



Friends of the Roman Road and Fleam Dyke

May 2010

Newsletter Number Thirty Two

Wimpole Hall

Before the present Wimpole Hall was built c.1640, there was a moated manor house set in an 81ha (200 acre) deer-park and situated to the north and south of this were three medieval villages: Bennall End, Thresham End and Green End, associated with which was the ridge and furrow system of farming. The villages were cleared and the present parkland began to develop starting with the work of Charles Bridgeman, under Lord Harley followed by Greening, Capability Brown and Humphry Repton, who worked for the Earls of Hardwicke 1740 - 1895. The parkland today is an overlay of the work of these landscape designers and gardeners.



Wimpole Park is one of the great archaeological gems of Cambridgeshire, not because treasures were found here or that the place was associated with great historical events, but because it can tell us about the way ordinary people lived there hundreds of years ago.

When the park was created three hundred years ago the old village of Wimpole was cleared away, the tenants were evicted and their fields put down to grass. It is now possible to walk down long vanished lanes, across the undulations of ridge and furrow fields, past the windmill mound and stand on low grassy mounds that are all that is left of the villages. Each mound representing a house such as a tiny cottage, heated by a single fire in which John and Agnes Pratt and their six children lived. Around the Hall there were once summerhouses, gravel walks, fountains and colourful flowerbeds, all swept away by changing fashions.



Belonging to a still earlier time are the remains of a medieval moated manor house lost in dense woodland. This evidence is only preserved here because much of the park has never been ploughed since the villages were cleared. Wimpole is now an island of preserved archaeology in a sea of intensive arable farming where such fragile evidence has been lost forever.

Wimpole Estate by Simon Damant, the Head Ranger

A green and pleasant corner of England, surprisingly rich in wildlife with a history reaching far back in time.

This once large estate (over 10,000 acres) was reduced to 2,500 acres, however it still is large and displays almost all the geological formations of the cretaceous period and their related soils. The latest formation which is mostly on top of the high ground is the boulder clay and derived from the glacial periods. Chalky boulder clay supports most of the remaining ancient woodland in Cambridgeshire; however Wimpole does not have any remaining woodland although Kingston and Eversden wood were once part of the estate. Although not on the estate as such it is worth mentioning that Eversden woods has aspen growing within it. Here we find a rare hoverfly associated with the tree *Brachyopa pilosa*, its larvae utilise the Cambrian layer under the bark of freshly fallen aspen wood where they grow. *Brachyopa pilosa* has not been found on the estate but we have planted native aspen in Cobbs wood. The soil series mostly associated with Chalky boulder clay is Hanslope series and interestingly, in the ancient woodlands that are situated over Hanslope, this series has over time changed to a Ragland series. The difference is an acidic top soil which has come about due to organic acid leaching of the upper profile through thousands of years (if these ancient woodlands were assarted and ploughed it would effectively return it to a Hanslope series as it would bring the alkalinity back to the surface). Typical woodland is of the Ash/Maple type or WG8 community.



Below the mantle of boulder clay is the Middle and Lower chalk and this is evident on the slopes where thousands of years of erosion have exposed it. This geological formation in turn provides a substrate for the chalk grasslands. Only a minute fraction of the chalk grassland plant community exists at Wimpole, most having been lost in the last 100 years to agricultural improvements. An example of what would have been seen here can be seen at Therfield heath. In the medieval period practically all the land at Wimpole had been put to the plough as is evident from the 1638 Hare map but chalk grassland would have persisted in pockets and when in the later post medieval period (17th century) when the population shrank much of the chalky ground was turned into sheepwalks.

Chalk grassland would have flourished again, however recent policy changes, the demand for cheap food and the use of fossil fuel, fertilizers and pesticides has seen its demise over a large area of Cambridgeshire. New CAP environmental incentives especially in regard to the 6m margins can help once again to increase the chalk grassland area where the chalk substrate is exposed. In recent years pyramidal orchards have expanded as have bee orchids while judicious seeding has brought back many of the commoner chalk grassland species. Recently the Botanical Gardens in Cambridgeshire provided the estate with around 40 tuberous thistle plants. (These were saved from extinction in Cambridgeshire and originally were from Wimpole.) They have been planted on the edge of the woodland near Cobbs wood farm. There are many more butterflies to be seen, especially the common blue and newcomers such as the marble white have been increasing of late.

