Reprinted from: Gloucestershire Society for Industrial Archaeology Journal for 2008 pages 56-63

GSIA VISIT REPORTS FOR 2008

Once again the Society's thanks are due to Frank Colls who organised a full programme of local visits and two excursions further afield by coach. The following reports have been compiled by Frank Colls

Sunday 13th April 2008
Afternoon Walk, Soudley area Forest of Dean

Although the weather didn't look promising, 19 members came on this trip, with a few taking the opportunity to visit the Dean Heritage Centre prior to the walk. Frank Colls was our guide and he spoke first spoke about the early industrial activity of the site when it was known as Camp Mill. After various uses and latterly much neglect, it was developed from 1983 into a museum and study centre on the history of the Forest of Dean.

We made our way around the site perimeter, pausing to consider the line of the Soudley Brook, the tributary coming in from the Soudley Ponds, the changing layout of the mill pond and the probable location of an 1866 dam. We reached a lane by the road bridge and followed this along the line of the early 19th century tram road which had been built as part of a scheme to transport coal from Cinderford Bridge down to the Severn at Bullo Pill. As we followed the lane we came to a few quiet houses near where the tram road had emerged from a tunnel under Haie Hill. We heard about the huge changes which the area had undergone when an iron works had been built in 1837, with two blast furnaces, and the conversion of the tram road to a broad gauge railway in 1854 and then to standard gauge in 1872. Copies of detailed maps and some old photographs were available which helped us to envisage the area as it had been, though hardly any structures survive. The portal of the Haie Hill tunnel, and that of the Bradley Hill tunnel are still there, the latter having been built to enable the railway to take a less curved route than the original tram road had done. We heard more about the story of the blast furnaces and the 1875 improvements although changing economic circumstances had led to the decline, abandonment and eventual clearance of the site by 1907. The railway route was still important and we retraced our steps to see the western portal of the Bradley Hill tunnel before reaching Upper Soudley.

Passing the site of a level crossing and a former siding we came to the site of Upper Soudley Halt, built in 1907 when passenger services were introduced, though mineral trains were the main traffic. We saw the abutments of a bridge which had carried the line over a lane and heard more about the engineering challenges of the line with its steep gradients and associated operating problems. Continuing along the main road we came to a point where the railway had crossed by a bridge (nothing remains) to enter a cutting which is now the start of a geology trail. The original tram road had taken a sharper turn to the north and had followed a shelf formation which could be seen in a small adjacent field. We followed the geology trail (along the route of the railway) to the Blue Rock Tunnel, another short tunnel constructed to lessen the curve of the original tram road line. Nearby had stood the King's Furnace, from the earlier period of charcoal smelting of the iron, demolished in 1674. We also saw a recent wooden sculpture showing a 'hod boy' pulling a loaded hod of coal through a narrow tunnel, reminding us of the hard and dangerous lives of the early miners and their families. Returning to the road we took a back lane through the village and then a brook-side path back to the site of the level crossing and we could appreciate the impact that the railway and its embankment must have had in its heyday. A brief detour took us to the small site of the Camp (reckoned to be Norman, although the evidence is flimsy) from which Camp Mill had been named. We finally came to the lowest of the Soudley Ponds and heard about their development as fishing ponds in the 19th century, and the later periods of use for swimming and leisure purposes. Frank was thanked for giving us an interesting afternoon before we made our way back to the Heritage Centre and headed home. The rain had threatened but had held off.

