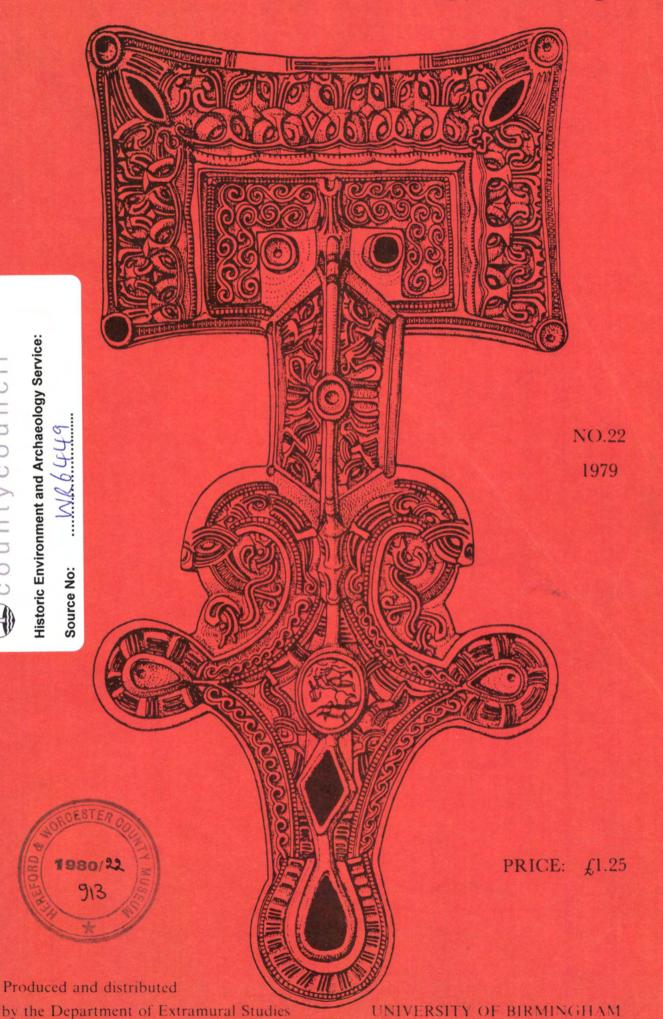
# Council for British Archaeology Group 8



worcestershire

## ISSN 0141-301X

Copies of the News Sheet can be obtained from:

Mrs. M. Jones
Department of Extramural Studies
University of Birmingham
P.O. Box 363
Birmingham B15 2TT

and

Mr. J.G. Perry 66, Purnells Way, Knowle Solihull Warks

Cover - Anglo-Saxon brooch from Alveston Manor drawn by Patricia Mallett.

# CONTENTS

	Page No.
Chairman's Letter	2
Editor's Letter	3
General	5
Field Survey	24
Prehistoric	38
Roman	43
Anglo Sexon	55
Medieval	56
Post-Medieval	78
Personalia	94
Publications	94
Useful Addresses	99
Addresses of Organisations	102

# Chairman's Letter

The retirement of Ted Price from the Chair of CBA 8 is another change to report in a time of change in West Midlands archaeology. Ted's contribution to the work of the group is gratefully acknowledged. Another alteration is the demise of the Quango, which resulted in the dissolution of the West Midlands Advisory Committee. At the end of the academic year, Dr. Graham Webster is to retire from his post in the Department of Extramural Studies at Birmingham. It was through that post that Dr. Webster was largely responsible for the growing strength and capacity for research and excavation by amateur archaeologists throughout the West Midlands. His enormous contribution should not be underestimated and it is hoped that he will continue to support and advise with the same dedication as he has always shown.

In a time of change the functions of established organisations can become indistinct unless they are adapted to new circumstances and this clearly applies to CBA 8. Even so, the group will ensure the continuation of two established services:-

One aim of CBA 8 is to encourage an increasing proportion of the general public to take a genuine interest in archaeology: the CBA day schools in Birmingham play an integral part in this objective.

It is equally important to disseminate information among those already committed to the archaeology of the region. For twenty-two years the annual news sheet has served to keep all involved up to date on recent excavation results. This valuable series must be continued.

In recent years rescue archaeology has been coped with increasingly by professional archaeologists in the region. Perhaps the greatest contribution has been made by the Birmingham University Archaeology Unit under the direction of Martin Carver. The increasing professional involvement must continue, especially on large sites which require to be excavated more promptly than a part-time group can manage. A phase of professional work on such major sites as Beckford, Catholm and Coleshill has produced an enormous volume of information to be written up and published, taking a number of experienced archaeologists out of the field at a time when financial resources are stretched to the very limit. In such circumstances the contribution which the amateur can play is enormous if he is prepared to do the work.

Unfortunately the extension of professional involvement in the West Midland counties has not, with a number of notable exceptions, been matched by an increase in the contribution of independent societies and groups. It should now be the main aim of CBA 8, the county and local societies, to encourage and activate more research and publication of the highest possible standards.

Research in local history and archaeology will remain alive and healthy in the West Midlands for as long as dedicated enthusiasts are prepared to obtain the necessary expertise and devote time and energy to legitimate excavation, recording and research. The Anker Group and the relatively new Staffordshire Archaeological Research Association are research or activity based. The extramural classes which engage in active fieldwork under the guidance of experienced tutors are producing new information and, hopefully providing class members with new skills which they may continue to employ usefully.

The greatest advances recently have been in the field of vernacular architecture, now reflected by a series of bi-annual day schools. In Shropshire the work of Madge Moran on the timber-framed buildings of the county, and in Herefordshire the recording inspired by Jim Tonkin are both well organised and informative. The Ludlow Historical Research Group has been actively engaged in historical and architectural work of an exemplary standard leading to prompt publication of results in a readable and saleable format.

These examples indicate that there is an enormous volume of research potential throughout the West Midlands, and there is room for everyone interested to make a contribution. CBA 8 is anxious to encourage, assist or advise all efforts to continue or initiate bona fide archaeological and related activities. Those individuals, groups and societies which are not yet affiliated are warmly invited to subscribe to Group 8, both to contribute to the work of the group and to benefit from the services which the Group can offer.

R. MEESON.

## The Editor's Letter

We are going through a period of change and stress and the West Midlands is having its fair share. There has been no lament for the disappearance of the Area Advisory Committees but a heavy responsibility rests on the Groups to ensure that serious threats to ancient sites and historic buildings are widely known, and when necessary, public reaction generated. If there is no voice raised against the more serious depredations in our region we can hardly protest when the treasure hunters seriously offer the public their alternative archaeology for Britain and for which, in our silent acquiescence, the public will naturally give their support. But there are more serious threats than this; the ever persistent plough slicing away sites centimetre by centimetre, agricultural improvements which cause the removal of awkward earthworks, large-scale drainage schemes and so on, and they go on all the time virtually unnoticed. We need an immense educational programme to sell our buried heritage to a public quite indifferent to its fate. People are now fully alerted to dangers threatening their living world but could not care less about the dead past. Although there is an immense interest in archaeology generally we are not able to take advantage of this and channel it into action and protest.

