood is a mere stripling. It is not even the oldest woodland plot in Britain, which is in Wistmans Wood, where a plot recorded in 1921 has been re-found and repeated in recent times. At Lady Park, the trees in long 20m-wide transects have been mapped and measured at intervals while the wood itself has been left unmanaged. Now we have over 70 years of detailed information on how the stand and the individual trees species – and indeed the individual trees – have changed, and this has now been written up as a book: *Woodland Development. A long-term study of Lady Park Wood* by George Peterken and Edward Mountford (CABI, 2017). Other observations have been made on the fauna and flora, but not as detailed. The book gives the detail of what we have observed, but broadly we have found that the relentless and largely predictable competition between trees species and individuals is interrupted by largely unpredictable disturbances of many kinds, from the 1976 drought and the 1971 arrival of elm disease, through to apparently trivial events, such as unseasonal and heavy snow falls. In response, regeneration has been patchy and intermittent and, as the wood has become more natural, so it has become less stable. The book also discusses some of the implications.

What have we learned? In practical terms we have realised how difficult it is to maintain a long-term record, because it requires a relay of recorders, each passing the baton to the next. In personal terms, those doing the recording have developed a deep appreciation of how natural woodland works. From the nature conservation point of view, we have witnessed the decline of plant and butterfly diversity as the wood has fallen out of management, whilst suspecting that the fungal diversity may have increased. From a foresters' point of view, we can now see how natural woodland works and from this refine ideas of how to undertake 'near-tonature' forestry. Foresters can also point out just how messy and dangerous a wood eventually becomes if it's not managed. Enthusiasts for re-wilding and public access might have pause for thought when they see how inaccessible and dangerous a wood becomes after 150 years of non-intervention. Scientific ecologists can check whether their models of natural woodland structure and processes work out in practice, and refine some details of how natural woodland work. They can also use the record to inject a time-perspective on other studies, e.g., of carbon sequestration. And, all these aspects can be demonstrated on the ground with the record in hand

Woodland Development A Long-term Study of Lady Park Wood

George Peterken and Edward Mountford



Woodland Development. A long-term study of Lady Park Wood by George Peterken and Edward Mountford (CABI, 2017).

Wichenford survey of pollarded trees.

Jane Field

Wichenford, in west Worcestershire, is a small rural parish of about 2,672 acres situated between the rivers of the Teme and Severn. Within those acres 229 oak, 55 ash, 16 1ime and one alder pollards were discovered - J don't think any were missed! Willows, of which there are possibly hundreds would provide material for another study which itself is urgent as so many are now collapsing under the weight of uncropped boughs.

In spite of our Heritage Group's intensive research we have yet to unravel the mystery of how our parish, first mentioned in the 11th century, came to be, and why the lands around its boundary were identified and named long before Wichenford itself. The answer may well lie in the many boxes of records yet to be sifted through at "The Hive' in Worcester.

This study, undertaken in 2006-17, found that the pollarded trees of Wichenford Parish are bound closely with the activities of its agrarian population and consequently the evolution of its landscape. Of course over the centuries many, perhaps hundreds, of these trees have disappeared without trace, but enough of them remain to give us logic for their sites and functions, and to tempt us to learn more of their and our history.

As the area of Wichenford Parish is of manageable size for a onewoman study to be undertaken, and most of the land-owners are known to me so it seemed a good idea at the time! There is much preparatory work in discovering ownership of land, but once achieved land-owners (to date) have been very helpful, interested and generous with consent.

Apart from obtaining permission to wander, investigative work both before and during the study made use of a number of resources, the most fruitful of which were estate maps usually of the 18th and 19th centuries; the Tithe Map of 1838 and its Award, sale notices of farms, estates and woodlands, Court and Bishops' Rent Rolls, Parish Records, Will s, and the location of historic local industries, all gave an insight into the location of pollards and their functions. When such documentary evidence had been set into the context of what is known about the historical practice of pollarding elsewhere in the country, and more internationally, it made a chronicle of our trees and their backdrop far more enriching ... what a wonderful way to learn history!