The Upper Cambridge Greensands

Below the Chalk is a formation known as the Upper Cambridge Green sands, its most extensive related soil series is Lode and this provides excellent soils for market gardening and fruit crops like apple orchards. It is a very workable soil and it produces good hay and grass. This geological formation is especially famous for coprolites, which were mined on the Wimpole estate around 1870. A massive enterprise was undertaken with good financial reward but it destroyed much of the archaeology as unfortunately many of the Roman, Saxon and medieval settlements were situated along the Upper Cambridgeshire Greensand belt, because good clean spring water was available from the Chalk aquifer. These springs and wet seepages support a wet flush plant and invertebrate community so we can see alder willows etc growing quite freely here. The chalk aquifer supplies the small brook with water throughout the summer. During the winter, rainfall and surface water drainage greatly increase the flow in the brook and during the summer the chalk aquifer supplies a small but steady flow. Wildlife of interest here are the bullhead fish which is a BAP species and many invertebrates like the soldierflies *Oxycera annilis* and *O. terminata* both RDB species. No large water body existed within the Wimpole parish until 1700 when possibly Lord Radnor built two fish ponds and Capability Brown designed the third lake. The upstream fish pond of the first earlier two fish ponds does not exist any more but the earth works can be seen in the woodland. The remaining two ponds have a tench pike community which helps keep the water clear and provides valuable wildlife habitats. Here we can find water vole and on some occasions a rare sighting of otter. Many rare diptera exploit this aquatic habitat and Dr Peter Kirby's wetland report indicates a relic fen upland invertebrate assemblage. (The report can be obtained from the Wimpole web page). Frogs and toads seem rather scarce but great crested and smooth newts are in abundance as are grass snakes.

The Gault Clay

Below the Upper Cambridgeshire Greensands is the blue Gault clay formation, generally the heavy and sticky Evesham soil series persists and in the winter this can be totally waterlogged for many months. Once again, it was completely ploughed in the medieval period but the population shrank in the late middle ages, and it was then used dairy products from 1700. A rich grassland, hedges and standard trees existed with a cycle of periodic ploughing for arable crops. It would have been home for many hunting birds like the barn owl buzzards and kites as well as many of the farmland birds. This was the case until the modern era of high arable crop productivity with the resultant loss of biodiversity and destruction of remnant ridge and furrow. One exception among the tenant farms is at Valley farm where the ridge and furrow has never been ploughed since it was enclosed around 1700. (This can be seen on the LiDar map to the north west of the park see below for the link).

Losses and Gains

Another event that changed the landscape, especially to the south of the hall, was the destruction of so many elms, both hedges and mature trees, including the massive south avenue. Now we rarely see the white letter hairstreaks that depend on elms, but they are around. As fossil fuel becomes scarcer and more costly it is probable that land on gault clay will revert to dairying sometime in the near future. It is worth noting that over the last decade certain birds have actually increased, buzzards are now a very common sight and kites are making a come back and will be quite common within a decade in Cambridgeshire. We even have a resident pair of marsh harriers that have been breeding at Wimpole for at least the last five years.

Of all the habitat at Wimpole the most important lies within the parkland. Mature and veteran trees abound and potential replacements have been planted. Here we find an exceptional assemblage of deadwood invertebrates which is nationally important and ranks alongside those of Hatfield forest and Croome park to mention a few. To see the list follow the link <http://yrefail.net/Coleoptera/sqi.htm>

Added to this, are the archaeological village earthworks, field systems and later garden-landscape features. These have been captured on LiDar which catches the relief to an accuracy of 100mm at every 1m². The LiDar PDF map can be viewed on the Wimpole NT web page:

http://www.wimpole.org/farm_archaeology.htm

Ninth Annual General Meeting, 22nd April 2010, 7.30pm at the Six Bells Public House, Fulbourn

Present: Chairman, Edmund Tanner; Treasurer, Mike Albutt; Secretary, Julia Napier; Membership Secretary, Jane Robson; Iain Webb, Wildlife Trust officer, with committee members: David Barden, Nigel Copeman, Roger Lemon, David Seilly, and about 35 members of the Friends. Peter Grubb and Rob Mungovern apologized for absence.