The C.B.A. is the only effective national body able to take any action in the present depressing state of affairs, but the strength of the C.B.A. depends on its affiliated members and the Regional Groups. There has always been difficulty in communicating with the grass-roots of British archaeology and in making societies and individuals aware of the serious threats which now beset us. Some groups have been even more ineffective than others, and it is now very necessary to change this so that all those working or interested in our past should attempt to unite and take counter measures. Our amateurs tend to be parochial and our young professionals are unable to participate in public debates as they are local government

officers, but they could at least join us in discussion and constructive thinking. The only features we all have at present in common are the News-Sheet and the Annual Conference and the future of both is now a matter of real concern.

There is little doubt that the News-Sheet provides a very useful annual summary of work in hand, especially with the present slow publication rate of county journals. Ways and means must be found of keeping it going, perhaps in a cheaper format. The Annual Conference has been much criticised and the programme should be modified to meet the needs of both professionals and amateurs. If the reports could be limited to three or four of the more interesting or important, there would be time for discussion and constructive thinking about the wider issues now pressing upon us. It would thus be up to Groups to organise local meetings for reports which could not be included, and where thought could be concentrated on the problems of a particular locality.

I apologise for extending my editorial brief on this occasion since I may not have the opportunity next year. I would like to express my gratitude to all those who respond so willingly every year to our requests for the contributions to the  $\underline{N-S}$  and to those dedicated few who are endeavouring to keep British archaeology alive in the West Midlands region.

GRAHAM WEBSTER

#### GENERAL

# Birmingham University Field Archaeology Unit

#### Introduction

As in previous years, the work of Birmingham University Field Archaeology Unit has concentrated on the excavation and publication of archaeological sites currently under threat in the West Midlands region. The Unit consists of trainee field archaeologists who are reading for a special degree at Birmingham University, and who aim to become prefessionally competent through the varied experience which a year in the field provides.

#### Research

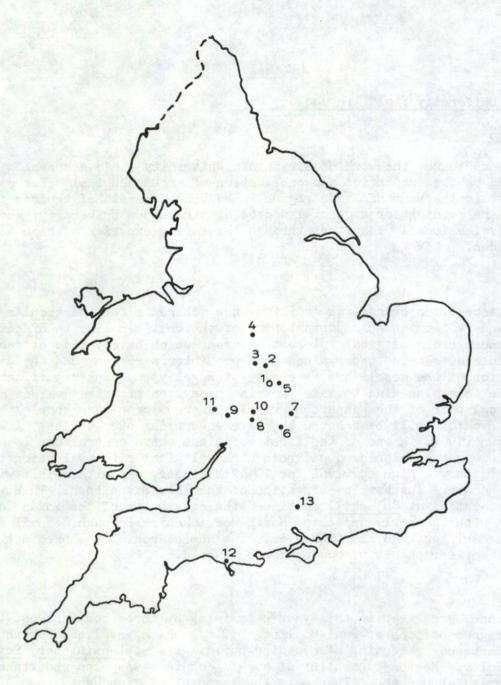
Such experience often brings, in addition, new adherents to a particular area of research, and it remains an important part of the Unit's policy to discover new sites or arouse archaeological interest in areas which have yet to attract attention. The West Midlands remains undervalued as a prehistoric region, and the discovery and excavation of the mesolithic cave site at Rugeley was thus significant and rewarding. We were also glad to take part in the systematic site evaluation by Oxford Archaeological Unit of the Wasperton gravels, where a crop-mark complex similar in size to Beckford will be removed by gravel-quarrying over the next few years. Stafford Town (1979) is one of the first occasions where central and Local Government have together commissioned an urban archaeological site evaluation; preliminary results show a high survival for 10-12th century deposits. This will, it is hoped, encourage further investigation of the late Saxon town. This year's training excavation at Coleshill continued the excavation of the Roman Temple in conjunction with the newly appointed North Warwickshire Borough Council archaeologist, John Magilton, and his STEP team. The whole area of the precinct was uncovered and earlier phases of occupation contacted.

#### Training

New dimensions were given to this year's training by three commissions, (provided through the good offices of Paul Gosling, D.O.E.) which involved, for the first time, the emergency recording of standing buildings - at Leominister, Edvin Loach and Old Madeley. Regional sampling of mural technique was also undertaken for the local authority at Manerba. Thanks to the interest of Alan Hunt, some field survey was possible in Dorset, and we remain optimistic that this most important part of the field archaeologist's repertoire will begin to attract rescue or research funds in due course.

A one-day conference was held at Birmingham in the spring of 1979, the aim of which was to discuss professional training in archaeology. The second of such meetings, it was attended by delegates from Universities of Bradford, Oxford (external studies) and York, and by a number of students who gave their experiences of the various schemes currently available (see BUFAU Report No.1, appendix). From the discussion it appeared that the variety of experience and level of responsibility provided by the Birmingham Unit was above the average, but the qualification bestowed was insufficiently defined to be readily appreciated by employers. This matter, now under review, has shown itself to be important to three generations of Unit members, who continue to be predominantly those who are committed to joining the world of professional archaeology.

M.O.H. CARVER



- 1 Birmingham
- 2 Rugeley
- 3 Stafford Town
- 4 Old Madeley
- 5 Coleshill
- 6 Stretton-on-Fosse
- 7 Wasperton
- 8 Worcester City
- 9 Edvin Loach
- 10 Croitwich
- 11 Leominster
- 12 Weymouth
- 13 Danebury

Fig.1: Map of places referred to in the text (JPM)

# Project Summaries

## Staffordshire

# Bower Farm, Near Rugeley (Fig. 2)

The chance find of two skulls, thought to be Neolithic, in the entrance to a small sandstone cave on the edge of Cannock Chase, led to the excavation of the cave and an area of approximately 12 m<sup>2</sup> outside it. The excavation was carried out by BUFAU for Staffordshire and DoE, with the help of Birmingham University students, and Dr. L.H. Barfield.

Dr. Warwick of Birmingham University Dept. of Geography, suggested that the cave was water worn, probably a spring head. With the falling of the water table a new spring was formed lower down, which later collapsed. The deposits had been deeply disturbed by animal burrows. All contents were sieved and over 250 flints were recovered, of which some geometric tools could be dated to the Late Mesolithic. It was impossible to state whether or not the skulls were connected with the flints, but it seems unlikely. There was one relatively undisturbed feature on the site; a layer of blackened sand with burnt pebbles, and a burnt flint flake. The stratification suggested that this surface was Mesolithic. The B.M. is at present carrying out preliminary thermoluminescence tests on the burnt pebbles. The lack of evidence for organised occupation, and the high tool/flake ratio, implies that the site was a hunting camp.

CHARLOTTE HILTON

# Stafford Town

good.

A programme of archaeological site evaluation for Stafford Town was carried out between 5 March and 22 April.

## 1. Documentary Survey

Initial work on the primary and secondary documentation by Jill Walker (M.A. Thesis, Bradford University, 1976) and Michael Greenslade (C.H. in press) was extended and 21 previous excavations (archaeological and otherwise) in the town were located. A Site Prediction map showing the possible location of structures, streets, streams, pools and pits of Late Medieval Stafford was prepared (Fig. 3).

# 2. Topographic Survey Supervisor: Madeleine Hummler

The aim was to reconstruct the surface of the modern town in detail in order to give a ceiling for earlier topographies. 1,762 points within the area of study were mapped and related to Ordnance Datum with level and staff. The x-y-z- co-ordinates of each point are to be entered into a computer-programme ("STAFFTOP") by John Wilcox (Stafford Polytechnic) to give a contour plan at 10 cm vertical intervals. A subsidiary programme uses the depths of ancient strata to predict areas of maximum survival and the shape of the original land surface.