The extreme vulnerability and, as it has emerged, the unique importance of this ancient tree heritage made their study compelling and urgent. Their positions were plotted; most of them were photographed; their vital statistics recorded and their apparent functions and uses researched. This latter investigation taught me much about the landscape and the people who lived in Wichenford hundreds of years ago.

The method I adopted for the survey might appear laborious to more technologically able students as it made the heaviest use of footwear and writing materials, and involved two separate 'sorties': the first to find the pollards and investigate parking and the second to plan routes and 'get up close' to record their vital statistics and precise positions, number each tree and photograph some when winter and early spring weather allowed. Two explorations did prove fruitful as more pollards were sometimes found concealed in undergrowth next to their more spectacular neighbours.

Wichenford gradually resolved itself into four distinct regions of pollard density and this, together with observation and evidence, provided by the resources described above, allowed for a greater understanding of historic and more recent influences that can shape a landscape, even in such a small area.

Pollards were found in many comprehensible locations: near dwellings (and some recorded dwellings of which no trace now remains); on boundaries (01), parish, estate and farm, and at the edges of the many coppices in the parish. Trees were frequently found by pools, sometimes very long, large pools, but often smaller ones in the middle of fields - it was very unusual to find a pool without one or a number of pollards. Many lanes and footpaths, old drove roads or green lanes were marked by pollards, and those isolated in fields, marked lost hedgerows (02). Many showed signs of being cultured for 'compass timber', for ship or house building, when prospective buyers toured hedgerows selecting timber for specific applications.

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01. Pollard in a boundary. Jane Field.



02. Pollards marking loss of a hedgerow. Jane Field.

Pollards appear to have been a bone of contention for many hundreds of years: they have had so many enemies that it is surprising any have survived, but we are still continuing to lose them. Five have gone/died since this survey was completed. The reasons for these losses are various and mostly attributed to inevitable changes in agricultural practice; our pollards belong to a different age and their future in today's world, unless they are protected, is not a happy one. All the above points, and many more, are expanded upon in the book (03) that evolved from the study, and which is available from Jane Field, Gatepiece Cottage, Highfields, Wichenford, Worcs., WR6 6YG at £8.00 plus £2.50 post and packing.



03. Wichenford Pollarded trees, the book by Jane Field.

Images

- 01. Pollard in a boundary. Jane Field.
- 02. Pollards marking loss of a hedgerow. Jane Field.
- 03. Wichenford Pollarded trees, the book by Jane Field.

Ancient tree records from Wichenford

Heather Rendall

It is not just the trees that are ancient in Wichenford but also the records themselves. Our earliest charter dates to the time of King Offa and Bishop Milred (757-774) and contains a description of the boundary of the Wican estate. This mentions among its markers the Ship [sheep?] Oak, the Great Aspen and Five Oaks Way. The oak and aspen are, of course, long gone, but a 19th century cottage called Pitt Oak is thought to be retained as a debased version as Fifth Oak which was recorded on Isaac Taylor's 18th century map (01).¹



01. The Fifth Oak.on Taylor's 18thC map Another charter dated 816 records Bealda's Ash tree and the Rough Barked Oak, the latter possibly being a 'Lachbaum', a German term for a tree whose bark is scored to denote its use as a boundary marker.

The 15th century Court Rolls from the reign of Edward IV begin with a dispute over the right to pollard trees along what is now Willow Road, the boundary between Wichenford and Martley. Although no pollards remain along the road today, a photo taken as recently as 1963 shows a row of them in the hedge on the Martley side (02).²



02. Willow Road with pollards 1963.

Pollards were important to the people of Wichenford as their Customs of the Manor allowed them the right of Lop and Crop thus providing constant fuel for their fires, poles for their hops, and handles for their tools. Removing timber or wood or despoiling undergrowth by errant animals all feature frequently in the Rolls; clearly trees had value and people were constantly fined for breaking the law/custom.

