

WIRG

Wealden Iron Research Group

NEWSLETTER

No. 4

November 1983

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Secretary: Mrs. S Swift, Hamfields, Withyham, Hartfield, Sussex.

Tel: Groombridge 754

Letter from the Chairman

Dear Member,

The past year has been an interesting one. It was with no small sense of relief that WIRG's exhibition in the Ashdown Forest Centre became a reality at the end of March. After a long period of gestation, it had taught us a number of valuable lessons. The AGM broke new ground for the group and, following the generally favourable response to the format, the Committee have decided to repeat the experience. Preliminary details will be found elsewhere.

One thing that is refreshing is that, although we are, in a sense, in a period of limbo, work for the book being complete though not yet published, there has been no shortage of new ideas for research; some long overdue. Giles Swift's minepit project has benefited over the last year from the continued exposure of a number of sectioned minepits in the brickpit at Sharpthorne, shattering once and for all the old bell pit theory and revealing a hitherto unrealised depth of working. This and the bloomery survey of a few years ago are examples of a type of work which, I hope, will be the pattern for WIRG's future; well defined and thoroughly executed projects, supported by professional assistance where necessary, and using our established and yet growing contacts with other historical and archaeological groups in the Weald.

As usual, excavations have been well supported, Rodney Clough's one at Hodge's Wood, Crowborough, has the promise of interesting things to come in one of the hearths; distinctly different from what was left of the other two, could this be one of those elusive medieval sites? At Little Cansiron, David Rudling's excavation of the Roman tile kiln has its relevance to Wealden iron in its circumstantial links with the Great Cansiron iron site and the notion of an industrial area in that valley. In the course of their work, the Sussex Archaeological Field Unit were able to uncover two bloomeries. David Crossley's projected excavation at Pippingford had to be cancelled for lack of manpower though not, I hasten to add, from WIRG.

I am sure I was not alone, while listening to Tony Weaver's talk at the Winter Meeting, in dreaming that such a reconstruction as was made at Saugus could be done in the Weald. Perhaps it is a thought for the future!

My thanks to the Committee, and particularly to Sue Swift and Reg Houghton, for their work through the past year; and my best wishes to you for what I hope will be a particularly rewarding 1984.

Yours sincerely,

Jeremy Hodgkinson

Pippingford Furnace

Since announcing it at the AGM, the project to preserve the remains of the furnace has encountered some difficulties; not the least of them being the fact that the site lies in part of the Army Training Area on Ashdown Forest. Negotiations are under way to secure some access to the site for contractors and visitors but it remains to be seen whether the Ancient Monuments Inspectorate will be able to support such a project without some form of tenancy on the site. Until this is resolved there is little point in raising funds for the work.

J.S.H.

Field Group Activities for 1983/84

On 11th September 1983 thirteen Field Group members met at Huggetts Farm, High Hurstwood to discuss activities for the coming season. It was decided to hold forays on the last Saturday in the month, from October to April. The following outings were planned:

- 29th October - Visit to the newly discovered forge site at Birchenbridge, near Horsham. This is a new site and needs to be examined by WIRG members.
- 5th November } - Survey in Hodges Wood, Crowborough. A survey is to be
31st December } carried out to mark on the map sites of interest, (minopits, slag heaps, bloomeries, etc) in Hodges Wood. This will need two forays.
- 22nd January - Foray to Tudeley, a medieval site, to look for evidence of it being a water-powered bloomery site. Also to visit Rats Castle, an interesting site in the vicinity.
- 25th February - Foray to Hawksden Forge, to investigate stream. Also to visit Brooklands to examine slag. It is thought possible that it may be a water-powered bloomery site.
- 31st March - Foray to Camp Hill area on Ashdown Forest to look for evidence of bloomery sites.
- 28th April - Visit to Pophole and Lurgashall, West Sussex. At Pophole documentary evidence points to a furnace site, but only a forge has so far been found. At Lurgashall, where there was a watermill, it is possible there may be a water-powered bloomery site.

If any member wishes to join any of these activities please contact:
Swift, Hamfields, Withyham, Hartfield, Sussex, TN7 4BH. S.M.S.