# 3. Excavations (see Fig. 4 for Summary)

# Site 18: 7 St. Mary's Grove, 9209 2327 Supervisor: J. Collens

Natural sand at 76.63 m OD (2.10m below gs) cut by two successive ditches containing Stafford Ware (10th c) and 12th C pottery respectively. Succeeded by garden soil and builders' rubbish in continuous sequence to 20th C.

Size of cutting: 4 x 1.5 m; Total depth: 2.95m;

Depth of intact strata: (late Saxon) 1.15m, (medieval) 0.40m,

(post-medieval) 1.40m; Survival: features, good; finds: organic poor; otherwise,

I object the representation of the contract of

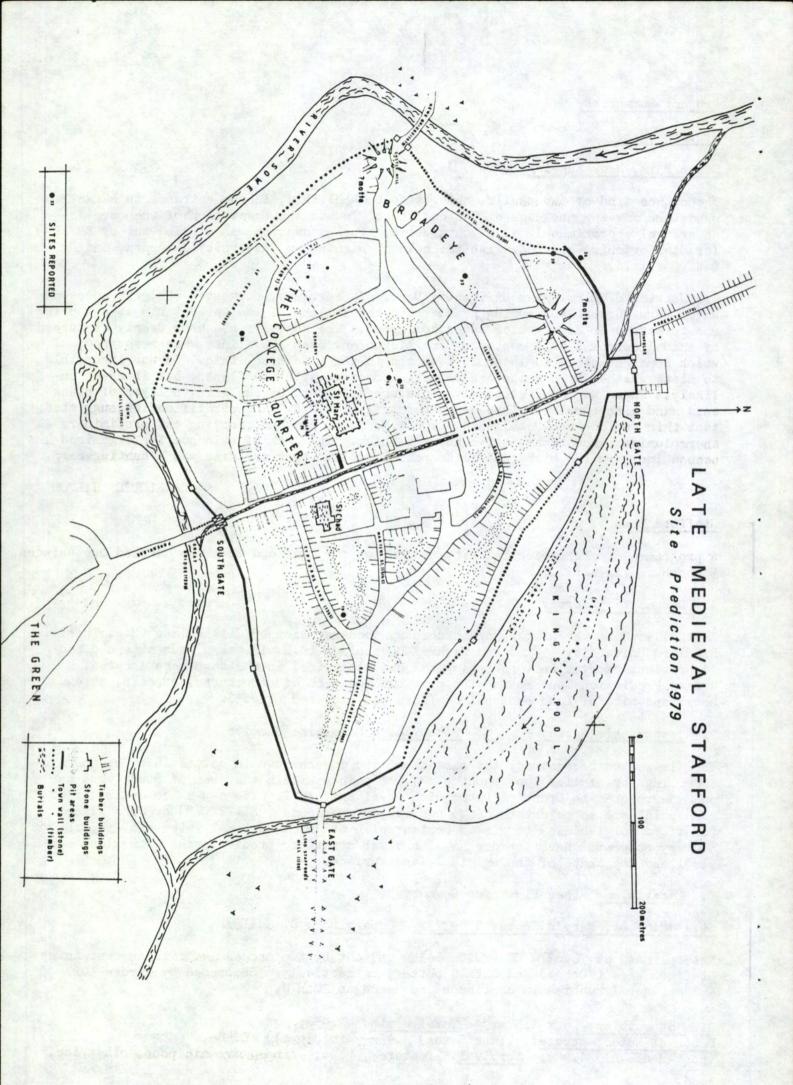
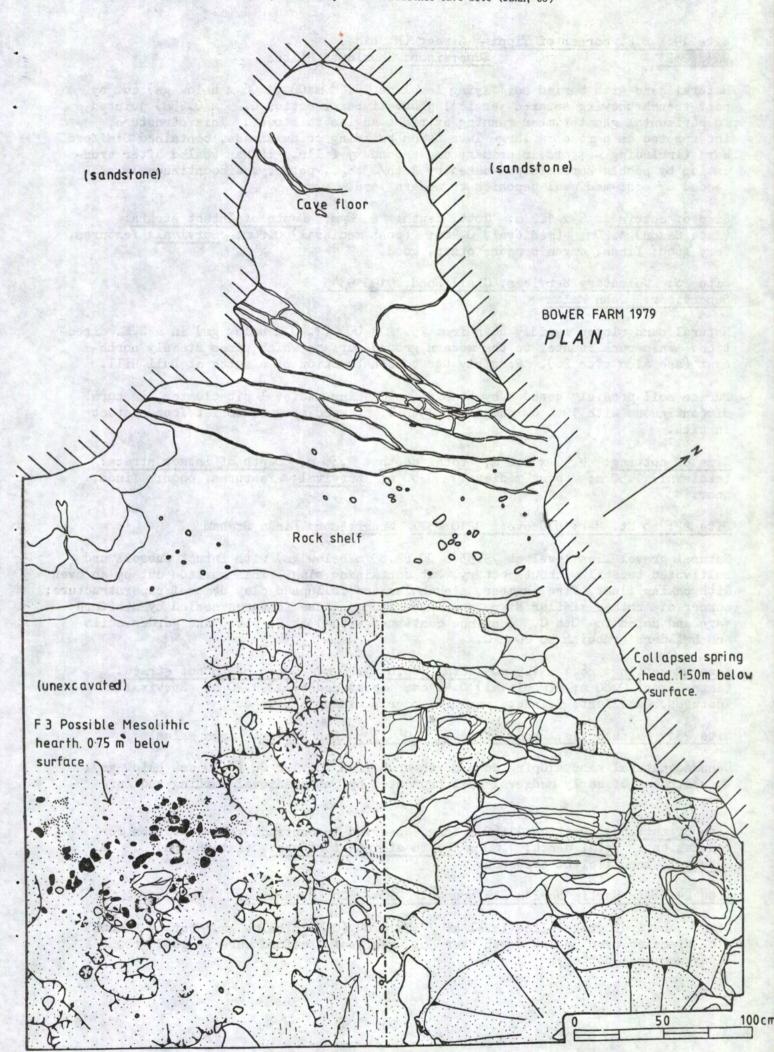


Fig. 3: Late Medieval Stafford - Site prediction (MOHC)



# Site 19: S.E. corner of Tipping Street (N. side) 9237 2321 Supervisor: Charlotte Hilton

Natural sand with buried soil lying level at 75.18 m OD (1.06 m below gs) cut by post-trench showing squared vertical ghost timber (section 0.25 x 0.25m) jointed to horizontal ghost timber running at right angles to street. This structure, interpreted as part of a large late Saxon building or pallisade, contained Stafford Ware (including wasters) in primary and secondary fills. It was sealed after truncation by pebble surfaces pre-dated by 12th/13th C. pottery, discontinuously succeeded by post-medieval deposits to modern yard.

Size of cutting: 6 x 1.2 m; Total depth: 2.20 m; Depth of Intact strata: (late Saxon) 1.20m; (medieval) 0.40m; (post-medieval) 0.60m; Survival: features, very good; finds, organic poor; other, good.

## Site 20: Voluntary Services, Chell Road; 9195 9345 Supervisor: John Malam

Natural sand sloped rapidly down from 75.12 m OD (1.40 m below gs) in a S.E. direction. This runs counter to the modern ground surface which rises steeply northeast (see also site 26). Possibly due to construction of a motte at Bull Hill.