Our finest records date to the second quarter of the 18th century, thanks to a gentleman called John Moulding whose notebooks and jottings have fortunately survived and were donated some years ago to the Worcestershire Archives. He was considered "...a very ingenious antiquary" by Dr Treadway Nash. Luckily for us he not only spent his time noting down tomb inscriptions or copying the

numbers of births deaths and marriages but also counting and measuring the trees on his property.³

He listed his fields and then under separate headings recorded the number of oak runnells (or pollards), oak storers (under 12" in girth) oak saplings (under 24" in girth) and oak timbers (over 24" in girth) in each field (03). He did the same for ashes, elms (surprisingly few!), fruit trees, maples and lime. The record extends over four pages and produces some truly remarkable statistics (Table 1)

03. John Moulding notes on tree type measured

² © Wichenford Local Heritage Group

Table 1, Records of the number of trees measured by John Mouldingin first quarter of 18th Century.

Oak runnells	Oak storers	Oak saplings	Oak Timbers	Ash runnells	Ash storers	Ash saplings	Ash Timbers	Lime runnells	Lime storers	Lime saplings	Lime timbers
398	233	161	79	381	93	408	129	5	3	8	9

That is a total of 871 oak trees and 1,011 ashes. Considering how much elm still exists as a hedgerow tree in Wichenford, under 8 ft tall, it is noteworthy that Moulding records only 23 storers, 14 saplings and 12 timbers. Among the other trees he records are small amounts of holly, yew, sicamore (sic), aspen, walnut (just two), birch, crab and orles.



04. John Moulding's map of trees he counted

The estate of Cockshut was not large. This is Moulding's map of the fields, whose trees he counted (04).⁴

Today the same estate appears fairly well treed but when compared with his records, it is denuded! Moulding would barely recognise his landscape.

Starting in 1729, Moulding began to measure the girth of various trees, 16 to start with and then he extended the measuring to a further 11. He only completed the task four times: in 1729, 1733, 1735 and 1737. Here are some of the results in table 2:

Table 2. Som	e of Moulding's	measurements
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Dates	29 th Sept	6 th June	28	5 Feb
measured	1729	1733	Feb1735	1737
Oak timber	7' 4"	7' 5½"	7' 6½"	7' 6¾"
Oak timber	5' 11/2	5' 4"	5' 5"	5' 63/8"
Ash sapling	1' 5"	1' 7"	1' 7¾"	1' 9"
Oak storer	8"	omitted	9½"	11¾"
Oak sapling	1' 2 ^{1/12} "	1' 3"	2'1"	2' 7¼"
Ash storer	6"	omitted	101/2"	1 ' 0"
Ash storer	7 ¹ /2 ["]	10"	11"	117/8
Elm sapling	1' 7"	1' 9½"	2'1"	2' 7¼"
Ash east	101/2"	1' 3¼"	1' 4¼"	1' 7¾
Ash west	9 ¹ / ₄ "	1' 1¼"	1' 2½"	1' 5"
Ash east	11"	1' 0"	1' 1"	1' 2¼"
Ash west	1' 0"	1' 3"	1' 3½"	1' 4 ^{3/4}
Great Walnut			2' $0^{3/4}$	2' 1½"
Small Walnut			4"	5"
Oak timber	3' 6¼"	3' 9"	3' 10½"	4' 0"

Without knowing the detail of weather patterns covering these years, these measurements remain just interesting per se. However this is the age of the World Wide Web and we can follow the weather for this period on <u>http://www.pascalbonenfant.com/18c/weather.html</u>. In 1729 they had experienced severe Winter weather followed by a backward Spring. A wet Summer was followed by a warm Autumn.

Between 1730 and 1733 there were a series of warm Autumns having been preceded by The Great Frost in 1730 and a series of warm dry Summers.

1733 was a dry year followed by a warm winter.

1735 was year of destructive gales in January and August with flooding in between.

 $1737\ was warm during May through to July, though August was wet and cold.$

It will need an expert arboriculturist to match weather and growth to produce patterns and perhaps in the end four sets of data will not be enough, but hopefully this additional data will support evidence collected elsewhere and add to a regional, if not national, picture of trees in the second quarter of the 18th century.

Historical Ecology of the Wyre Forest

John Bingham

To sum up the ecological history of Wye Forest in a short presentation is impossible but this brief overview is my personal take on some of the key points that have lead to the present day forest. Some are speculation based on history, some more factual but I hope at least it makes people think of how past history created our present landscape and natural history.

