

# WIRG

## Wealden Iron Research Group

NEWSLETTER

No. 8

November 1987

Editor: Mrs. S. Swift, Hamfields, Withyham, Hartfield, Sussex, TN7 4BH Tel: Groombridge 754.

### Letter from the Chairman

Dear Fellow Members,

When 'the WIRG book' was about to be published, a debate was revived into the future direction which the Group might take. WIRG had originally been set up to carry out research for a book. That was finished (I almost wrote 'completed' but they are not the same), and it was claimed that the 'raison d'être' of WIRG had been accomplished. WIRG, it was argued, should be wound up and its expertise should be directed towards another project. That it might become a Wealden Archaeological Research Group was suggested. The idea had its merits. WIRG has developed some expertise in field archaeology and, on a number of occasions, the search for Wealden iron has brought to light other remains. The 'secret Weald' has been loath to yield up her treasures and it has been but a short time since she was regarded as impenetrable forest, unsettled before Saxon times. Undoubtedly, there is a need for a 'WARG'; but at WIRG's expense?

To my mind, the fundamental misunderstanding of those who proposed the scenario I have just outlined was to see WIRG as essentially an archaeological group. A glance at the Bulletins over the last ten years will amply demonstrate the balance that exists between research done in the field and that done in the library, for it is hard to find a discipline where the historical and archaeological elements are more interdependent than the Wealden iron industry. For this reason, I particularly welcome the proposal to form a Records Group (see below). Far from feeling that documentary research is a poor relation in the work of WIRG, the formation of such a group may, nevertheless, redress the balance as far as the perceived nature of the research we undertake is concerned. I hope it will be well supported.

This year has seen the departure of two committee members. After many years Lilian Funnell has decided to stand down. A former art teacher, she has given WIRG the benefit of her talent with the pen and brush on many occasions, and has brought to the committee a keen local interest in Wealden iron. Giles Swift has been a member of the committee since 1982 and has been keen to develop new techniques of fieldwork. I thank them both. I also extend a welcome to Alan Stevens and Edmund Teesdale who have joined the committee this year. Other changes are Sue Swift's 'translation' to the editorship of the Newsletter and Shiela Broomfield's election as Hon. Secretary in her place.

Every year I invite you, the members, to keep the committee informed of research you are doing or of discoveries you make. Please continue to do so. In the meantime, may I wish you the very best for Christmas and the New Year.

Sincerely,

Jeremy Hodgkinson.

### Winter Meeting

The Winter meeting was held on 31st January at Crowborough and was attended by about 40 members of WIRG and friends. Miss Effie Photos, from the London University Institute of Archaeology, gave a very interesting illustrated talk about her research on iron ores and the by-products of Macedonian bloomery smelting. Much of her experimental work had been carried out at Roger Adams' experimental bloomery site on Ashdown Forest. The talk was followed by an excellent tea.

### Annual General Meeting held on 25th July 1987

The speaker for the Summer Meeting this year was Rosalind Willatts who met us at Wadhurst Church at 12 o'clock. She took a party of about thirty members round the church talking about the iron grave slabs which are to be found in this church in greater abundance than anywhere else in England. Her obvious knowledge of, and enthusiasm for, her subject was soon apparent and we spent a very interesting, entertaining and informative hour there. Most of us then adjourned to one of the hosteries in Wadhurst for lunch and looked forward to the talk which was to follow in the afternoon.

At Stonegate Village Hall we were not disappointed, for Miss Willatts spoke for an hour on the history and present whereabouts of the other iron slabs in this country. Her lecture was well illustrated by many rubbings she had made of them. The vote of thanks was given by Tony Weaver. During the usual splendid tea supplied by members of the committee, for which our thanks were also due, we were able to look through the album of photographs which Rosalind Willatts had taken.

The A.G.M. followed. Jeremy Hodgkinson was re-elected Chairman and Reg Houghton as Treasurer. After several years as Secretary Sue Swift felt that she wanted a rest and was warmly thanked by the Chairman for her work. Her knowledge and good humour will not be lost to the committee, however, as she has agreed to stay on the committee. Shiela Broomfield was elected to the position of Hon. Secretary.

The meeting closed at about five o'clock at the end of a very interesting and worthwhile day. DH.