Buried soil possibly denuded by base of succeeding medieval pit cluster, in turn discontinuous with 19th C. dumping. 19th C. stamped ceramic toilet found intact in situ.

Size of cutting: 4.30 x 3.0 m; total depth: 2.30 m. Depth of intact strata: (medieval) 1.50 m; (post-medieval) 0.80 m; Survival: features, poor; finds, poor.

# Site 22: 8 St. Mary's Grove; 9210 2327 Supervisor: Linda Graham

Natural gravel lies level at 75.53 m OD (2.83 m below gs) with intact subsoil and cultivated topsoil without pottery, but containing slag. This horizon cut by an oven with baking floor, fire chamber, stakeholes and collapsed clay dome of superstructure; corner of another similar structure in section. These features sealed by Stafford Ware and dated to 10th C. Sequence continues with 13th C. pits, and garden soils and builders' rubbish to 20th C.

Size of cutting: 6.1 x 1.5 m. Total depth: 3.20 m. Depth of intact strata: (late Saxon) 0.80 m; (medieval) 0.40 cm; (post-medieval) 1.20 m. Survival: features, excellent; finds: organic, poor: otherwise, good.

# Site 23: Sainsbury's, Broad Street: 9196 2335 Supervisor: John Malam

Denuded natural sand sloping down northwards from 77.41 m OD (0.70 cms below gs). Thin stratum of early medieval soil truncated by post-medieval cutting and surfacing.

Size of cutting: Section 11.60 m long, observed in contractors excavation for foundations. Total depth: 1.60 m Depth of intact strata: (late Saxon) 0.20 m. Survival: insufficient evidence.

# Site 24: Sir Martin Noel's Almshouses: 9204 2308 Supervisor: Jon Cane

Denuded natural gravel lies level at 77.58 m OD (0.56 m below gs); cut by 13th C pit, diameter over 3m and depth over 2m. Residual Stafford Ware in good group of later medieval pottery.

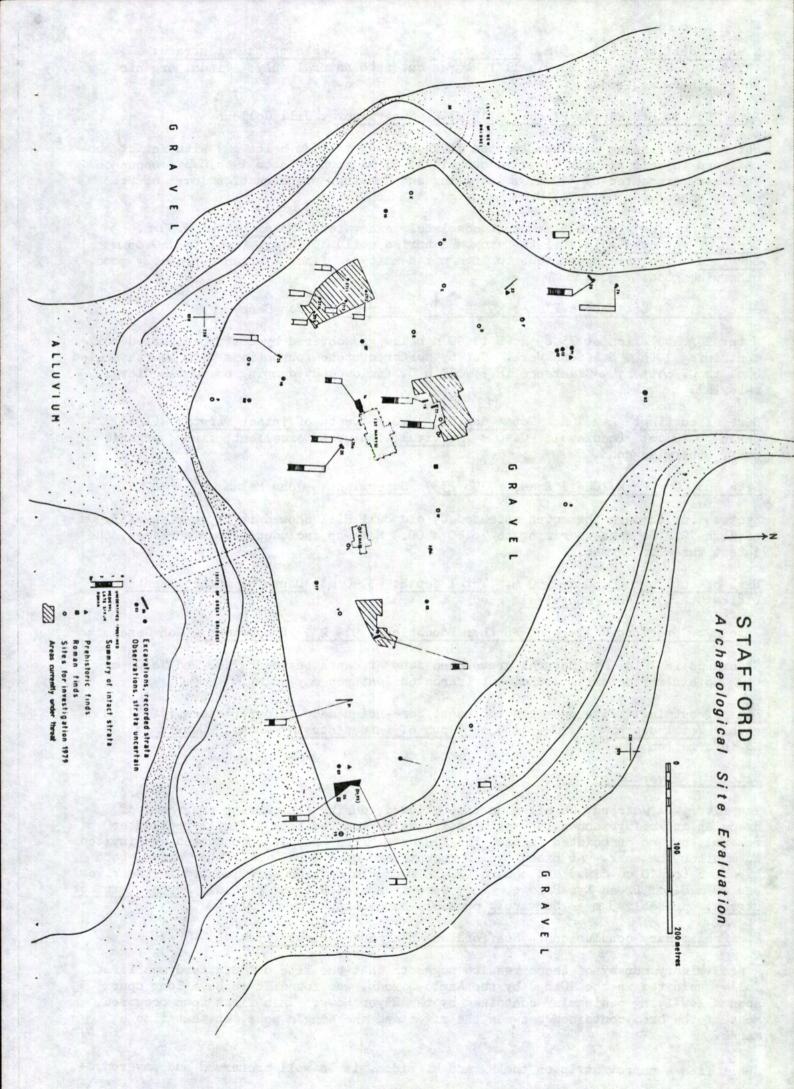


Fig.4: Stafford Town: Archaeological site evaluation (MOHC)

Size of cutting: 4 x 1.5 m. Total depth: 2.35 m. Depth of intact strata: (17th-20th C) 0.60 m. Survival: features cut into natural only; finds, organic poor; otherwise, good.

# Site 25: 11 St. Mary's Place; 9215 2316 Supervisor: Jill Collens

Natural wet-running sand was located at 74.07 m OD (3.05 m below gs) with intact subsoil and topsoil sloping rapidly downhill to S. A rich 10th to 14th C pit sequence followed, truncated by ?19th C. levelling and dumping. Construction level of St. Mary's school (1856), was 10 cm below gs.

Size of cutting: 4 x 6.5 m. (not completely excavated) Total Depth: 3.55 m.

Depth of intact strata: (late Saxon and buried soil) 0.70 m; (medieval) 0.85 m

Survival: features, poor (due to high pit density); finds; organic probably good, otherwise good.

# Site 25a: 11 St. Mary's Place: 9214 2317 Supervisor: Jon Cane

Natural gravel lies at 75.89 m OD (1.90 m below gs) covered by disturbed buried soil containing 10th C Stafford Ware. Cut by mortared stone foundations with hearth sealed by 13th C. pottery. Clearance in (?) 19th C. followed by dumping of post-medieval material.

Size of cutting: 2 x 1 m; Total depth: 1.90 m Depth of intact strata: (late Saxon) 0.10 cm; (medieval) 0.40 m Survival: features, excellent; finds: organic poor, otherwise good.

# Site 26: Car Park, Chell Road; 9196 2337 Supervisor: John Malam

Section cut through the mound ascended by old Bull Hill showed it to consist of 3.40m of 18th-19th C. make-up rising to 78.60 m OD. Make-up included 6 road surfaces, the latest three of tarmac.

Size of cutting: 3.50 x 2.50 m. Total depth: 3.40 m. Depth of intact strata: (18th-19th C) 3.40m. Survival: good

# Site 27: Stafford College of Further Education; 919 231 Supervisor: Jon Cane

Clearance in 19th C to natural gravel and sand at depth between 77.00 and 78.06 m OD. No earlier deposits found, but truncated features may exist.

Size of cutting: Five openings to insert bore-holes made by contractors, c. 1 x 05m each. Total depths: 1.10 - 1.55 m Depth of intact strata: none. Survival: No information.