Report of excavation of medieval site at Huggetts Farm, High Hurstwood

Bad weather forced the cancellation of most of our Sunday 'digs' at this site last winter. Some progress was made in the investigation of the depression but much remains to be done. However, the weather forced us indoors to sort the very large collection of potsherds, and we hope this winter to finish the sorting and to mark each piece. The pottery collection is an important one, covering a period from possibly as early as the 12th century to the 18th century, an unusually long sequence that is unique in this area.

Last winter's unco-operative weather made us realize how impractical it is to expect to finish this excavation on a casual once-fortnightly basis. We are therefore proposing to have a full-time excavation for between two

and three weeks next July/August, possibly with the co-operation of another archaeological group. Diggers will be able to camp nearby, and will be fed in return for their work. About £200 to £300 will be needed to mount such an excavation. We should therefore be pleased to hear from anyone who would be interested in helping with this project, either with their time, or by making a donation towards the expenses.

If you would like to help, either with marking pottery this winter, or with preparations for the excavation, or at the excavation itself, please contact Mrs. Dot Meades, Huggetts Farm, High Hurstwood (Tel: Buxted 3131), or Mrs. Sheila Broomfield, 8 Woodview Crescent, Hildenborough, Tonbridge (Tel: Hildenborough 838698).

D.M.M.

Ibstock Brickpit, Sharpthorne

In Newsletter No. 2 (1981) reference was made to the excavation of a minepit shaft at Minepit Wood. Since then a number of similar circular shaft mines, some as deep as ten metres, have been exposed during clay digging at the Ibstock brickyard at Sharpthorne, and these have been examined by Giles Swift and Fred Tebbutt through the courtesy of the brick company. Bernard Worssam has now surveyed the pit face on behalf of the Geological Survey. Through the generosity of a Margary grant from the Sussex Archaeological Society a radio-carbon determination was made of a piece of timber recovered from one mine shaft. This gave a date of A.D. 1200 \pm 50 years. Recently part of a tree trunk has been found in another shaft, and it is hoped that dating may be possible either by radio-carbon determination or by dendro-chronology.

G.S. & C.F.T.

Excavations at Great Cansiron Farm, Hartfield, East Sussex

An interim report of the excavation of a Roman Tile kiln appeared in second series No. 3 (1983) of the Wealden Iron Research Group Bulletin, plans of the position at the end of 1982 are printed on pages 44 and 46.

The second season's excavations commenced in early August 1983, again under the direction of David Rudling assisted by students of the Archaeological Institute, members of WIRG and other volunteers.

Further work at the kiln site revealed four post holes at the drying shed, and the feature at 17 on the plan to be a hearth which, whilst containing slag, did not give the impression of being a furnace.

The kiln was cleared of debris as was the stokehole. Amongst the many varieties of tile, roller pattern designs have now been found. A tile forming part of the surround to the stokehole had been marked with Roman numerals.

A new section was opened to the east of the stokehole and here evidence of a further building was seen, a portion of a tiled floor remaining in situ.

One trench was cut through the lynchett and another one adjacent to the hedge of the field to the west of the kiln.

After an unsuccessful attempt to locate the site of the iron furnace to the north-east it was found after the land had been ploughed, and a quantity of pottery was recorded.

An opportunity was also taken to excavate the furnace located at Faulkners Farm by courtesy of our member Giles Swift.

David Rudling is very interested in the area, which is rich in sites of archaeological interest, and hopes to return as soon as the necessary finance has been obtained. D.R.C.

Experimental bloomeries

In September 1983 we tried out 50th bloomery experiment, making a small amount of high carbon iron after only one and quarter hours of hard blowing.

We have found that a furnace will survive several smelts with a tuyere that projects inwards about 50 mm. and that the slag block containing the bloom can be lifted out through the top while still hot without much damage to the lining.

The furnace need not be very high. We have made iron in furnaces which are only 50 cm. above the tuyere, but the fire must be very hot right up to the brim.

