

## STROUDWATER CANAL HERITAGE PROJECTS

Report for 1 October 2006 to 30 April 2007

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### Overview

The purpose of the historical and archaeological research is to provide information that will help local people and visitors feel a sense of continuity with those earlier generations who worked and played along the canal corridor.

The canal was built to supply coal to the mills and the households along the Frome valley, and it also carried stone for building and for roads and materials for local industries. Many of the impressive mill buildings survive, and the restored canal will provide an attractive link for those wishing to explore the area. Each of the bridges will become landmarks for exploring the area, and appropriate interpretation material will be required.

There are many interesting canal features that need to be recorded and interpreted to add interest to those walking along the towpath or visiting by boat, and there are many interesting buildings along the canal corridor. The former wharfs where cargoes were unloaded are now barely recognisable, but their locations need to be recorded and their roles understood. There were several boat building and repair yards along the canal, and similar facilities will be needed for pleasure boats on the restored canal.

Although the primary role of the canal was to carry commercial cargoes, in the past it has also been a valued area for recreation activities. The canal and towpath have been used for boating, fishing, walking, and nature study, and these will become more important when the canal is restored. There were formerly several public houses beside the canal, and no doubt there will again be one or two in the future.



The *Nellie* at Eastington Wharf

This report is an account of the historical and archaeological research that has been carried out by members and associates of the Gloucestershire Society for Industrial Archaeology into the canals in the period 1 October 2006 to 30 April 2007. It begins with the background of the Society's involvement with the Canals Restoration Project. The work carried out has been divided into four main subject areas, Trade and Employment, the Historic Environment of the Canal Corridor, the Recent History of the Canal and Additional Research Resources and each of these is considered in a separate section below. Finally, a view is given of the way forward how the project will develop in the future. A total of 29 reports describing the research carried out have been compiled and they are listed in the preceding article. The reports are referenced in the following by giving the report number in square brackets e.g. [S18].

### **Background**

The Gloucestershire Society for Industrial Archaeology (GSIA) was formed in 1963 and has a long-standing interest in the Stroudwater and the Thames & Severn Canals which are now often referred to as the Cotswolds Canals. The Society has supported from the outset the current restoration project led by British Waterways on behalf of the Cotswold Canals Partnership. When the opportunity arose for in Autumn 2006 for GSIA members to carry out historical research in support of the wider aims of the restoration project it was readily accepted. However, it was clear that if material was to be available to support the bid to the Big Lottery in May 2007 there was no time to be lost. It was therefore decided to approach members and others, with a known interest in the canals or local history in general, and invite them to contribute either a complete paper or to work on the compilation of resources that will assist future work. Whilst this approach might appear to be no match for setting up a proper research programme it has in fact proved to be extremely successful. The range of topics addressed has proved to be comprehensive and a total of 29 projects of varying sizes have been completed or are still ongoing (see Appendix A). Furthermore, the experience gained in the past six months will be an invaluable in planning future work as discussed in Section 7. The results of the studies for the four main subject areas will now be discussed.

### **Trade and Employment Along the Canal**

The coming of the Stroudwater Canal had a dramatic effect on both the domestic and commercial life of the communities it served. Stephen Mills's paper [S03] describes the effect on the inhabitants of the parish of Eastington and on the several woollen cloth mills that operated there. The coming of the canal reduced the price of coal from about £1 per ton assuming that it was available at all to about 15/- (75p) per ton. Clearly, the canal was having a major impact on reducing coal prices charged to local industry but, perhaps more importantly, it meant that regular supplies were now reasonably well assured. The coal came from the Forest of Dean and from as far away as Staffordshire and Shropshire.

The arrival of the canal appears to have had little direct impact on employment in the parish, although doubtless some local men were employed as labourers or in other unskilled roles. Indirectly, in the ensuing years, the canal's opening undoubtedly had an impact, if only through helping to ensure that the local mills were no longer entirely at the mercy of the River Frome, but could now rely on steam power when required. This minimised problems of water shortages stopping production, along with the inevitable lay-offs. In its earlier days, it not only acted as a conduit for goods and commodities, but also as a provider of news and information, carried by passing boats. It was alongside the new canal wharfs that small thriving communities developed.