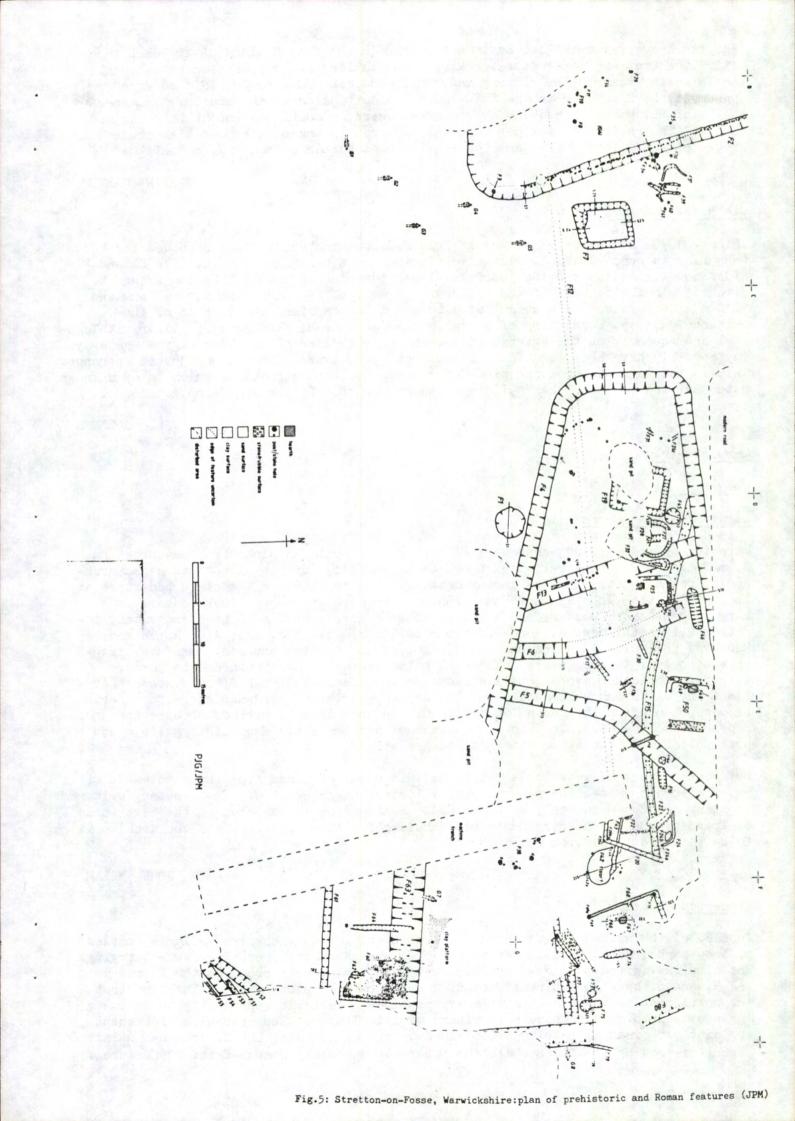
#### Site 28: River Sowe

The river was watched, as often as time allowed, during the current programme of dredging and refurbishment. Peat deposits were reported from the mill pool after removal, but no associated finds. The Midlands Mills Group was contacted and invited to monitor the work. At Broad Eye a recent hard-core ford, and timber piles, both circular (c. 10 cm dia.) and square (20 x 20 cm) in section were located in the river bed 25 m S. of Broad Eye Bridge. They were inundated without record. Depth of intact strata: probably 5 m + Survival: probably excellent.

## 4. Preliminary conclusions - Stafford as an archaeological site

A preliminary survey of these results suggests that the site of Stafford was first fully exploited in the 10th C by the Anglo-Saxons, who found it to be a long spur upon a low-lying peninsular contained by the River Sowe. This first town occupied most of the area contained between the river and the King's pool, at that time a marsh.

Apart from a narrow strip on the N. and W. sides, it is well preserved and may repre-



sent the largest intact late Saxon settlement in the West Midlands. At least three activities (pottery manufacture, smelting and baking) are represented in the small sample so far taken. The pottery industry, producing 10-11th C "Stafford Ware", appears to be localised in the S.E. and a residential or other industrial quarter to the N. of St. Mary's Church. The sequence generally continues intact into the mid 13th C. The rewards of further work will be greatly enhanced by parallel studies in progress on Stafford Castle and the vegetational sequence from King's Pool.

MARTIN CARVER

# Old Madeley Manor (SJ 773423)

In Aug. 1979 the entrance gateway of this Medieval moated site was recorded for the DoE prior to consolidation. The site consists of a rectangular moat, (the S. and E. sides now filled in) and two possible fish ponds running parallel to the W. and S. ditches. In the E. half of the enclosure, a wall of red sandstone 5.76 m long and 1.80 m wide survives to a height of 4.68 m. This comprised the S. half of the entrance gateway, consisting of a double chamfered arch, flanked by a pillar with capital and voussoir on the exterior face, and a portcullis slot. The original gateway may possibly have been flanked by blind archways set back from the projected entrance. This is the largest surviving piece of masonry of this structure, which is of unknown date, but traces of further buildings can be detected to the W. of the gatehouse.

JILL COLLENS

## Warwickshire

# Coleshill

# Stretton - on - Fosse (SP 222384)

Stretton-on-Fosse is adjacent to the Fosse Way in south Warwickshire, seventeen km S. of Stratford-upon-Avon. Sand has been extensively quarried at Stretton and archaeological deposits of wide-ranging date have been discovered and disturbed since at least 1949, when Iron Age and Roman inhumations were excavated. Subsequently a large pagan-Saxon cemetery and a second Roman cemetery have also been excavated, together with settlement evidence of the Mesolithic/Neolithic, Iron Age, Roman and Medieval periods. 13 sites have been recorded at Stretton and many more have probably been lost to the quarry. The most extensive settlement evidence is Roman, (fig.5) comprising several small structures in association with ditch systems. At least one ditch was palisaded along its length. Artefact evidence suggests a period of occupation from the second to fourth C. The prehistoric periods at Stretton are represented by a possible Iron Age roundhouse and Neolithic/Mesolithic gulleys and post holes, in association with a flint assemblage.

BUFAU received the excavator s notebooks, diagrams and finds from the settlement sites and from these excavation reports were illustrated and written. The cemetery evidence is being studied separately by W.J. Ford. Publication is expected in the next issue of Transactions of the Birmingham and Warwickshire Archaeol. Soc. and the archive is to be returned to Warwick County Museum.

JOHN MALAM

# Wasperton (SP 260580)

Just S. of the village of Wasperton, in the S. tip of Warwickshire, a large complex of crop-marks, identified in aerial survey, is being threatened by gravel-quarrying. The site is limited to the W. by the River Avon, by a small brook to the E. and to the N. and S. by long pit alignments seen on the air photographs. The fact that the settlement is bounded in such a way provides a valuable opportunity to evaluate a supposed prehistoric grave site within visible limits. The crop-marks represent two distinct areas of settlement, divided by pit alignments; the N. area has mainly "Iron Age-looking" features while the other has "probably Romano-British" features.

There should be ample scope here for investigation of settlement shift.

In March 1979 members of the Oxfordshire Archaeological Unit, BUFAU and Warwick museum carried out a programme of site evaluation in an attempt to provide a basis of information on which the decision whether to excavate or not can be made. This consisted of:

- limited excavation in the remaining section of the S. pit alignment, in which several pits were dug (but no solid dating evidence found) and environmental samples taken;
- limited magnetometer and resistivity surveys;
- 3. an assessment of the time required to carry out topsoil sampling as a preliminary to a possible large scale topsoil sampling operation to assess survival of occupation debris outside features.