The vegetation of prehistoric Britain is open to question, after the last glaciation woodlands covered most of the landscape but how well wooded was our country. In the area around the Worcestershire - Shropshire border mixed broadleaf woodland would have been establish by 6,000BP, depending on your viewpoint it was either 'Tansley' climax high forest or a 'Vera' landscape with open wooded and large grass/heath areas. My personal view of the Wyre Forest area was open forest with large heathland glades maintained by grazing animals. The steeper valley sides would retain a Tansley high forest but plateau areas more grazed, an open Vera scrubby heathland. The extent of Wyre is difficult to define. As a stand-type woodland it would have been limited by the underlying geology of the Carboniferous Coal Measures that support acid woodland with Heather and Bilberry as typical ground flora species, typically NVC W16 woodland. This suggests the forest extended just north of the Abberley Hill and reached to Bridgnorth. Ended before Cleobury Mortimer and in an east direction finished at Six Ashes and Enville. Kinver Forest, a more Vera landscape would have extended the woodland to the east but on a different geology, as would Morfe Forest.

The name Wyre, Wira or Were is derived from a river name meaning 'winding'. Wyre Forest is the 'forest on the winding river' and refers to the twisting course of the River Severn. The river has a different character after the Ironbridge Gorge, until that point it is a slow and meandering with a wide floodplain, after Ironbridge the flood plain is narrow and the river character is different. All due to the glacial ice sheets altering the rivers course to form a new route south, adding a route way for species to follow. At Seckley/Eymore the river has cut out a small gorge or overspill, some 80-90m deep with a distinct sharp 90 degree bend in its course. The forest is on the winding river hence the name, which also derived Worcester, Wira Castra a Roman fortified settlement on a crossing point on the river Wira. The poor soils and climate of the area, with spring three weeks later than most of Worcestershire and earlier autumn frosts would add to the areas unsuitability for farming. Steep sided stream valleys and the area becomes marginal in land use terms, best retained as a forested area.

There is some indication of prehistoric ridge way routes; possibly the Button Oak road to Bagginswood, over the river Rea to Titterstone Clee with its hill fort. Another follows the Heightington road near Rock. We get evidence of the area with Celtic and more frequently Saxon place names. Dowles is the 'dark' brook due to the stone bedrock, Rock 'oak', Arley the (sea) 'eagle' wood, Coachroad Coppice the 'cock rodding' coppice, Postenplain the gate, 'posten', onto the open grazed area. The 'ley' and 'leah' place name are common on maps towards Bridgnorth with Highley, Chorley, Glazeley etc, as settlements within woodland. A Saxon charter describes the management of one wood to produce timber and underwood. Haye names suggest that Saxons hunted red or roe deer in the forest.

After the Norman conquest the forest was held as a Chase by Marcher Barons, the Mortimers who by C12th-C14th emparked land for fallow deer. Cleobury Park being one of the largest but numerous deer parks appeared in the forest over time, Kinlet Park was said to be the finest deer park in England. During this period we have a open forest of mature trees with hunting of deer and common rights for domestic animals. Place names associated with parks are frequent, Lodges etc and also a few hunting terms like Doghanging (hang back with dogs). All this grazing would have had an impact on the ground flora but provided disturbed ground for many species now considered rare. The flora of this acidic Chase had relic northern species like Soft-leaved sedge, Wood Cranesbill and Wood Melic-grass. Heathland are likely to have been more extensive and the indicator plant species are still well represented in the modern flora.

By 1461 it become a Royal Forest but little interest seems to have been taken in the hunting, most of the forest being sold by 1550, legally disafforested and passed for more commercial uses. By 1576 there were iron forges along Baveney Brook owned by Robert Dudley, hence Furnace Mill but as early as 1275 records indicate ironstone was being dug in the woodland. Did the workers plant the Red Currant as a source of vitamin C, the plant is abundant along the brook. This era was the start of the industry of charcoal burning and tanning, by 1650 the whole forest was converted to a system of oak coppice cut on a 18-year rotation (01, 02). The diversity of tree species and the old trees themselves would have been lost to oak coppice. Old boundary hedges are often diverse in shrub and trees that are rare in the forest. The maps are full of 'coppice' names also charcoal burning names such as Burnt Wood. This has masked the older and more interesting earlier Saxon names that may have been used for some of the woodlands. The coppice flora would have evolved and our modern indicator plant species come from this era of management, species like bluebell and wood anemone would form continuous cover in areas free from wild boar rooting. Coppice would have ended much of the common grazing and deer would no longer be tolerated, grazing in the woodland declined. The open glades and heath declined and a lack of animal dung would have affected invertebrate assemblages and no doubt other species like birds.