Sunday 11th May 2008
Coach trip to Southampton

We had an almost full coach and a fine day for this visit to the south coast although we started on the other side of Southampton Water at the Eling tide mill. With limited internal space we divided into two groups, with a half-time changeover, so we also had a chance to explore the history displays and exhibits at the nearby Totton Heritage Centre. We saw the mill with an enthusiastic guide who mentioned the long history of milling on the site and the building of the present mill around 1785. The tide level was suitable for milling to be carried out so we could view the working water wheel, restored in the 1970s. We heard about the sequence of the rising tide filling the upper pond and then, as the sea level falls, the period when the pond empties and drives the water wheel to power the grinding machinery, this being very similar to that used in other corn mills. The next stop was at Hythe, reached after a short drive, and we first walked through the town to reach a fine building, now Council offices. This had once been part of a marine institute where tests were done on the idea of a new type of vessel, the hovercraft, invented by Christopher Cockerell in the 1950s. Nearby had stood the sheds in which early prototypes were built and in the small waterside park we saw the memorial sculpture to Sir Christopher, as he became in 1969.

We then walked back to the pier to catch the ferry over to Southampton (we were to rejoin the coach later in the afternoon). The 1881 pier is 700 yards long so some members were grateful to take the little electric train to the far end, though quite a few people were happy to walk. The narrow gauge railway was installed in 1922 and the ferry company is still a significant part of the local public transport system. It's only a 12 minute ride but there was plenty to see as we crossed to the Town Quay and then walked to the Maritime Museum, housed in a 14th century wool house. Here everyone had the chance to look around at their own pace and admire the many displays covering the development of Southampton as a port, including a splendidly restored 1939 model of the dock area showing a number of significant ships and liners of the 30s. A lot of the museum is devoted to the Titanic and the stories associated with its disastrous maiden voyage. After this we met up with Bill White of the Hampshire IA Society who gave us a very interesting walk to see remaining buildings and features of the original walled port, as well as telling us about the voyage of the Mayflower. We then went by coach to see some of the sites where flying boats had been manufactured and Bill also told us of the work by R. J. Mitchell on the Spitfire, designed and tested in Southampton. We finished at Stoneham Cemetery and saw the grave where Mitchell was buried in 1937. After thanking Bill for a most interesting tour, covering a wealth of fascinating stories, we headed for home.

Wednesday 21st May 2008
Afternoon visit to Aston Down Airfield

It was a fine afternoon as about 20 of us met with Nick Hardcastle of Leda Properties who had kindly agreed to show us around the large site of this former RAF station. Initially developed as an airfield with grass runways in the 1914-18 war it reverted to agricultural use around 1920. It was rebuilt in the 1930s with concrete runways and was very active during the Second World War for aircraft storage, maintenance and training purposes, and as a centre for the important task of ferrying aircraft to and from other airfields. Part of the site and the runway areas have been in use as a glider base for many years but the extensive peripheral areas with many hangars and other buildings were only relinquished by the MoD in 2002. This has enabled a new era of commercial development since the many hangars still have the potential for modern uses, while retaining their historic character and their heritage value. A good proportion of the old hangars are occupied with various modern businesses such as storage and distribution, vehicle maintenance, and some manufacturing.

We walked around the main block of buildings which formerly housed the administrative and technical facilities of the base, but with 3 large and several smaller hangars. We then went by cars to the 5 outlying areas, each having 2 large hangars, such that the many aircraft based or stored here in the operational years were widely dispersed and hence less vulnerable to enemy action. We could see the different styles of hangar design and appreciate the large scale and heavy solidity of the concrete structures. Some of the hangars had needed remedial work to the roofs to make them fully water tight for commercial letting. However, the overall size and ruggedness of the hangars had made them highly attractive propositions for the many companies now on the site. We also saw a small but solidly built concrete guard post on the edge of one of the areas and were told of 3 other structures which would have been part of the defensive arrangements in the war period.
At one of the hangars we had a bonus item when the manager allowed us inside to see the internal structure more closely and to hear about his own business, secure document storage. The facilities and very large storage rack structures were still being installed but we could appreciate the attractiveness of these old hangars for such commercial companies.

It had been an interesting tour and it was good to see how the large hangars were being used for modern purposes while retaining their distinctive appearance and reminding us of the part they played in the history of aviation. Before departing we thanked Nick for giving us a most informative afternoon.