Hopefully the results of this evaluation will provide an insight into how this important site should be dealt with.

JON CANE

# Coventry, Much Park Street

Excavations for DoE by G.G. Astill, A. Hannan and Coventry and District Archaeol. Soc. on several sites in Much Park Street between 1970 and 1974 were studied and prepared for publication in 1978-79. The sites had reached various stages towards publication and the work has included preparation of the site record for archive, construction of a medieval pottery type-series (for general use in Coventry), and specialist studies on metal-working and animal bone.

Although the sites were up to 100 m apart, there was a surprising similarity between them. Light industrial occupation in the 12th and 13th C, which included small-scale decorative metal-working (notably buckle-making), was interrupted for a time by agricultural activity and eventually superceded in the 14th C by residential (possibly mercantile) occupation. Medieval buildings had survived at all the excavated areas, and archaeological, architectural and historical evidence is now being drawn together to give an extremely interesting pattern of development in this area of medieval Coventry. The report should be complete in draft early in 1980.

SUSAN M. WRIGHT

#### Hereford and Worcester

#### Worcester City

A volume of archaeological and topographical studies dealing with medieval Worcester was sent to press in August 1979. The Unit was responsible for analysis and publication drawings for six excavations: those of Helen Clarke, Ben Booth and A. Cubberley by the Cathedral, Julian Bennett's along the City Wall, the 1860 discovery of a Roman cemetry and kiln at Diglis, and the medieval sequences at Sidbury. The volume also contains accounts by Sue Hirst and Jan Wills of their excavations along the City Wall, Nick Molyneux's description of an extant late medieval building at Angel Place and historical papers by Clive Beardsmore, Nigel Baker and Pat Hughes. There is a medieval and post-medieval pottery typology for the city written by Elaine Morris and the volume concludes with an evaluation of Worcester as an archaeological site. 93 figures and 24 tables are included. The book is to be published by Worcestershire Archaeol. Soc. and is due to appear in 1980.

M.O.H. CARVER

# Edvin Loach (SO 6622 5845)

The small Saxo-Norman parish church was superceded by an adjacent building in the

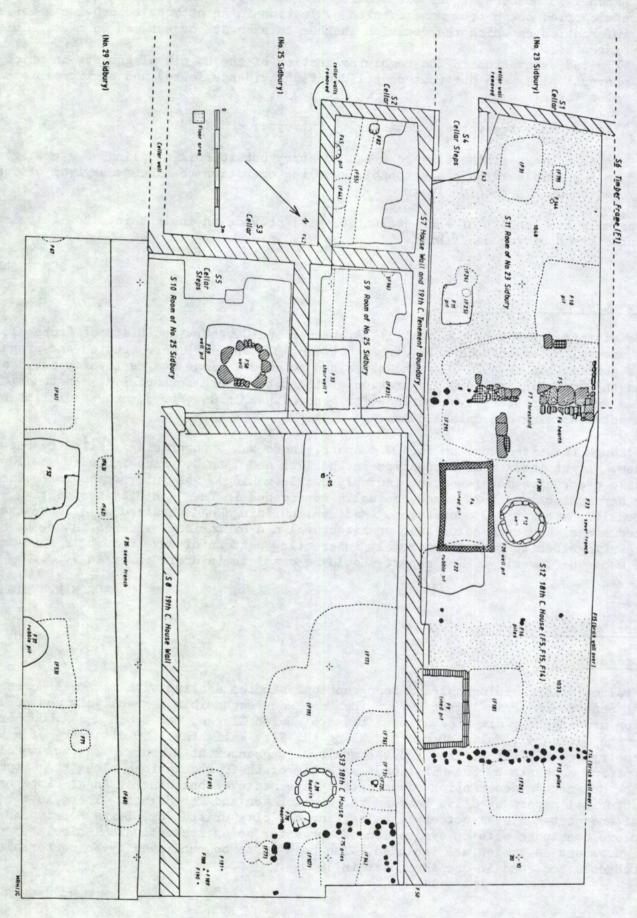
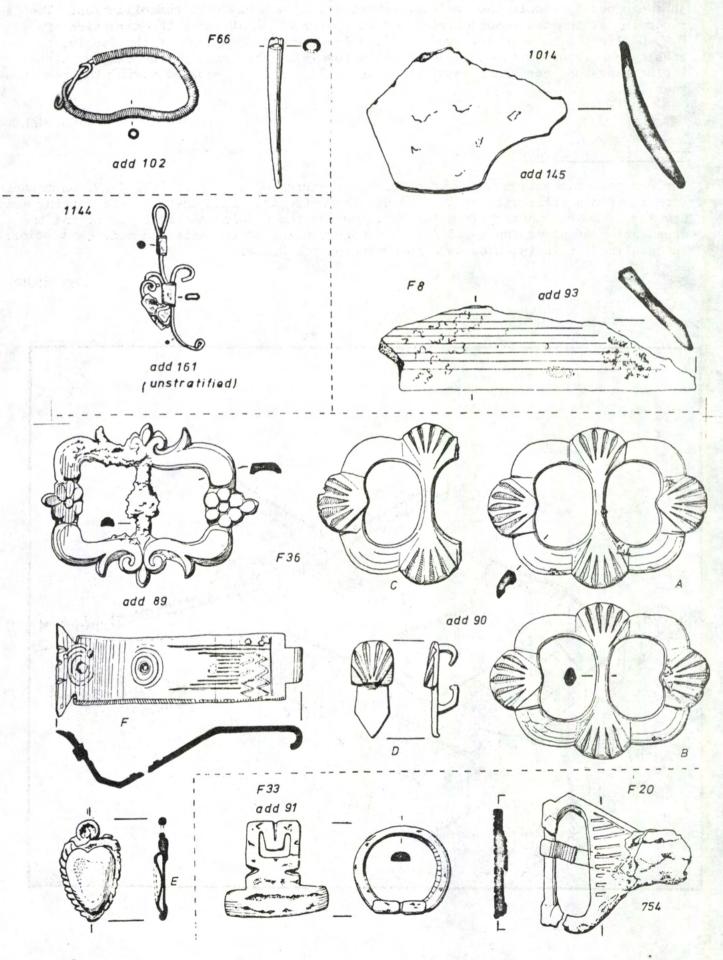


Fig.6: Worcester City: Plan of Sidbury excavations (final phase) (JC)



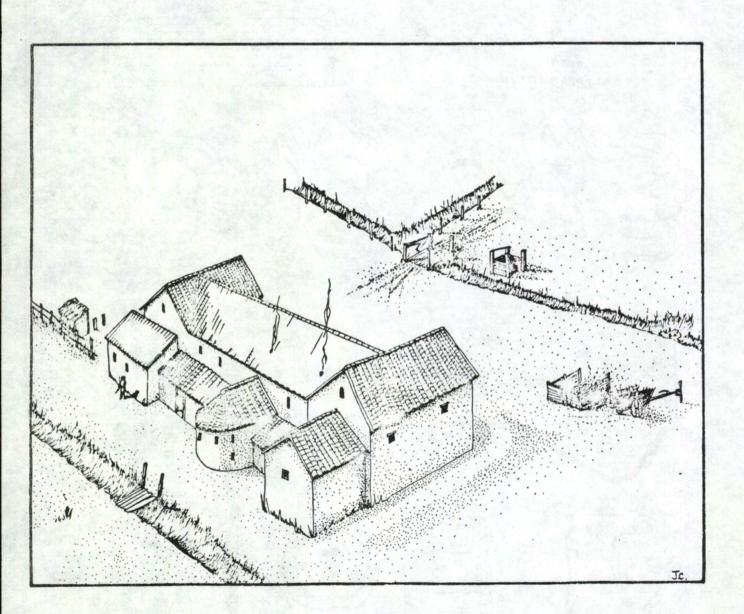
19th C. Since its replacement, the earlier church has decayed considerably, its roof having entirely disappeared, and the upper courses of the nave and tower walls being in a state of collapse. To prevent further decay the DoE is carrying out a three year project to record the building in detail, as a prelude to consolidation. The recording of the tower was carried out by member of BUFAU under the direction of P.F. Gosling. The work involved detailed drawings and sampling of the fabric, to enable consolidation to be as accurate as possible. The rest of the church, with the herring-bone construction of the nave walls, will be recorded during the next two years.