Iron tuyeres can be used several times if not allowed to get too hot and this may account for the lack of clay tuyere fragments on some sites.

The ore consumption in relation to iron produced remains very high and we do not yet have the skill to correct this but we are using far less charcoal now than in previous years. R.J.A.

WIRG AGM 1983

On 16th July at Maresfield village hall, after coffee when members met one another again, our President, Mr. C.F. Tebbutt, opened the proceedings.

Our Chairman reported on the activities of the past year, including the progress made by the Pippingford Blast Furnace Trust and the Group's exhibition at the Ashdown Forest Centre.

Reports were then made by the other officers and the officers and committee elected for the coming year are as follows:-

Chairman - Jeremy Hodgkinson
Vice Chairman - Dot Meades
Secretary - Sue Swift
Treasurer - Reg Houghton
Bulletin Editor - David Crossley
Committee - Lillian Funnell, Pam Combes, David Combes, Brian Herbert,
Alan Scott, Margaret Tebbutt, Sheila Broomfield, Giles
Swift.
Auditor - Daphne Abbott

After the formal proceedings, an interesting talk on ironworking in the 15th and 16th centuries in France was given by Brian Auty. Following this talk on the research being carried out by Brian Auty, David Crossley explained the history of the Pippingford blast furnaces and members and friends were later shown the site, where David Crossley was able to answer questions. Both speakers must be thanked for their very informative talks and a special thanks must be given to David Crossley who left Sheffield University very early in the morning and had to return the same day.

It was generally agreed that the AGM in the form of a day conference was a great success. A.G.S.

Crisis at Haxted Mill, Edenbridge

Mr. C.E. Woodrow of Haxted Mill has sent us the following account.

The Mill houses the Watermill Museum with two working waterwheels, various working traditional mill machines, site maps, picture gallery, working models and slide shows. The emphasis throughout is on the history of watermills and the many uses to which they were put. At 5 pm. on 3rd August the whole mill came to an abrupt halt. The river (Eden) embankment had given way at its highest point immediately above the mill where the water level is raised 10 feet to give a head of water to the overshot wheel.

The top floor houses the exhibition of the Wealden Iron Research Group (see Bulletins No. 8 (1975), 46 and No. 13 (1978), 19) and a Mayday call through Brian Herbert brought two stalwarts of WIRG to the rescue - Roger Adams and Dennis Beeney. On the first day they had dug out the break to the bottom of the embankment. On the second day they filled this in with 20 (Yes - twenty) tons of virgin clay dug out by a JCB from the up-river marsh, brought to the Mill by lorry, and then barrowed to the site.

It is surely appropriate that they were working immediately under a "Hercules" wind-pump on the river bank, for it was indeed a Herculean task. On the third day the Mill was working again. C.E.W.

Exhibitions

Ashdown Forest Centre Exhibition on Wealden Iron

This exhibit, described in the 1982 Newsletter, has been on display to the public since the end of March 1983. During this period over 10,000 visitors have come to the Centre, and very many of them have expressed great interest in the iron industry and the activities of WIRG and have commented most favourably on our exhibit. The sub-committee who designed and prepared it are to be congratulated on a splendid display. It will remain on show until the end of February 1984.

In response to many requests two leaflets are being prepared for sale at the Centre, one giving a brief description of iron working in the area of the Forest and the second dealing with other archaeological sites in the same area.

During the winter months the Information Barn at the Centre is open on Saturdays and Sundays from 11 am. until 5 pm. M.T.

The Wealden Iron Museum at Haxted Mill, Edenbridge, Kent

When the first exhibits were set up at Haxted Mill, consisting of slag, maps and photographs, it was felt that it was all rather static; that is before the slide with commentary was installed in 1975 and later improved in 1981. This modification allows the two slide shows, Wealden Iron or Watermills, to run automatically as requested, and only involves the curator when it needs to be switched on and off. Except, that is, when a fault occurs, which is mainly due to limitations in the cassette tape recorder system.

While still on the quest of making the Wealden Iron part of the museum more complete, a new booklet is to be introduced. Many schools use the Mill for projects, and it is hoped that when the booklet is used in conjunction with the "finds" case, a clearer understanding of the subject will be appreciated.