### Officers and Committee for 1987/88

Chairman:	J. Hodgkinson, 7 Kiln Road, Crawley Down, Crawley, Sussex.
Vice Chairman:	Mrs. D.M. Meades, Brackenside, Normansland, Fairwarp, Uckfield, Sussex, TN22 3BS
Hon. Treasurer:	R. Houghton, 17 Woodland Close, Crawley Down Crawley, Sussex, RH10 4JZ
Hon. Secretary:	Mrs. S. Broomfield, 8 Woodview Crescent, Hildenborough, Tonbridge, Kent.
Hon. Editor:	D. Crossley, Division of Continuing Education, The University, Sheffield, S10 2TN

Executive Committee:

- D. Combes, Fairlight, Croft Road, Crowborough, Sussex.
- B. Herbert, 1 Stirling Way, East Grinstead, Sx. (Special responsibility for distribution of publications).
- A. Scott, 36 Clinton Crescent, St. Leonards-on-sea, Sussex.
- Mrs. S. Swift, Hamfields, Withyham, Hartfield, Sussex. (Newsletter Editor).
- Mrs. D. Hatswell, Squires Cottage, Squires Close, Crawley Down, Crawley, Sussex.
- A. Stevens, 26 Lorna Road, Hove, Sussex.
- E. Teesdale, The Hogge House, Buxted, Sussex.

Warm Sunshine for Joint Conference

Want to guarantee a really nice day? Arrange an SAS and WIRG joint conference on 4 July! It was intended to attract those unfamiliar with Wealden iron but this was not clear, especially to those who are members of both societies, who met despite feeling it was all old hat. We hope, then, new members were attracted. All praise, then, to five of the speakers for worthy effort - the sixth spoke, it is believed, in the tones of Hudson's woodcock: "all softly 'pon the midday air", despite repeated complaints. Between excellent photographs he showed diagrams too detailed to be visible, but all is not lost: see Bedwin in the bibliography.

President of both societies, Br. Henry Cleere gave us his latest thoughts on the 'Wealden iron industry in the economy of the Roman empire', beginning with the lure he suggested iron presented to continental invasion a century after the conquest of Gaul. Elsewhere in the western empire, inscriptions, and the exceptional lack of civitates, provide evidence first of republican, then of imperial, control of vast tracts of metal-bearing rock. We have CLBR tiles by the thousand, the absence of a town between Noviomagus (Chichester) and Dubris (Dover), and an apparently exploitative road pattern, with well engineered roads leading to London across the High Weald, but none using the dryer ridges along it. Unfortunately, we have but one, ambiguous, inscription, but that is from Chichester. Military guards were required, whether mining was under direct or concessionary management: water transport was far cheaper than land; so, if the classis britannica had to be in the Weald, why not use the return journeys of its transports to ferry iron to the continental coast?

Three brief papers on the 16C industry in Ashdown Forest began with Brian Awty briefly pinpointing his excellent lecture to WIRG on 16 July 1983 and his articles. Edmund Teesdale, having addressed both societies on Ralph Hogge, and published his book, fortunately compared Hogge with more successful 'gunmakers', defined as works managers not necessarily either owners or artisans. Dot Meades then gave us a useful detailed environment for Hogge's iron-works.

Insofar as Hogge, turning over large sums of money, left no fortune, he failed, and Jeremy Hodgkinson gave us another example from the 18C. Hogge was disabled, and probably defrauded, but Clutton seems to have been both inexperienced and reckless. The industry, however, was doomed, as the far greater efficiency, scale, technical skill, and diversification of the Midlands, Welsh, Northern and Scottish industries gained momentum, destroying the Wealden industry in price, output, quality and convenience.

Bibliography

Following the gazetteers a complete bibliography is contained within H. Cleere & D. Crossley, "The iron industry of the Weald", Leicester, 1985, which ought to be read in conjunction with E. Straker, "Wealden Iron", Bell 1931 republished David & Charles 1969, and with articles appearing from time to time in SAC and in Wealden Iron, Bulletin of the WIRG. Also there is E. Teesdale, "The Queen's Gunstonemaker". A.S.

Sussex Archaeological Conference - "New Approaches in Archaeology"

Having been fixed for October 17th 1987, this conference might not have taken place were it not for indefatigable efforts from the organizers, the speakers and the audience. The Great Storm of the previous day had wrecked the planned venue and East Sussex County Council allowed their Council Chamber to be used instead. One of the speakers, Catherine Royle, could not get through the devastation surrounding her home. Other speakers, from areas less badly affected by the hurricane, struggled through to make their contributions and, as if to acknowledge these efforts, about 80 people came out from under the fallen trees and scattered roof tiles, to listen.