01. Oak Coppice Wyre Forest. John Bingham



02. Coppice Oak Stools Wyre Forest. John Bingham

Open common land on the southern edge of the forest seems to have survived until the Enclosure Acts. 'Gate' names occur as the area was common grazing but controlled by access points. The area to the south at Far Forest and Bliss Gate seem to have been extensive common land of open heath or grassland. Names exist such as Hedgewick Common, Rock Common, Bliss Common and Wyre Common and the existing Pound Green Common. The lanes and footpaths on maps often converge to a 'Y' shape at each end where animals were brought to the gate and dispersed onto the common. Some field boundaries show the outline of former common lands but the full extent is lost. Lanes and minor roads may have unusually wide verges being the fragments of the former common land, boundary hedges show both ancient assarted 'wood ghosts' with irregular and sinuous outlines, from late Saxon times containing 10 or more hedgerow shrub species. In contrast the enclosure smallholding hedges are straight and with one or two shrub species. Many areas are a confusing mixture of both types of hedgerow. 14-15th Century farmsteads seem to have originated typically around the perimeter main forest area, often told by having the name' farm' whereas the later 16th and 17th Century smallholdings lack 'farm' names. In modern times these larger farms, being commercial tended to improve the grassland with NPK fertilisers whereas the smallholders managed the land taken from the common more traditionally, adding just lime and farmyard manure, today many of the small fields are still semi or unimproved grassland (03). Most of the smallholdings date from Enclosure Acts from 1750 to 1850s. Here we find the NVC MG5 grassland indicator plants. Cherry orchards also date from this time (04) and now provide saproxylic habitats for many species, the Noble Chafer beetle being special. In importance for saproxylic insects the forest is ranked 49th in England, remarkable for a coppice woodland compared to areas like the New Forest or ancient parks like Winsor Deer Park.

Also the spring-line flushes that have escaped drainage over the years, protected by having woodland cover. For example the 'Great Bog of Wyre' a base-rich flush with a rich flora of indicator plants for this habitat type. There are numerous small flushes over the forest of varying pH adding and contrasting with the acid nature of most of the woodland. Drainage is an issue in many woodlands, few are anything like as wet as they once were.



03. Typical Unimproved Grassland Wyre Forest. John Bingham.



04. Smallholding Orchards. John Bingham

The oak coppice period lasted until 1900 with a few coppice plots cut up to 1940 but then the oak was stored as high forest by singling coppice stools. From 1930 planting of conifer and beech started together eventually leading to a shady forest, a far cry from the short rotation coppice or open hunting chase. Many species would have suffered from this change both plants and insects. The varied habitats of a large woodland and the surrounding smallholding landscape have buffered some of the losses. Smaller woodland would have fared less well, as many have.

Finally we now see conservation management of the forest, not always the same as traditional management, we strive to maintain the old ways but often due to cost and time the outcome is different. History cannot be repeated.

Fulfilling the potential of hedges.

Caroline Corsie

Grasslands and Agriculture Officer Worcestershire Wildlife Trust

Four years ago, Worcestershire Wildlife Trust was successful in a bid for a DEFRA funded Wild Pollinator Facilitation Fund. The early days of the project were spend putting together a Wild Pollinator Farm Health Check (based on an American template) which, in conjunction with Michael Liley ecology skills allowed us to 'score' a range of habitats on a farm for their condition. The outputs have been enlightening e.g. the presence of (or not) of bare earth in warm sunny areas, often rabbit grazed resulting in habitat for ground dwelling tawny mining bee, which then provide early pollination of stone fruit at a time when honey bees are still tucked into the hive. ... (makes you wonder just how much myxomatosis has affected solitary bees?).