The new booklet, to be commissioned at the Easter 1984 opening, will discuss various Wealden Iron topics in 1000 words or so. Aspects such as geology, iron-ore, mining, water-power, furnaces and dating finds are proposed, with an emphasis on artifacts found whilst field walking. The primary object of the booklet is that it should be used in conjunction with the exhibition at the Mill. However, it will be comprehensible in its own right and will be suitable for students taking their "O" and "A" level projects, and who, no doubt, will not fail to become attached by the magnetic attraction of Wealden Iron. It will also be valuable to potential archaeologists before they become hypnotised by the intricacies, idiosyncrasies and intrigues of the Iron Industries of the Weald.

Copies of the booklet should be available to members at the next AGM, and will be added to the book list in the next newsletter. B.K.H.

Exhibition at "The Priest's House", West Hoathly

In July a small Wealden Iron Exhibition was arranged in "The Priest's House" at West Hoathly at the request of the Sussex Archaeological Society as part of a village fete weekend over a Saturday afternoon and Sunday.

Organised and arranged by our Chairman, Jeremy Hodgkinson, it attracted a considerable number of visitors.

To give a local interest a map was prepared to show the iron working sites in the vicinity, together with a small pamphlet giving a brief history of each.

Some of the exhibits were borrowed from Anne of Cleves Museum by kind permission of the Curator, including several cast iron firebacks, a very small cannon and a few cannon balls in assorted sizes. Two most interesting exhibits were the fireback showing "Hercules and the Hydra" similar to that illustrated by Straker in "Wealden Iron" (kindly loaned by Mr. Hodgkinson Senior) and a carved wooden mould for the same design from the Museum. As far as the writer knows this is the first time that an original mould and casting have been shown together.

The models of the pair of furnace bellows, worked by hand and the coin operated forge hammer proved as popular as ever. A little too popular perhaps as the noise of the hammer, starting up unexpectedly in the small quiet room, proved unexpectedly shattering. R.G.H.

Caterham Museum

In January 1983 the Caterham Museum, Surrey, arranged a Wealden Iron exhibition under the direction of the curator, Miss E.P. Humphreys, a member of WIRG. Some exhibits, including models, had been borrowed from the Sussex Archaeological Society. Those able to visit the exhibition were full of praise for the arrangements, and enjoyed seeing other items in this small but excellent museum.

Hastings Area Archaeological Research Group, Hastings Museum

On 9th September 1983 representatives of WIRG were invited and hospitably entertained at the opening by Mr. J. Mainwaring Baines of an exhibition illustrating ten years of work by HAARG. The record of research work was displayed on the museum walls, and included plans, photographs and actual artifacts. Particularly impressive was the record, by distribution map, of Roman sites, many of which were associated with iron-making.

A proposed Fireback Survey

The cast iron fireback is, perhaps, the most familiar product of the Wealden iron industry. Its evolution, in many ways, mirrors the development of the industry itself. Yet there has never been a thorough survey of them, their design, their provenance, even their authenticity.

The Wealden Iron Research Group is in the best position to undertake such a survey, which will inevitably take several years, and it is hoped that a working party can be formed to organize and undertake the task.

Initially, would all those who are interested in taking part in this project please contact:

Jeremy Hodgkinson,
Wealden Firebacks Survey,
20, Spinney Close,
Crawley Down,
CRAWLEY, Sussex,
RH10 4PF Tel: Copthorne 713544

A meeting can then be arranged to discuss the idea and formulate a plan of action.

For those interested, there is a reasonably comprehensive bibliography of firebacks on page 258 of Schubert's 'History of the British Iron and Steel Industry' (1957).
J.S.H.