Sunday 15th June 2008
Afternoon Walk at Saul Canal Junction (including the new Marina)

The weather was kind to us but with about 35 people arriving for this walk (too many for a single party) we had to revise our plans. We split into 2 groups with Hugh Conway-Jones showing people around Saul junction and a stretch of the Stroudwater Canal, and Ray Wilson taking people around the new Marina. After a refreshment break the groups swapped over so everyone had the full programme.

Hugh related the story of the building of the junction when the Gloucester and Sharpness Canal had to cross the route of the earlier Stroudwater Canal, the latter having to be raised 4 feet to give a unique "level crossing". We saw the lock (now redundant) that had had to be built to give the new level and its unusual paddle gear, the fine Bridge House, the ship canal spill weir and the course of the River Frome. Many craft were on the canal or turning at the junction so moving the two swing bridges kept the bridge keeper quite busy. Opposite was the dry dock which is part of the extensive boat building and repair business alongside the ship canal. We walked along the short length of the Stroudwater, now a dead end but full of moored boats, and saw the entrance to the new Marina. We continued to Walk Bridge and heard of the occasion when many boats had approached the solid structure to give it a gentle nudge as a symbolic gesture to the world that they wanted the swing bridge back as part of the overall Stroudwater restoration project. Going up the lane and along a field path we came to the site of the former water powered Whitminster Mill and saw the present weir. We heard about the earlier period of boat working on the Frome and the Kemmett Canal, and about the period when there were competing demands for water between the millers and the canal company. It was a short walk to Whitminster Lock which originally had a 4 feet fall, but this was changed to a few inches when the Stroudwater level was raised to enable the junction to be built at Saul. We saw the fairly new lock gates which had been installed as one of the restoration projects of the Cotswold Canals Trust. The final feature we saw was the site where the waters of the Frome are taken through two settling ponds (to clear silt) to feed the short length of the Stroudwater and hence the ship canal, this input being vital to the take off point further south which supplies water to Bristol.

The second part of the visit was, with the kind permission of the owners, around the new Saul Marina and Ray gave us a very useful commentary on the dredging and building of the site and how it was being developed to provide a modern facility for the many boat owners who use the ship canal and, eventually, to build up the services needed for the reopened Stroud-water sections. He also told us about some of the nearby features such as the boat repair business and, further along the ship canal, the Cadbury's mill. By chance, the marina was hosting a rally for enthusiasts of the Russell Newbery Engine (a top of the range diesel engine used in many boats) and a demonstration engine was there to admire. While none of our group were potential purchasers, the engine was started up for us to appreciate its qualities. Both Ray and Hugh were thanked for showing everyone around and for most ably dealing with the larger numbers of people we had attending.

Tuesday 8th July 2008
Walk and social evening at Northleach

Over 30 of us gathered on a slightly damp evening to meet with Peter Dawson of the Northleach Local History Society. We also had with us Enid Sly, a long time resident, who provided several extra comments based on her own experiences seeing the town change over many years. Peter outlined the origins of the town, set up or "planted" by the Normans around 1220, with its regular pattern of burgage plots. These 11 yard wide strips still form the basis of many of the property boundaries in the town centre. The triangular shape of the market survives, smaller than originally laid out, and from here we started our walk seeing various notable houses and hearing of their former uses and significant features. At Wheel-wrights (formerly run as a wheelwright and joinery business) we were able to enter some private gardens to see some of the old work sheds and outbuildings on an area where the old burgage plots had been amalgamated. We saw the substantial Tayler's Brewery, dating from 1850 but recently redeveloped for residential purposes while retaining its fine appearance.