JON CANE

## Droitwich Bays Meadow

Further post-excavation work was carried out during Oct. 1978 to Feb. 1979, on material from the Roman Villa site at Bays Meadow in Droitwich. This involved the sorting and drawing of coarse pottery from the early phase, the drawing of small finds, and the preparation of plans and sections. A reconstruction of the site was made (see below). The publication is intended as a monograph of the C.B.A.

JON CANE



#### Leominster Priory

Recording of a disused building adjacent to the Priory Church was undertaken before modern reconstruction for Hereford and Worcester C.C. Interior and exterior plans and wall elevations were analysed and drawn, and strata within the buildings were excavated to the limit of the current threat. The original building appeared (from a surviving blind arcade) to be Norman, with extensive 13th C and post-dissolution rebuilds. It is sited over a vaulted channel containing the Pinsley Brook and is thought to have been a reredorter or infirmary.

L.D. GRAHAM

## Local Field Research in Progress at the Department of Ancient History and Archaeology

#### Parish Surveys

1978	Tim Yarnell	Shifnal (Salop)
1979	Linda Graham	Northfield, Birmingham
	John Malam	Wolverhampton, (W. Midlands)
1980	Val Turner	Warwick Town

#### Higher Degrees in Progress

1977	Paul Booth Roman Alcester	
E stu	Helen Mayoh	Petrology of Churches in Herefordshire
	Susan Colledge	Vegetational History of the West Midlands (In Department of Plant Biology)
1978 1979	Michael Hodder Nigel Stillman	Pre-history of the Sutton Coldfield Area. Norman Earthworks in the Welsh Marches

#### Urban Research Fellow's Report

In addition to the research into the location of the old pit at Upwich, Droitwich reported elsewhere in the N.L., I have completed a paper on 'Romano-British Town and Village Defences: A New Review of the Evidence. This paper began as a chapter on the defences of the Romano-British Town and Village Defences of the West Midlands but the study of the evidence led to a certain disagreement with current thinking on the function and development of Romano-British defences in general and a separate paper was prepared. This includes a gazetteer summarising the information on the defences of each settlement together with the major references in each case. The paper outlines the present framework which is based on the premise that the defences of Romano-British town and village throughout the province follow a common pattern of development and that the provision of defences was the result of a policy decision implemented at provincial level; the nature and the limitations of the evidence for such an interpretation are discussed and alternative interpretations offered with the intention not of establishing a new framework but of encouraging a more flexible and objective approach to the investigation of defences. The aim of the paper is primarily to engender an entirely new spirit of inquiry into the study of defences; new ways of approaching the evidence are explored while emphasising the need to accept the limitations of the evidence as an important factor in the conclusions which can be drawn. The current tendency to try and fit the evidence into 'the normal pattern of development' demanded by the framework has effectively fossilised the study of defences when in fact the actual collection of archaeological data, on which any sound framework must be based, is still in its infancy. It is hoped that this paper will go some way towards placing the study on a new basis.

The Urban Research Committee. This year the committee organised a very successful seminar on 'The Origins of Evesham' which was held as an extramural Day School event in Evesham on May 19th. Papers were given by David Cox, James Bond and Professor R.H. Hilton and Dr. C.C. Dyer chaired the event.

JULIE CRICKMORE,
DoE Research Fellow, School of History, University of B'ham.

#### Aerial Reconnaissances - West Midlands 1979

Weather permutations in the spring were not ideal for crop marks, but by early summer, meteorological statistics showed a lower than average rainfall in Essex and on the coast of E. Central Scotland. During June there was little rain in central and E. England, and this created conditions for variations in cereal growth, and crop marks started to develop on the lighter and faster draining soils. There was little rain in East Anglia and the Midlands in July and areas with soil moisture deficits spread W. from Essex. Some of the clay soils, that are normally less sensitive were starting to produce crop marks as far W. as Warws. A combination of the dry weather and warmer air temperatures accelerated the advance of cereal maturity and crop-marks continued to develop slowly W. on a selective basis determined by a variety of soil/weather/type of cereal permutations. By the end of July the speed of development required daily flights over a rapidly expanding area of potential imformation but this was stabilised by thunderstorms at the end of the month and in Aug. the amount of visible information rapidly declined.

The Dumbleton area provided much new information and this is moving towards a reconstruction of a complete Romano-British landscape of small farmsteads. There are hints of an earlier pattern under this. Many of the previously recorded sites around the base of Bredon Hill were visible as well as many previously unknown sites and features. The E. side of the Severn Valley from Tewkesbury to Worcester provided new sites but further W. towards the Wye Valley new information at the end of July was not sufficient to justify perseverence. The valley soils around Ludlow and Craven Arms only had sparse and poorly defined evidence, but the higher ground in that area and along Wenlock Edge was more interesting. Bridgnorth to Wolverhampton had new evidence and a marked feature of that area is the number of pit-alignments. To the N. of this, the Shrewsbury area retained the poor prospects determined by the late spring rainfall.

The W. side of Cannock Chase had provided little in the past and a new large double ring-ditch is of special interest as no other such site is known in the W. Midlands. The Trent and Tame Valleys in Staffs. had many sites visible and of special interest is an arrangement of five concentric rings of pits or post holes near Catthorpe, resembling the plan of Woodhenge and/or Stonehenge. This area contains a variety of other crop-mark sites of neolithic character and is clearly of considerable prehistoric interest. Warws. provided a variety of new sites that include certainly one and possibly two sites in which triple ditches with two internal banks were constructed across the necks of meanders of the River Lea. Two similar examples have also been recorded in the Peterborough area.

In general, it was the areas to the E. and N.E. of the W. Midlands that provided most of the evidence in 1979, but even in the W. Midlands the results were above average and some of them, particularly those in areas and soils that are normally not cropmark sensitive, give further weight to the proposition that archaeological evidence is ubiquitous and that the currently known pattern derives mostly from the sites which are the easiest to find both on the ground and from the air. Some joint flights were made with Arnold Baker, who with his usual expertise, timed these to coincide with the absolute peak recording conditions at the end of July and just before the thunderstorms. Experiments were made with a zoom lens to increase the detail available from sites and although this was to some extent successful, there are handling and other camera problems. The make of camera and lens limits require careful analysis and it is necessary to develop a specific technique. Any factors that increase the recording process will cause more handling errors and it is recommended that prior proficiency is obtained by practicing camera use as a passenger in a car being driven along a rough road.