Ordnance Survey Maps

Members wishing to consult the WIRG collection of Ordnance Survey maps of the Weald area should apply to the Chairman, Jeremy Hodgkinson (address above)

A Wealden Cannon in the Isle of Wight

While holidaying on the island this summer, ever watchful for anything connected with the Weald, I noticed, at Blackgang Chine, an iron cannon, mounted on a rather unconvincing carriage, bearing on its trunnions the familiar letter 'F' of the Fuller family. cursory measurements showed it had a bore of about $2\frac{1}{2}$ inches and a length of 4 feet. A few 'back of envelope' calculations revealed this as a six pounder. This was a naval gun, having been salvaged from one of the numerous ships which have foundered off this windward shore, and it had a ring above the cascabel (at the breech end) through which a restraining rope would have been run.
J.S.H.

Recording of Cannon

Several members responded to a note under this heading in Newsletter No. 2 (1981) asking for information, and we now have details of a number of cannon. If anyone would like to take on the project of collating and writing up this material the editor will be pleased to pass on the information so far received.

Talks on the Wealden Iron Industry

Several talks have been given by Jeremy Hodgkinson and Dot Meades and other members. Valerie Herbert has sent us this account.

A lecture was given to the top year of Escotts Junior School, East Grinstead, during November 1982. It was undertaken with some trepidation as it was the first lecture ever given. Nevertheless it all went smoothly and much interest was shown in the exhibits. To testify this, two "thank you" letters out of 23 plus a poem, are quoted:

"Dear Mrs. Herbert,

Thank you for coming and telling us all about ore and charcoal, and the making of charcoal and iron. The slides were interesting and so was your projector.

Lee Herriot"

"Dear Mrs. Herbert,

Thank you very much for coming in and talking to us about the wealden iron industry. I liked being able to feel and touch the actual bits of iron and slag. I really enjoyed myself.

Toby Greenwood"

V.E.H.

The following forthcoming talks may be of interest to members:

Platt and District Society on 19th January 1984 at Platt Village Hall, Kent
Talk to be given by Jeremy Hodgkinson, Chairman, WIRG

East Grinstead Society on Wednesday 21st March 1984 at 8 pm at the Small Parish Hall. Illustrated talk by Jeremy Hodgkinson, Chairman WIRG, on "The Ironworks along Felbridge Water".

East Grinstead Society on Wednesday 18th July 1984 at 8 pm. at the Small Parish Hall. Illustrated talk by Miss R.M. Willatts, M.A., on "Iron Grave Slabs".

WIRG Bulletin

Items intended for publication in the next volume should be submitted to: D.W. Crossley (Hon. Editor), Division of Continuing Education, The University, Sheffield S10 2TN.

WIRG Publications for sale

The following publications are for sale from:

Mr. B.K. Herbert,
1, Stirling Way,
East Grinstead,
Sussex, RH19 3HG

Prices quoted include postage. (Prices at meetings or collected by hand).

A Gun-casting Furnace at Scarletts, Cowden, Kent.

by: D.W. Crossley

0.90 (0.75)

An Abandoned Medieval Industrial Site at Parrock, Hartfield.

by: C.F. Tebbutt

0.40 (0.25)

The Excavation of a Late 16th/Early 17th Century Gun Casting Furnace at Maynard's Gate, Crowborough, Sussex 1975-1976.

by: O. Bedwin

0.75 (0.60)

The Excavation of Three Roman Bloomery Furnaces at Hartfield, Sussex.	by: C.F. Tebbutt	0.90	(0.75)
Wealden Bloomery Iron Smelting Furnaces; (A survey of Wealden Bloomeries covering an area of approx. 200 km squared).	by: C.F. Tebbutt	0.75	(0.60)
A Middle Saxon Iron Smelting Site at Millbrook, Ashdown Forest, Sussex.	by: C.F. Tebbutt	0.90	(0.75)
CBA Research Report No. 29; Archaeology in Sussex to 1500 AD.	by: P. Drewett	NOT BY POST	(3.50)
Bulletins of the Wealden Iron Research Group:			
Volume 1 to 11	each	0.75	(0.50)
Volume 12 to 17	each	0.90	(0.75)
Volume 1 to 3, new series	each	1.65	(1.50)

VOLUMES 2, 5, 7, 8, 12 ARE OUT OF PRINT

Many thanks to David Combes for printing this Newsletter.