The conference had been organized as a tribute to Fred Tebbutt and the proceeds have been donated to the Tebbutt Research Fund. The subject provided a thought-provoking diet for the audience, though not without its lighter moments. The absence of the first planned speaker was filled by Peter Drewett who described some of the archaeology of Barbados; new to most of his audience for its subject rather than its approach (except perhaps in how to deal with land crabs!). Peter Reynolds, of the Butser Ancient Farm, invited a reconsideration of experimental archaeology and warned of the dangers of drawing unjustified conclusions. Don Brothwell's "New Approaches to the Dead" drew attention to the wealth of information which can be derived from the detailed study of human remains. Finally, Peter Marsden revealed the parlous state of nautical archaeology and the inappropriate legislation with which it is beset.

A fitting tribute? In terms of the quality of the speakers and the determination by all to carry on, undoubtedly so. J.S.H.

Field Group Activities

Members of the Field Group met on 24th September 1987 to discuss ideas for the programme of forays for the winter and spring of 1987/88. The following programme was arranged:

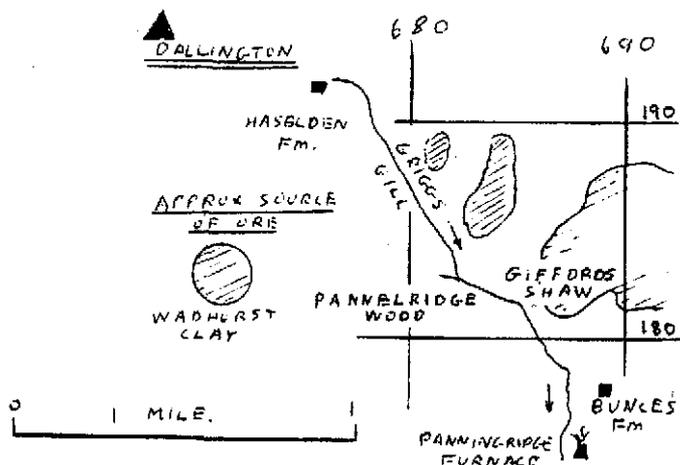
- 10 October - Owlsbury Farm - a further visit to try to date bloomery sites along the stream.
- 14 November - River Uck - a foray along the banks of the river to consider whether the River Uck could have been used to transport iron following the receipt of information from Mr. C. Goring.
- 5 December - St. Leonards - detailed survey of the Furnace and forge site.
- 9 January - St. Leonards - as above.
- 18 February - St. Leonards - as above.
- 12 March - Netherfield/Mountfield - a foray to look for bloomery sites in an area where none has so far been recorded.
- 9 April - Bardown and Coalpit Wood - a visit to a Roman site to note features and examine the site.

Due to bad weather the October foray was cancelled and Owlsbury Farm was visited on 14 November. The visit to the River Uck will be arranged on a later date. S.M.S.

Field Group Foray to Netherfield/Mountfield 12.3.88

As already noted in this year's forays, it is proposed to visit an area where there appears to be an absence of bloomery furnaces; although there are blast furnaces. This phenomenon may be seen on page 58/59 of "The Iron Industry of the Weald" by Cleere and Crossley. On this map of Roman bloomery sites there is a gap on the TQ700\*\*\* map references, (non-Roman bloomeries are also missing from this area).

By studying the geological maps for this area it has been decided that "GRIGGS GILL" would be a suitable place to search. This area, south-east of Dallington, is shown on the following sketch map.



It now only remains for the foray to be organised. This is where a member living in the locality may be able to help by arranging an introduction to the owner or owners of some part of GRIGGS GILL. Should anyone be able to assist, could they please contact the Publications Committee member, B. Herbert, whose address is on the back page of this Newsletter. B.H.

Records Group

It is proposed to establish a Records Group of interested members who will conduct documentary research on some of the bodies of material which are to be found in the archive repositories of the south east. Some collections are of major importance and the magnitude of the task of recording and interpreting their contents would be a daunting prospect to an individual but, to a group, might be more manageable. Examples include the Harrison Papers (Guildhall Library), the Pelham Papers (British Library) and the Cowdray Papers (West Sussex Record Office).

If you are interested in joining this group, please drop a line to the Hon. Secretary of WIRG and a meeting of those interested can be arranged. J.H.