But, if I had to choose one thing which has deeply affected me it would be the increasing awareness, whilst doing our 'Hedge Health Check', of just how lacking at least 80% of our hedges are in terms of the lack of herbaceous basal flora. We can blame the usual culprits: farming too close to the newly planted Countryside Stewardship hedge; over-cutting of the gnarled enclosure hedges which grows nettles and hogweed well; the impact of fertiliser, manures and sprays; the lack of protective field margins etc etc.

I think its simpler than this, and that most of our hedges have had no intimate relationship with a woodland and have never hosted, for example, bluebell, dogs mercury, greater stitchwort. Most of the hedges I see were planted when enclosures took place and are dominated by species such as blackthorn and/or hawthorn. Or they are very young and planted into herbaceous-species-poor previous arable ground which does not have a seed bank reserve. Also 'modern' hedges are generally not planted into earth banks. We could have at least 36 floristic species (Defra Hedgerow Habitat Action Plan) and over 130 BAP species are intimately associated with hedges such as dormouse , tree sparrow and purple ramping fumitory (UK BAP; Walton 2009b).

At Worcestershire Wildlife Trust'sLower Smite Farm we have around 7km of hedge but Michael will only grudgingly say that only two hedges totalling 400 metres have anything remotely interesting regarding an herbaceous transition zone. This is either due to location (a sunny warm bank on the lane which gets cut far too early each year by Highways people) and a well treed hedge line down the centre of the farm which is probably the edge of what was once a woodland. Recent coppicing of the hazel component of this has resulted in bluebell, dog's mercury and cowslip, amongst others, emerging from the gloom into the dappled sunlight.

Meanwhile, following a visit to Birmingham and the Black Country Wildlife Trust to see their efforts to rear hedge flora plug plants, our Lower Smite farming volunteers are now enthusiastically planting red campion along key corridors on the farm, and relocating other species (seed grown) such as cowslip, and sweet violet. We have plans to collect bluebell seed (and I'm checking the legal!).

All in all, I believe we have discovered a huge gap in the potential of thousands of kilometres of our hedges in terms of their ability to provide nectar, pollen and habitat for many species; a bit like a hollow chocolate Easter egg? Its not that hogweed and rank grasses and nettles don't have a place ...its just that things could be so much better and that is what we are trying to persuade Natural England in the hopes of getting funding to encourage farmers. In the meantime, the yellow rattle, we spread last autumn along the edges of some 7-year-old hedge is starting to suppress the grasses and make way for other species grown as plug plants by the farming volunteers from seed harvested elsewhere on the farm.

With hedgerows being so vital and fundamental in terms of connectivity and expansion for many species we are campaigning

hard that the potential to make them 'more' must be recognised and fast.



01. Cowslips in a grassy hedge base



02. Hedge containing hazel with bluebells growing in the base

A brief look at what happened in the Worcestershire countryside 40-60 years ago.

Harry Green.

This Annual meeting has two main aims. One to show the value of long-term recording in understanding changes in biodiversity. The second to encourage the search for Shadow Woods – the remnants of habitats that existed in the past.

This introduction is a reminder through a few pictures of the dramatic structural changes that happened in Worcestershire

Countryside 40-60 years ago. Extensive hedgerow removal created large fields mainly for growing cereals, stubble burning to remove unwanted straw, ploughing botanically rich ridge & furrow grasslands, and excessive land drainage, all largely driven by fixed prices and intervention that created huge food mountains in storage.

Can we find and record remaining traces of the pre-war countryside and earlier? These may contain ancient trees worthy of conservation and biodiversity hotspots providing species to recolonise the countryside. And should we record the present situation and future changes over a long period? Will this give a wider understanding of wildlife in the farmed landscape and better conservation?



01. Sheep on old ridge and furrow rough pasture February 1971



02. Same field long after ploughing and re-seeding January 2011



03. Stubble burning out of control damaged hedges and heavily flailed and damaged hedges in background August 1981...



04. Before around seven miles of hedges removed in a few days in 1982



05. After removal of around seven miles of hedges if a few days in $1982\,$



06. Deeply dredged stream 1981. Simplified structure. Rapid drainage of nearby land.