1 Chairman's opening remarks

Edmund welcomed everyone to the meeting, and summarised the work of the Friends over the past year. He highlighted the work on the long-distance walk done by Roger Lemon, and introduced members to our new website, a page of which was displayed on the projector screen. Edmund emphasised the fact that all the money we receive by way of subscriptions and donations is used for the work of the group, and that the continued support of members is vital if we are to continue to promote the value of the sites, and secure funding for the essential management work.

2 Report on conservation work

Iain Webb said that there had been fewer work parties over the winter 2009–2010 because of the often poor weather, but that nevertheless the key areas of the sites were looking very good. On the Roman Road, work has been focused on the part north of Worsted Lodge, which has the best areas of chalk grassland. In addition, effort has been put into tackling invasive species on both sites, particularly elder and wild clematis, but also hemlock and a non-native species of spurge.

Iain then reported some of the interesting sightings over the last year. On the Roman Road, the Jet Ant has been seen again on the section north of Worsted Lodge, forming distinct 'lines' across the track. A new clump of Wild Thyme has been seen on the same section, and Common Quail were heard in early June 2009. In addition, on the last work party of 2009, on Fleam Dyke, Richard Fowling found a Woodcock. A day-flying Barn Owl has been seen on the Fleam Dyke, which indicates a shortage of food this cold winter, and Iain noted a flock of 4,000 Wood-pigeons near Dungate Farm – an impressive sight, but not one that the farmers are likely to enjoy seeing! Finally, a Yellow-browed Warbler, a rare migrant from Asia, was a surprise find late in 2009.

3 Website and long-distance walk

Roger summarized the work involved in setting-up of the long-distance walk, which was funded by Awards for All. The launch of the walk took place on Sunday 13th September and attracted a good turnout, with about 60 people being present for the launch, 29 actually attempting the 25 mile walk, and 20 completing the 15-mile route. A booklet describing the walk has been prepared, and has now sold nearly 500 copies, generating an income of about £900. There was to be a board giving information about the walk, possibly at the Wort's Causeway end of the Roman Road. Waymarking discs, using a version of the Friends' distinctive logo, were made, and these were put in place over a period of several days, along with additional wooden posts where necessary.



The grant money has also paid for the design and hosting of a website for the Friends which can be seen on www.frrfd.org.uk. The Chairman invited comments and suggestions. He added that David Barden was preparing a full list of species for both sites, which would be added to the website. We hope this would result in an increase in recording effort, especially of the more difficult groups of organisms.

4 Butterfly recording in 2009

Roger reported that in 2009, weekly transects were conducted on both sites, and that very good coverage had been achieved. The small colony of Chalkhill Blues on Fleam Dyke had not expanded as had been hoped, unlike on the Devil's Ditch, where there has been an almost 100% increase in butterflies seen since conservation work started 20 years ago. Following advice from Ed Turner, John Dawson and Sharon Hearle, Roger and Vince Lea were carrying out a comparative survey of the two sites in order to see what

factors might be preventing the Fleam Dyke population from expanding – results to be reported in due course. As regards other species, 2009 had of course been remarkable for a huge immigration of Painted Ladies from the valleys of the Atlas Mountains, Algeria but Red Admiral had done less well than in recent years.

5 Treasurer's report

Mike Albutt was pleased to report that expenditure had been less than income in the calendar year 2009, and summarized briefly the statement of accounts that had been passed around for members to inspect; these were subsequently approved. Copies can be obtained from the secretary. s.a.e. appreciated.

6 Questions from members

- (i) An enquiry as to how Marbled Whites were faring. Roger reported that there had been occasional sightings on the Roman Road in 2006 and 2007. They appear to be seen more frequently on Magog Down.
- (ii) A question about how the butterfly transects were conducted, especially with regard to the Chalkhill Blue population. Roger said that a pre-defined route was walked at a slow pace, and that all butterflies within a 5m strip were logged. Although the number resulting is not an indication of the total population, it allows comparison to be made between successive surveys, and long-term trends to be determined, something that cannot be done by ad-hoc observations. He estimated that in 2009 there were 5–8 Chalkhill Blues on the Fleam Dyke.
- (iii) What about older records of butterflies and other insects on the sites? Roger replied that there reasonably good records going back several decades, but very little before that. Comparison of populations is difficult when we lack systematic records. For example, Chalkhill Blues had certainly been commoner on the Fleam Dyke before the 1950s. (For example, on 31st July 1930, Fleam Dyke was said to have been “swarming” with them – see: R. Field, V. Perrin, L. Bacon and N. Greatorex-Davies, *The Butterflies of Cambridgeshire* (2006))



Graham Easy

7 Election of committee members

All the members of the committee were unanimously re-elected *en masse*.