Cannon Mould

Continuing research into cannon manufacture is enabling the dating of such pieces to be assessed from the pattern of bands and other surface features of cast iron ordnance. Finds of cannon mould are not uncommon in the Weald and it may be possible in future to determine the approximate date of such mould fragments, and distinctive patterns may help to link certain guns with particular furnaces. Anyone finding such fragments should collect them in a bag, labelled carefully with details of where and when they were found (including grid reference), and notify the Chairman. J.H.

The Wealden Iron Bibliography

As mentioned in WIRG Newsletter No. 5, a bibliography of Wealden Iron and allied subjects has been placed onto punched cards. This bibliography has now been transferred to a BBC computer using a data base program called "Datagem". This arduous task was carried out by Denis Kenward (who will continue to keep it up to date) of Piltown, Sussex; for which WIRG is most grateful.

It is proposed to make this bibliography available to all members of WIRG for a small fee of 5p per page plus 20p postage, there being 10 references per page.

It is possible to request the total bibliography which amounts to some 500 references covering 50 pages. However, in most situations, members will require a search to be made for a particular SUBJECT or AUTHOR, as described below.

As the fee for this service cannot be calculated in advance, the bill will be sent along with the results of the search.

Requests for a search should be sent to:-

Denis Kenward,  
Little Sharps,  
Piltown,  
UCKFIELD,  
E. Sussex, TN22 3XG  
Tel: Newick 2030

The following notes should be followed to enable the desired search to be made.

(1) THE AREA

This refers to the AREA that the SUBJECT is being written about. Each AREA is coded by a letter in the following way:-

- B ..... Britain
- G ..... Global
- W ..... Weald

(2) THE SUBJECT

This refers to the SUBJECT matter for the search. Each group of SUBJECTs is coded by a letter in the following way:-

- A ... Direct Process: Bloomery Furnace: Slag Type
- B ... (District, Britain)
- C ... Indirect Process: Blast Furnace: Slag Type: Modern Steel
- D ... Conversion Forge: Chafery: Finery: Slag Type: Pigs
- E ... Iron Ore: Sandstone: Firestone: Geology: Clay: Bricks
- F ... Charcoal: Forestry: Coal
- G ... (District, Global)
- H ... Firebacks: Graveslabs
- I ... Cannons
- J ... Trackways: Hillforts
- K ... Ironfounders: Ironmasters: Gunfounders: Ironworkers: Blacksmiths
- L ... Economics: Accounts: Inventories: People (not iron people)
- M ... Wrought Ironware: Bar Iron: Boring Bar
- N ... Cast Iron Ware: (not Firebacks, Graveslabs or Cannons)
- O ... Ironworking Site Lists
- P ... Museums: Exhibitions: Contests: Conferences: Trusts
- Q ... Technology: Water Systems: Energy Sources: (not Charcoal or Coal)
- R ... Maps: Documents pre-1850
- S ... Dating
- T ... Accommodation: Houses
- U ...
- V ...
- W ... (District, Weald)
- X ...
- Y ...
- Z ... Unknown: Others

Field walking reports and visits to sites are not included unless a significant find is encountered.

It is also possible to make other types of search, and some (of the many) examples are given here for a guideline.

- (1) Search for AUTHOR .....(eg. Worssam)
- (2) Search for AUTHOR by letter or letters..(eg. Ss)
- (3) Search for PUBLICATION.....(eg.WIRG Bulletin)
- (4) Search for WORD within the reference title.....(eg. ore)

It is also possible to make two (or more) searches in sequence, for example:-

FIRST search for AUTHOR.....(eg. Worssam)  
 SECOND search for SUBJECT with the above author.....(eg. ore)

The searched list of references will contain a code for the common PUBLICATIONS NAMES: the less common publications and books being written in full. This code will be supplied with each list of references.

WIRG is covered by the "Data Protection Act" regulations concerning lists of names and personal information of living people held in a computer in such a way that they can be manipulated and the names printed out. Due to this act, WIRG cannot offer for sale the discs holding this bibliography.

It should be understood that these references are for personal use only and are not available for direct publication in the form of a list. B.K.H.

Forthcoming Conference

The Council for Kentish Archaeology is holding a conference at Chatham Historic Dockyard on Saturday 9th April 1988 from 11 am to 5 pm.