Stone was the other major cargo and Arthur Price has been researching the use of building stone on the canals, both for the initial building phase and later the export of local stone into the surrounding counties that were served by the canal network [S02]. Building stones of various types were needed in great quantities for locks and bridges, warehouses etc., limestone was required for burning and converting into lime mortar. The proprietors of the Stroudwater Canal made searching inquiries regarding cost, durability and availability and consequently imported many of these stones from outside Gloucestershire. They opened their own quarries, leased others and bought direct from various quarrymen. For the Stroudwater Canal the tonnage and minute books record in great detail stone from Shropshire, the Forest of Dean, Chepstow and Tintern, Hanham and St Vincent Rocks in the Avon Gorge at Bristol. The Stroudwater company opened or leased quarries and the Thames and Severn Company had its own quarries at Quarhouse, Thrupp, which supplied weatherstone for lock building and general-purpose building stone for Stroud and Gloucester. Some of these stones can be related to specific building projects and can sometimes be seen today, in the same place they were laid over 200 years ago. The meticulous records mean that the stone types and the quarries from whence they came can be identified and provide scope for future work.

The source of stone for some important building projects can be identified, such as the Painswick paving sent to Windsor Castle for St George's Chapel in 1820. Due to the accounts it is known that it was Walls Quarry at Brimscombe that supplied this stone. Stone sent from the famous underground quarries at Balls Green near Minchinhampton for the rebuilding of the House of Parliament was consigned by canal in the early 1840's.

The tonnage books of both canal companies present a particularly rich picture of the trade along the canals for more than 150 years. Alan Tucker has provided an overview of the trade on the canal between 1775 and 1822 [S07]. This takes the form of a number of summary documents and spreadsheets which will assist future workers on the social and economic history of the canal. The documents give details of such things as the accounting procedures of the Stroudwater Company, biannual cash totals in the tonnage books handed over to the

treasurer, the vessels and their masters. Of particular interest is the wide range of goods that was handled although by far the largest commodity was of course coal from various sources. Other goods included stone, bricks, salt, tin, copper, iron, lead, nails, timber, bark, grain, cheese cider, wine, ginger, wool, vitriol and guns!.



*The Dudbridge Crane*

Hugh Conway-Jones has chosen the first few months of 1881 for his study of the tonnage books [S08]. At this time most of the barges collected coal from Lydney or Bullo Pill (or roadstone

from Bristol or Chepstow) and delivered to wharfs along the Stroudwater and Thames & Severn Canals as far as Chalford. Only a few passed over the summit to Cirencester and Lechlade. The vessels owned by the milling firms commonly brought in corn from Bristol and sometimes returned with flour. The Reliance, owned by the Stroud Gas Co, regularly delivered coal from Newport. The Annie, owned by Harry Knee, collected general cargoes from Bristol as well as making trips to collect coal.

### **The Historic Environment of the Canal Corridor**

It is the built structures that give any canal its unique character due to the materials used and the actual designs of the locks, bridges, wharfs, warehouses, watchmen's cottages and even boundary markers. An accurate and detailed knowledge of these and all the other types of structure found along the canal corridor is an essential pre-requisite to sensitive restoration and the creation of a conservation plan for the canals.

In 2003, Cotswold Archaeology was commissioned to carry out a heritage survey of the full 57km of the Cotswold Canals. This work comprising documentary, built heritage, archaeological and historic landscape research was published in July 2003. A major output of the work was a computerised database containing the details of more than 1100 sites. The software chosen for the database was Microsoft Access and thus its use was effectively restricted to computers which had a full version of this software installed. In order to make this valuable resource more widely available, the data has been transferred to an Internet based database. At the same time it was found that the sites could be duplicated in separate tables in the old database which made the addition of new information a complex and error prone process. The database has therefore been rationalised so that all the data is now incorporated in a single table which overcomes these problems.

In principle, the new database is accessible to any user who can connect to the Internet with a standard web browser and has been given the password. A further advantage of this approach is that all the data is held in a single location and this removes the additional problems of updating the contents of multiple versions of the database on different standalone computers. The new online database uses the industry standard SQL format. Details of the structure of database and the standard searches presently available is given in [S15]. At present, only relatively simple searches can be performed but more complex searches are being developed following feedback from users. It is planned to link the Internet based database to the photographs being taken in another project.

A draft version of the heritage survey was made available to various individuals and organisations in 2003 who subsequently submitted a large number of comments and corrections to Cotswold Archaeology. It is apparent that many of the corrections were addressed before the final report was issued. However, no comprehensive review was carried out at that time that all the comments and corrections had been addressed. This review has now been carried out and reported in [S16]. It was found that there are only a few outstanding issues and these have been identified for future work. Another key activity in the review and updating of the contents of the heritage survey has been to walk the line of the canal that forms Section 1b (Saul Junction to The Ocean, Stonehouse). To this end, three field visits have been organised for GSIA Members between December 2006 and April 2007. These were very well supported and points of interest were noted and later compared with the contents of the database [S24].