Following the AGM, Simon Damant gave a wonderfully enthusiastic and knowledgeable talk about Wimpole Hall Park, summarized above. He is happy to take groups of people round the estate and show us some of the things he talked about. See below.

On Wednesday 7th July, the first ever FRRFD Quiz Night.

The committee has been joined by **Elfrida Heath**, who has offered to run the occasional event for us. The enclosed flyer invites you to display your general knowledge in the friendly atmosphere of the Black Bull, Balsham. £3 50 per person. Your ticket includes free sandwiches. Bring your own team or join one on arrival.

First question to start you off.

The details at the bottom of the flyer are set against three photographs of wildlife. Which of these species are to be found on the Roman Road or the Fleam Dyke?

On Wednesday 28th July, excursion to Wimpole Hall Park – Simon Damant will be our guide. 7.0 pm to 9.0pm or so.

Meet in the car park. Tickets £5 per person (towards the costs of the estate).

Make cheques payable to the Friends of the Roman Road and Fleam Dyke.

Please send a **stamped addressed envelope** to Elfrida Heath,
69 Humberstone Road, Cambridge, CB4 1JD tel:01223 562360

The Plantlife Juniper Project.

Press release from **Tim Wilkins, the Plantlife Species Recovery Co-ordinator**

Attempt to halt the decline of the plant that gave gin its name and distinctive flavour.



Juniper is an important part of our ancient landscape and culture. It was one of the first trees to colonise Britain after the last Ice Age; but today it is in serious trouble. Juniper has steadily declined over the last few decades, and many counties in southern England have lost 60-70 per cent of their juniper populations. This spring, Plantlife is launching a new conservation project and survey across the lowlands of England to help save this interesting and useful species.

Tim Wilkins, the Species Recovery Co-ordinator for Plantlife, says that without action now, juniper faces extinction across much of lowland England by 2060. “The loss of juniper would represent more than the loss of a single species: it supports more than 40 species of insect and fungus that cannot survive without it. The special conditions thought to be necessary for juniper seeds to germinate are also beneficial to a host of other wild plants, many of which are also under threat. By focusing on the habitat, our new project aims to help many of them.

Why is it in decline?

A Plantlife survey of 44,000 upland junipers in Scotland, North Wales, Cumbria and Northumberland in 2004-5 found that conservation action was needed to help junipers to regenerate, as so many populations were small and ageing. Only 13% of sites had juniper seedlings present and of these there were fewer females than males. In addition, most juniper stands comprise old bushes of similar age, which means that a colony can decline quite suddenly when all bushes start to die of old age at around the same time.

New project in lowland England

Plantlife is trying out three techniques to bolster the most endangered populations across the chalk and limestone country of lowland southern England. Tim Wilkins said, “More than 30 project sites have been chosen for a range of conservation measures, including large-scale pilot management, experimental seedling shelters and - where colonies have all but died out – numbers are being bolstered through the propagation of cuttings.” A new public survey of lowland England is also being launched today to provide an up-to-date picture of juniper sites. Survey forms can be downloaded from Plantlife’s website (www.plantlife.org.uk) or obtained by phoning Plantlife’s head office on 01722 342730 or emailing juniper@plantlife.org.uk.

Traditional uses of juniper

The word ‘gin’ derives from either genièvre or jenever, the French and Dutch words for juniper. The berries are also used in cooking, particularly to flavour game dishes. In the 19th century, when a law was introduced outlawing unlicensed whisky stills, juniper wood was harvested for this illicit trade because it burns with hardly any smoke. Juniper has also long been known for its medicinal qualities. During the 1918 Spanish Flu epidemic, hospitals experimented with spraying vapourised oils into the atmosphere of flu wards in an attempt to prevent air-borne infection spreading and juniper was one of those found to be particularly effective.

The Plantlife Lowland England Juniper Project is funded by Natural England, Biffaward and Buckinghamshire County Council.