The programme is as follows:

Introduction by Sir Steuart Pringle, Bt, KCB, DSC, CBIM (Chairman, Dockyard Trust)

Chatham Dockyard and its Buildings by Richard H. Sutch (Surveyor, Dockyard Trust)

Guided Tour of Buildings of the Dockyard.

Lunch 11.15 - 14.15

Ship Building at Chatham by Richard Holdsworth (Curator, Dockyard Trust)

Guided Tours of Ropery Exhibition, Smithery, Gannet, Ordnance Gallery.

Tickets, at £2.50 each are available from:

5 Harvest Bank Road, West Wickham, Kent, BR4 9DL

(Please make cheque out to C.K.A., and enclose an SAE).

Ashburnham Furnace

The following reference to Ashburnham in the "Hand Book of Kent & Sussex" by J. Murray 1868, was brought to our attention by Mr. A. Pearce, who is Secretary of the National Association of Mining History Organisations.

"Ashburnham was famous for its iron furnace, the last which ceased working in East Sussex. The bed of the furnace from which the iron was drawn to be cast into pigs, etc. was made of large blocks of stone taken from some of the rocks at Hastings which were about 4ft square inside; 2 bellows each about 12ft long were worked by an overshot water wheel. Iron ore was brought from pits some few miles distant.

Blasting of the furnace was carried out at intervals of about 3 years and continued to blast for about 2-3 months each time, until the stock of material was used up. The last casting was in the

year 1809. It was the last furnace in use in Sussex and Kent and was brought abruptly to a close in consequence of the intoxicated habits of the foundry men.

By neglecting the proper mixture of chalk, etc. with the ore, the flux did not separate as it should have done to run off and it remained a mass from which the iron could not be drawn off to be run into the pigs for the forge. The blasting was of necessity stopped and no attempt made afterwards to renew the work. It was the habit of the gin drinking that brought the work to a premature close before the iron was all worked up."

Castell Henllys

Mr. F. Gregory, a WIRG member, has visited Castell Henllys, between Newport and Cardigan in Wales, this year. There are Iron Age reconstructions there, and amongst other activities, such as dyeing with plant juices, they have been experimenting with iron smelting, apparently with some limited success, using a bowl furnace. They used iron ore from the Clearwell Mines in the Forest of Dean and charcoal of oak and beech produced on site.

Castell Henllys is open to the public during the summer months.

Recently Published Books

A.N. Kennard Gunfounding and Gunfounders - A Directory of Cannon Founders from earliest times to 1850: Arms and Armour Press; London 1986; 176 pp.; £19.95.

This book is long overdue and, from the English point of view, as a general survey of gunfounding it is a useful successor to Charles ffoulkes' "Gunfounders of England" of 1937. Mr. Kennard, a former Deputy Master of the Armouries at the Tower of London, has assembled a wealth of detail about European and American gunfounders in the period concerned. There is a preliminary section on gun-casting, before the main body of the book which consists of an alphabetical list of founders and a brief note about each. At the end are several appendices on later developments in casting methods, forged guns and collections of artillery. There is a bibliography but no index, and this is a mistake for, although the founders' names are adequately cross-referenced in the text, there is no way of cross-referencing places. The book is attractively presented and there are four plates, although there are no references for three of them.

From a Wealden point of view it is a pity that the author has confined his remarks to those based on the secondary sources available at the time of writing, and does not appear to have consulted WIRG's Bulletins, or to have thoroughly examined the Ordnance Board papers in the Public Record Office. There are a number of errors, such as the omission of John Churchill, who cast at Robertsbridge (and, almost certainly, at Darwell). Indeed there is little evidence of fresh research into the Wealden founders, beyond the work of Straker and Schubert. Armed with a copy of both these standards, there is little that a student of the Wealden iron industry can gain from Mr. Kennard's book. J.S.H.

L. Draper, New light on the West End post-medieval iron-working site, western Weald Surrey Archaeological Collections 77; 1986; 207-11.

This site remains one of a diminishing group of water-powered sites in the Weald for which no documentary evidence has been found. Laurie Draper's article is a fuller and more detailed account of the remains observed during highway works, which were reported in WIRG Bulletin Second Series 4; 1984; 6-7.

David R. Rudling, The Excavation of a Roman Tilery on Great Cansiron Farm, Hartfield, East Sussex Britannia 17; 1986; 191-230.

The close association of this site with the large ironworking site nearby is confirmed by pottery and archaeomagnetic dating evidence. There is a section on