Cataloguing the built heritage is very important but equally important is interpreting the relationship between the various elements, particularly as they change over a period of time. Hugh Conway-Jones's paper highlights features along the half-mile stretch of the Stroudwater Canal from Saul Junction to Whitminster Lock that have been influenced by the needs of the Gloucester & Sharpness ship canal which was built across the line of the earlier Stroudwater Canal in the 1820s. Information is given about how these features that can be seen today illustrate past concerns about forming the junction, the collection of tolls, water supply, dredging, land drainage and lock design and operation [S01]. Similarly, Alan Strickland's study of the WWII pillboxes situated along the Stroudwater Canal examines the reasons and purpose for their construction and location as part of the overall defence strategy of the period [S04]. The design and construction of each pillbox has been individually reviewed and illustrated, identifying particular features of interest. The historical significance of the pillboxes at local level and as part of our national military heritage is discussed and considered in relation to their long term conservation as part of the proposals for the restoration of the Stroudwater Canal.

Historic photographs, particularly if they can be accurately dated, form a very important resource for social history as well, as here, for understanding changes to both the infrastructure of the canals and the way in which they were operated. It has been possible to review the contents of a very comprehensive collection of historic postcards and photographs relating to the Stroud valleys belonging to Howard Beard [S21]. The review was successful in its main aim of identifying images of key items, such as the old swing bridges, for details that will assist the engineers designing replacement structures as part of the current restoration programme. However it is clear that this is an extremely valuable resource for dating changes made in the early part of the 20th century. Complementing the historic photographs is the present day photographic survey being carried out by Martin Phillips [S20]. A key feature of the survey is that many of the subjects will be chosen to be items in the heritage survey database. There will eventually be direct links between entries in the database and the relevant online photographs.

A series of reports produced following the periodic inspections of the Stroudwater Canal have



*Frank Cookley on his boat*

been rescued recently from the attic of a firm of Stroud solicitors. Mr W R Bloxham was Chairman of the Stroudwater Company for many years and also a partner in one of the practices taken over by the present firm. The reports cover the period 1908 to 1978 and contain a wealth of information concerning structural problems and general maintenance of the various structures on the canal and have been transcribed by Joan

Tucker [S25]. The report for May 1923 informs us that by then the traffic through Framilode lock was just one cargo a month.

Even after almost 250 years it is possible to see on the ground evidence of the work carried out by John Kemmett between 1759-1763 in an ambitious and only partly successful scheme to make the River Frome navigable between the various mills along the route. It is believed the navigation may have reached Bond's Mill at Stonehouse. John Berry has made a very detailed photographic record of the present state of the line together with a brief account of the history of the short lived Kemmett Navigation [S19].

Buildings along Section 1b of the canal in about 1840 have been identified from the relevant tithe maps, together with their owners and occupiers in a study carried out by Janet Hudson [S05] and Paul Davies [S06]. In addition, the Whitminster and Eastington tithe maps have been used to obtain the details of all the plots of land in the area where a new line will be needed for the restored canal between the A38 Gloucester to Bristol road and Westfield Bridge, Eastington [S29].

### **Researching the Recent History of the Canal**

Family history research can play a very valuable role in local history studies. Peter Ford has kindly made available extracts of his account of the Ford Family who owned Ryeford Mill in the late 19th century. It includes details of the vessels they owned which brought wheat along the canal to the mill and took away flour [S13].

A search of the Gloucestershire Archives catalogue has revealed two tape recordings chronicling a somewhat half hearted attempt to prevent closure of the canal in 1954. Detailed notes of the recordings have been made by Penny Fernando and these shed light on the involvement of several key local figures, including Ben Parkin the Stroud MP at the time [S14].

Personal reminiscences have a vital role to play in recording recent history but since it is now more than 50 years since the Stroudwater Canal was abandoned this becomes more difficult each year. Mr Les Pugh of Stonehouse is now aged 91 and was born almost alongside the canal at Whitminster in 1915. He has furnished interesting information on the operation of the canals and believes that the name of the vessel *Nellie* was changed to *Live and Let Live* [S99]. Both names appear in the records but hitherto there had been no known connection between the two sets of entries.

The last five issues of the GSIA Annual Journal have carried a report on the current state of the restoration plans and the achievements of the past year. The articles are already emerging as a valuable contemporary record of the progress made each year. The Journal has also contained articles on the Stroudwater Canal cranes which featured the sole surviving example at Dudbridge Wharf and fine coal pen to the west of Ryeford Bridge. Reprints of all the articles is included in [S18].