Turning down Antelope Lane (the Antelope Inn had been on that corner from 1576) and passing a non-conformist burial ground, we came to the church. Peter related a number of interesting points about the history of the church, started around 1350 but with many additions and changes over the centuries. We were able to wander around seeing some of the fascinating items, including several brasses depicting the wealthy wool merchants whose patronage and generosity had supported the completion of the church in the 15th century. Wool, of course, was the principal product of that time with a flourishing export trade. Peter and his colleagues had kindly brought along to the church a range of display panels which the NLHS had developed from their researches, and these were also a source of much interest.

It was then on to see an old mill site (originally recorded in Domesday), but the later mill building is now a dwelling with an extension recently erected where the water wheel had been. Further buildings were seen as we continued our tour including some 16th century houses, buildings formerly Westwood's Grammar School, and a row of old almshouses. We turned down an alley alongside a house with a very long narrow garden, bursting with flowers and vegetables, which perfectly illustrated the idea of the burgage plot. Reaching the river, which formed the southern boundary of this segment of burgage plots, we turned upstream to make our way back to the Market Place. Here we said our thanks to Peter and to Enid for a full and fascinating visit, before those who felt thirsty made their way to the Sherborne Arms to round off an enjoyable evening.

Tuesday 22nd July 2008
Afternoon visit to Severnprint

As our "modern manufacturing" visit this year we had a chance to visit Severnprint, a Gloucester printing company which is making use of the latest digital technology in its work. A small group was shown round by David Pealing, one of the Directors, and Paul Davies of their sales team. David explained the long-standing process of lithographic printing which originated with limestone blocks being marked with wax to form the letters and shapes to be printed; the wax attracts ink and so enables the ink to be imprinted on the paper in a press. In modern plants, large aluminium sheets are used with a special coating which is then selectively burnt away by a laser to form the desired letters and shapes. For a colour printing job, four aluminium sheets are made with each one handling a different colour – cyan, magenta, yellow and black. These colours, in the appropriate combination, enable a multiplicity of colours and shades in the finally printed page. The aluminium sheets are set up in a printing machine with four channels for the four colours, the paper being fed through each channel in turn to produce the finished article. In the press, each aluminium sheet is inked and the inked image transferred to a rubber blanket (this stage is known as web offset), with the blanket then imprinting the ink onto the paper.

We started by seeing these presses in operation with the paper stock being fed in at one end and the completely printed sheets emerging from the other, all at very high speed. The paper is generally B2 size (520mm x 720mm) which is larger than A2, this producing 4 A4 pages. This is to give space for printing reference data and registration marks (to allow precise alignment) and to allow for printing over the full extent of the paper and for folding and final cutting to an exact size. We then saw the computer area where incoming jobs were handled, mostly taking customers' digital files and setting these up into the correct layout and format from which proof sheets can be printed using very high quality printers. Once the customer has approved these, the digital file can be used in two ways. For high volume jobs, the file is submitted to the machine which produces the aluminium plates. For low volume work or for jobs where an element of variation may be needed (eg booklets with individual customer details on certain pages) the digital file is fed into a computer based printer not unlike the laser printers used in home and office computing, but of much higher quality and with extra functions to do folding, cutting and stapling. It was pointed out that the digital files used on the low volume equipment could, if higher volumes were ever required, be fed into the plate-making machine for subsequent use on the higher speed litho presses. In this way, the company is well placed to gain maximum advantage from its digital printing or the faster litho method to suit customer demand.

We heard about the production control system and saw the display boards whereby all the stages of any individual job were monitored and controlled. Finally we saw the area devoted to finishing and heard about the way in which special shapes could be cut, for making such items as folders and envelopes. We saw the equipment used for collating the fully printed sheets and for folding and stapling into the finished products. Finally, we thanked David and Paul for giving us an excellent tour of the plant during which we had all learned a great deal about modern printing. We were also much impressed with the way that the company worked and their approach to customer service and satisfaction.