The Juniper Project and Fleam Dyke

As previously announced, the Friends of the Roman Road and Fleam Dyke have received £1,500 of this money to use on the Fleam Dyke. Tim Pankhurst, now the Plantlife Brecklands officer, is responsible for a specific scientific part of the survey. All the juniper sites in lowland England will have one or more exclusion cages in suitable places near the existing junipers. These cages will have to be dug into the ground in order to exclude mice, bank voles and other small mammals including rabbits. Berries will be sown into the cages. Juniper berries take 18 months or more to mature, so it will be some time before hopeful little juniper seedlings will appear, if at all. There is only to be one cage on the Fleam Dyke, which Tim Pankhurst will set up and monitor. More generally, the Friends will clear more scrub regrowth off the western slope of the Fleam Dyke, sow berries into the bare soil and maintain regular mowing.



Three more juniper seedlings!

On 6th May, Tim Pankhurst and his assistant, Helen Jobson, Edmund Tanner, Iain Webb and Julia Napier met on the Fleam Dyke. As we were standing around the second of the three female junipers on the bank, discussing the plan described above, Helen suddenly said, “Is that one?” Iain confirmed that it was and instantly saw two more. The seedlings look like mini pine trees.

But too late to tell the ‘Juniper Watcher’

We regret to announce that after many years of ill health, Dr David Clark died in March at the age of 89. In the world of psychiatry and psychotherapy David Clark was famous as a pioneer of social therapy in psychiatry and the development of therapeutic communities in mental hospitals. When he took over Fulbourn Mental Hospital in 1953, despite, or perhaps because of a very heavy work load, he soon discovered the Fleam Dyke, which became a favourite place for a family walk and a picnic under the three pine trees near Mutlow Hill. The last one, long dead, fell a couple of years ago.



As the Fleam Dyke began to scrub over in the 1960s, as the result of myxomatosis, David Clark alerted the then Naturalists Trust for the need for work parties to clear the briars and bushes, especially round the junipers, and joined energetically in the clearing. He took a particular interest in the junipers, and for thirty years, until he began to suffer from heart trouble, he sent annual reports about them to the Wildlife Trust. These can be read on Gigi Crompton’s website: www.cambridgeshireflora.com

Dr Clark joined the Friends as soon as he heard about us and was glad to know from the newsletters that his work was being continued. At the private family funeral, it was suggested that instead of flowers, there might be donations to either the Cambridge Psychotherapy Assistance Trust or to the Friends of the Roman Road and Fleam Dyke. Subsequently, a cheque for £156 was sent to us by his wife, Margaret Farrell, a final and very generous gesture of support.



Work Party, Sunday 21st March.

The work party met at Wandlebury car park, for quick transport to the Golf Course section of the Roman Road. On top of bus, Iain Webb, left to right back row: Roger Wolf, Christine Newell, Stella Wolf, Richard Fowling, Matthew Wallis, Dick May, left to right front row: Cassie Sparks, Helen Chubb and Jess Hatchett. Steve Hartley had cycled on ahead.



Right: the Roman Road beside the Golf Course. A remnant of the raised bank or agger of the original road is seen to the right. Steve Hartley is brush cutting in the far distance! This section still has rock roses, lady's bedstraw, burnet saxifrage and the useful parasitic annual called hay rattle or yellow rattle. There is also a lot of *Bromus erectus*, upright brome, which gradually reduces fertility.



On the left, a Clematis and Bramble Hedge!

This stretch of the Fleam Dyke was very thickly scrubbed over. The top of the bank was cleared using our Awards for All grant, but both before the clearance and after, my notes for 2003 list only clustered bellflower here. There was therefore nothing to reseed the cleared chalky slopes with calcareous flora, while common 'weeds' quickly sprang up. Clematis or old man's beard, and brambles flourished in soil enriched by years of leaf fall and woody detritus. Annual brush cutting and raking has not deterred them. These are plants which enjoy good hard pruning!

Thanks to you, we are able to pay from more clematis treatment this year.

We are grateful to Wimpole Hall, National Trust for text and photographs from their website and to Plantlife International for photographs from their Juniper Project website.

My thanks to Mark Bishop at Copy Studio which is now to be found providing the same top quality service as before at 35 Clifton Road, Cambridge, CB1 7AD tel: 01223 211554

Rain at last, and the chalk grassland flowers should begin to flower properly. Make sure you go and enjoy what you have helped to protect and enhance.

Julia Napier

30a Hinton Avenue, CB1 7AS 01223 213152 frrfdjin@freebie.net