### **Additional Research Resources**

In order to build a firm foundation for both the present research and future projects, a number of "resources" have been compiled. Wherever possible these have been made available for all on the Internet.

Some of this information has come from Joan Tucker, the author of *The Stroudwater Canal* published in 2003. Inevitably, there was not enough space in the book to include all the material available and so hitherto unpublished details of 20 vessels and 37 company servants (employees) associated with the canal are available in [S09] and [S11] respectively and online. Paul Barnett has amassed a large amount of information on the vessels that now rest in the Purton boat graveyard on the River Seven just north of Sharpness Docks. *Should there be a reference to his project?* This information often includes social history such as their cargoes, routes, masters and owners. Six of the vessels now beached at Purton are known to have Stroudwater connections. The projects on traffic on the canal for 1775 -1822 and 1881, [S07] and [S08], respectively, form another valuable resource for future work.

An archaeological assessment of a site normally requires a review of the geology of the area and this has been carried out by Penny Fernando for the possible new lines of the restored canal between the A38 Gloucester to Bristol Main Road and Westfield Bridge [S26]. Public houses were always very much a part of the working life of the canals and hopefully they will feature prominently alongside the restored canal. Entries for the pubs that were near the canal have been extracted by kind permission from the very comprehensive Gloucestershire Pubs website created by Geoff Sandles [S12].

The A2A catalogue developed by the National Archives is a very effective method for locating records held in a large number of repositories from all over the country. Searches for "Stroudwater Canal" and "Stroudwater Navigation" have located records in 15 locations including the principal location, Gloucestershire Archives. For ease of reference the relevant results have been printed out and appear in [S17]. The searches have already proved useful, for example revealing the existence of the tape recordings chronicling opposition to the closure of the canal in 1954 [S14].

Maps from all periods form an invaluable historical resource and hence a list has been prepared giving all the relevant inclosure, tithe, estate, Canal Company and Ordnance Survey maps for the corridor containing the Stroudwater Canal [S27]. The newsletter of the Cotswold Canals Trust, *The Trow*, has carried many short articles over the years related to the history and archaeology of the canals, and a list of relevant articles has been compiled for issues 71 to 90 (1990-1995) [S28].

### **The Way Forward**

Although much has been achieved in the past six months, it should only be seen as the start of the project and not its completion. However, it is essential that future work identified is prioritised to meet the overall needs of the restoration project. A good example is the proposed project on the main wharfs on the canal [S23]. The aim of this project is to integrate, for each wharf, the results of several studies such as historical and modern photographs of the site, tithe map and census information, details of company employees, the vessels that called there and traffic studies. Additional research will be needed for each site. Ultimately this should provide a much clearer picture of the impact of the canal on the community in the 19th century. Not surprisingly, most of the major wharfs were located near a bridge over the canal. Today these bridges are among the main access points to the towpath. This will remain the case when the canal is restored and so these locations will be excellent places to place suitable interpretation panels which will utilise the product of this research.

The tonnage books provide a wealth of information on goods, vessels, owners, masters cargoes and places, and if they were to be fully analysed it would take many years. However,

sampling the records has shown that a large amount of information can be obtained without a full analysis. Clearly sampling the tonnage records for further periods of the canal's working life is likely to produce useful comparative data. So far, the 1841-1901 Censuses have not been examined for information on people associated with the canal, and this should be a worthwhile exercise when resources permit. It is to be hoped that, when the restoration actually gets underway, the ensuing publicity will encourage more people to come forward with their memories of the canal and the communities along the canal.

The people involved in this work so far have differing degrees of experience in carrying out local history research, and it is pleasing that members of the team have been able to assist each other where needed. This will be encouraged in the future so that anyone interested in contributing will be able to become involved.

It is essential that all the output from projects is published in a suitable form. This might mean that the information is placed on the Society's website in the area already designated for this purpose ([www.gsia.org.uk/canals](http://www.gsia.org.uk/canals)). It is expected that several of the projects will result in an article being published in due course in the Society's Annual Journal.

The Society is keen to support local schools who wish to include the canals in the curriculum. There is no intention at present for the Society to produce specialised 'Resource Packs' for schools. However, members would be pleased to prepare and supply appropriate materials to teachers from the resources produced in the present work.

In conclusion, the Gloucestershire Society for Industrial Archaeology very much looks forward to the full restoration of the Cotswold Canals. The Society appreciates that the restoration will bring benefits far beyond that of simply a restored navigation. It is very pleased to be involved in these projects which, potentially, will assist future users to appreciate, more fully, the history and archaeology of the Cotswold Canals.

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