Sunday 17th August 2008
The Mills of Uley

About 30 members met at Dursley for this first walk of a series looking at mills along the Uley valley with Ray Wilson. We began at the Rack Field car park, reminding us of the racks used for drying woollen cloth, one of the main products of the area. We passed the Town Council building, formerly the home of clothiers Jacob and Elizabeth Stiff as indicated by a stone carving in the wall. It was then on to the site of the early 17th century New Mills, though nothing remains apart from a fine house built in 1795. Walking to the Broadwell Springs, we heard about the water courses which fed the Ewelme Brook, the main power source for mills of the Uley valley. It was then on to Howard's Upper Mill, where pin making predominated and Pedersen cycles were made, but converted about ten years ago into residential use, and then the site of Howard's Lower Mill where Listers began in 1867. Ray told us of the Clothiers Trade Association and the way they organised themselves, and the period when Dursley and Stroud had a similar number of mills, but the later development of canal and railway links enabled a much greater growth in Stroud and the relative decline of Dursley.

We went on to pass the site of Rivers Mill, a late 18th century fulling mill later used for wire card making by Listers. This was destroyed by fire and replaced by a new building as part of the Lister premises. Continuing towards Uley, we turned off the main road to follow a field path to the site of Dursley Mill, now a private house, where we went along part of the dam of the former the mill pond. A further field path took us to Eyles Mill (Wresden Farm) and the adjacent mill house with its 1687 date stone and the initials J E E to mark John and Elizabeth Eyles. We retraced our steps back into Dursley to pass The Priory, a 16th century building which is still one of the main offices of Listers, and then saw the plaque to mark the work of Pedersen, a Lister engineer, on a house in Long Street. It was then time for a visit to Dursley Town Hall to partake of some welcome tea and cakes, where we thanked Ray for a very interesting walk. Those who still had time were then able to visit the small Heritage Centre which has a number of items and displays about Dursley's past which made for a fitting conclusion to an enjoyable afternoon.

Sunday 28th September 2008
Coach trip to Derby and the Derwent Valley

We had an almost full coach and generally fine weather for this visit. Dudley Fowkes of the IA section of the Derbyshire Archaeological Society had kindly agreed to show us around and tell us about the various sites. The centre of the city was undergoing much urban redevelopment and we were grateful to Dudley for navigating us around and for finding suitable parking places for the coach. We started at Derby Railway Station and first saw an 1839 roundhouse and adjacent workshop and office buildings, Grade 2* listed but neglected for some years. These are currently in the midst of refurbishment aimed at providing a new educational centre for Derby College. Walking into the station itself, Dudley outlined the early history of three separate lines and, in 1840, the building of a combined “tri-junct” station, of which little remains. The Midland Railway (formed from the 3 initial companies in 1844) built a new station in 1893 but most of this was later demolished with just some ornamental structures from the grand frontage saved. A 1950s development of concrete platform canopies was later deemed structurally unsound and all this is still supported with a very visible and temporary looking steel framework, destined to be replaced by a modern structure, currently being built. We moved on to see the fine Midland Hotel of 1841, the Railway Institute of 1894 (now a bar), and into the railway village. The cottages, terraces and small gardens built in the 1840s by the North Midland Railway for their workers now form a very attractive residential area.

The coach took us to the Cathedral area in the city centre where we dispersed for lunch before joining up at the Silk Mill museum for a short but interesting look at the many displays covering a whole range of Derby’s former industries. It was then on by coach to the small village of Darley Abbey with its fine array of cotton mills and workers’ housing developed by Thomas Evans from around 1780 but with many changes over the succeeding decades. With so many of the older buildings still standing, many now occupied in modern industrial and commercial activities and much of the housing now forming desirable residential properties, the village is one of the best examples of a complete factory village in the country. We then rejoined the coach and drove through Milford, with Dudley telling us of the cotton mill sites here, all developed by the Strutt family. At Belper we stopped at Strutt’s North Mill (1804) now the home of a small but comprehensive museum devoted to cotton making, hosiery manufacture and related topics. The design and construction of the fireproof building was especially worth seeing. After a look at some nearby terraces of worker’s housing from the period, it was time to go. We thanked Dudley for a very full and varied tour of a fascinating area before he left the coach in Derby and we headed for home.

Sunday 12th October 2008
Afternoon Walk, Stroudwater Canal and Mills in the Eastington area

It was an exceptionally fine afternoon when about 30 of us met up at Bridgend for a circular walk led by Frank Colls and Stephen Mills. Taking a field path parallel with the River Frome we went down the valley, first seeing Stonehouse Lower Mill beyond the trees. We heard about the early ideas for making a navigable waterway to link the river Severn with Stroud, promoted by the mill owners there, and the opposition from owners on the lower stretches concerned about maintaining water supply to power their own mills. Several failed efforts were made over the years from 1720 to about 1760, when the Kemmett Canal had a brief success with its system of interchange wharves with cranes to lift loaded containers from one river level to another. Finally, with a new Act in 1776, the Stroud owners achieved success and the waterway was opened from Framilode to Wallbridge in 1779.

We continued on to pass under the 1844 Bristol to Gloucester railway line at the fine brick viaduct, built in 1883 to replace the original timber structure, and came to Beard's Mill. We heard about its 17th century origins and changes which took place as water power gave way to steam, and the various cloth making processes carried out. One remaining building was formerly used for hand loom weaving at a time of transition away from cottage based production. We heard of the period in the mid 19th century when Charles Hooper ran five mills, each devoted to a particular stage in manufacture, and Beards Mill was a centre for cloth dyeing. It was then on across the fields to pass Bonds Mill, close to where one of the Kemmett canal cranes had been sited. We also heard about the period of the 1940s when Bonds Mill, relatively remote, was home to various manufacturing and research activities related to the war effort. Continuing our walk, we could see Millend Mill across the fields and heard about this long standing mill site and its former activities. Stephen also told us of the current development proposals under which, while many ancillary buildings will go, the main stone building from 1818 will be retained in the conversion to residential use.

We then came to Churchend and passed the site of the 16th century mill which had been very extensive at its height. It was part of the combined enterprise run by Charles Hooper, along with Millend Mill, Bonds Mill and Beards Mill, but is now totally demolished. It was also the site of one of the Kemmett Canal interchange wharves. Passing the little church, we continued along a path and paused to hear about Meadow Mill, seen across the fields, finally arriving at the Stroudwater Canal. We first went along to the site of Westfield Lock, now buried but a few large edge blocks can be seen, and the adjacent bridge. From here we could view, across a field, the line of the canal to the west as it had made its way towards Fromebridge. We returned to the canal to pass the weir structure by which the Oldbury Brook was taken under the canal, and which took the excess water of the canal into the Frome. As we began our walk eastwards along the canal, we saw the site of Dock Lock and the nearby dry dock and canal company depot. We continued on to Pike Bridge and Pike Lock, named from the turnpike house built here as part of the road improvements in 1823. It was then on to Blunder Lock and Newtown Lock where we heard about the building of the canal and the settlements that grew up in the 1770s. We continued to Bonds Mill, formerly a site of cloth production, at first water powered but latterly with steam engines. It was also used in the 1939-1945 war for defence related research and manufacturing. The extensive site is now occupied by several modern companies and we saw the access lifting bridge over the canal, with its innovative glass reinforced plastic design, built in 1994. Continuing along the towpath we passed through the foot tunnel under the embankment of the Gloucester to Bristol railway line, built in 1967 to replace the original bridge crossing the canal. This brought us to The Ocean, originally a mooring area, now home to many water birds, and then Nutshell Bridge where we left the canal to follow a lane to Stonehouse Lower Mill. This was a 16th century corn mill site, used also for fulling and cloth weaving up to 1906. The building is still in use by the Stonehouse Paper and Bag Company. Before returning to our starting point, Steve and Frank were thanked for a very enjoyable afternoon covering a wide range of interests.