JIM PICKERING & ARNOLD BAKER

#### Warwickshire Sites and Monuments Record

During 1979 steady progress has been maintained on the Sites and Monuments Record. With the assistance of a STEP team of four, about 800 sites have been entered into the Record, which now covers nearly half of the county to a satisfactory basic level. This work has involved a range of documentary sources and also some fieldwork, during which several previously unrecorded sites have come to light.

HELEN MACLAGAN for Warwickshire Museum

# Some Observations of Ridge and Furrow:-

The well known corregated effect of Ridge and Furrow still remains part of the country landscape, although the system may be noted more particularly on the heavier soils of the Midland Area. Nevertheless, in these days of power implements it continues to be slowly eroded in pursuit of greater production. The very contours of Ridge and Furrow do not fit in with modern technical methods, although its continued retention in the agricultural scheme of things rests upon the economic outlook of the farmers.

The origin of this method of cultivation is an old one, possibly pre-Conquest, no doubt evolving from ox teams turning soil continually in one direction. With the conversion of the horse to agricultural work in more recent times the practice continued, with additional advantage being gained in time needed to cut the rean and to turn the horse team on the headland, compared with what must have been the slow and labourious manoeuvres of a six-ox team.

However, whilst it is possible to ruminate at length upon the true ancestry of Ridge and Furrow, its functions are open to investigation, if only partially, by including the views of practical farmers and their men, and this I have attempted to do, hence this short paper. In the beginning, I assumed the problem to be one of a varied system of drainage, and this attribute must remain basic to the whole, although what did cause some mild surprise were the useages to which these ridges and hollows have been gradually adapted.

Ridge and Furrow will of course be found in all stages of preservation. Some examples remain bold and clear as if constructed yesterday - the most recent example known to me is of a 1923 vintage whilst other examples remain hardly discernable in the pasture, possibly the result of years of cattle treading, which may indicate that original crops were poor and more advantage could be obtained in leaving the area down to pasture and grazing although these almost obliterated workings are a strong indication of medieval abandonment.

The need to drain wet ground is obvious, whether that ground is to remain pasture, or in spite of the ground being 'cold' the intention is to attempt crop production. The copting of the soil will provide a less damp seed bed and will encourage a slow growth of humus which can be of advantage on heavier soil, and the furrow will provide the means by which the area is drained. The 'buttage' i.e. the base width of the ridge will of course vary according to the conditions. Should the area be very wet, perhaps sporting a spring or other water intake, the ridges and furrows will be found to be more closely set together, usually the butt in such cases is a five yard one. It is quite possible to discover fields where only a part is wet, and to find both 5 yard and 7 yard butts lying side by side to accommodate a particular need. Larger butt widths will also appear from time to time.

Drainage patterns normally follow the ground contour, and often drain off at a stream or may be directed via other channels to a pond. If the ground be gently undulating then patterns of furrows will be observed set at different angles but set upon a water disposal point, usually central to the system.

If the ground was prepared and butted in the autumn for planting early the following season, the aim would be to allow frost and snow to break down the soil to help in the

creation of a tilth for the seed bed. This is a practice still beloved of some farmers particularly if the ground under cultivation is heavy such as clay and the breaking down of clay clods even with modern implements prior to planting is a highly skilled operation. In the event of heavy snow however the furrows were ready to drain off the ground. It is surprising in some fields of Ridge and Furrow to note that frost and snow tends to clear the Ridge tops before the furrow and adjacent flat open ground. This may be due to the patterns angle to the sun, what little may appear, or the gradual build-up of humus within the ridge might provide some extra heat.

This is a problem which has always intrigued me and during the summer of 1977, from April until August of that year, I daily recorded the temperatures of Ridge, Furrow and adjacent flat land. The field was old pasture and the ridges well worn. Daily I found that the ridge was warmer by a degree or so as against its competitors, but the lead tended to decrease towards the end of June and by the end of July, all three readings were more or less constant. This field was orientated N.-E. Readings at a different farm in 1978 on a E. W. axis however gave no variations whatsoever.

Whilst the furrow carries out its essential drainage tasks, the ridge compliments the action if the ground be pasture, especially during periods of wet weather, as they provide reasonably dry platforms upon which animals may graze or even lie out. This fact was practically demonstrated to me by a local farmer who took me one dismally wet day to inspect his milk herd prior to calling them in for the evening - all contentedly grazing on firm high ridges - not in the wet furrows. He pointed out that grazing was available in both cases, on the ridge or in the furrow if the weather was reasonable, but observed that during a period of excessive drought such as the summer of 1976, the grass on the ridges was practically nil, but grazing was still to be had in the damp furrow bottoms.

Sheep most certainly tend to shelter in furrow bottoms especially against a bitter wind. They will also lie out on the ridge tops during calm weather, although there is a danger here in that if the ridges are steep, and the sheep carries a heavy fleece, the animal can roll into a furrow, finish on its back and will not be able to get up. This may account for the widest type of ridge - 8 - 10 yards.

If the system has a dual function for grazing it can do likewise for the harvest, especially hay, although this goes back to the days of the sickle and scythe. Should a year be average, a crop would be obtained from both Ridge and Furrow. In a period of drought the ridge top would probably be sparse, but a crop would always be available in the furrows. In a wet year the grass would dry off on the raised ridges where at least it could take advantage of sun and wind to help the drying process. It is possible to find Ridge and Furrow cut across a hill-slope and not directly down as might be expected. Whilst this may be another system of gradual drainage, with the water being directed to different disposal points, it could be allied to an attempt at conservation, - the land being unstable and liable to slip. Likewise, it could be a method of soil irrigation depending on the soil quality at the lower level. If that soil be light or sandy, with a tendency to dry out quickly, the water on arrival could be channelled through the area to supply its needs, being controlled if necessary by a system of sluice gates.

Ridge and Furrow certainly seems to be capable of great versatility but in conclusion I will mention but two more items. Firstly that a field of Ridge and Furrow carries a greater area of land surface than a convential field of the same measurement. Secondly, when seed was scattered by hand, by walking the ridges, it was easier to calculate the amount of seed necessary for the field. This was demonstrated to me by the owner of ridge and furrow under pasture, although for seed the substitute was fertilizer which he scattered by hand. Having decided the dressing required it was easy to walk both ridge or furrow and calculate the demand, and similarly during the spreading, by the simple process of going up one ridge and down another, he knew exactly what area had been covered, and did not end up doing one patch twice and another patch not at all. Certainly, it seems to me that Ridge and Furrow are equal partners in their system, the ridge to produce and the furrow to drain. Pipe drainage is of course the method now in general use, although I would record the opinion of one old country gentleman, well versed in field drainage matters, who firmly held the view that furrow draining was the more efficient. To him pipe drainage appeared a hit or

miss affair, and to compete equally with furrow a pipe line needed to be laid with the greatest of care, and to obtain maximum performance each pipe joint needed to be sealed with turf laid grass to the joint which in course of time allowed humus to seal the joint.

The state of the s

and the region of the course a last rest in property bell

E.W. TIPLER

not a serie to many the control of the property of the property of the control of the control of

provided the strange Caree Science by the letter of the south a province was the George and A. A. A.

and the second s

#### FIELD SURVEY

# Hanbury Survey 1979

The Survey involved 13 students (11 undergraduates and 2 postgraduates) drawn from a variety of history courses: Medieval and Modern History, Ancient and Medieval History, Medieval English and History, History and Social Science, History and Political Science.

Work went on on every day between 25th June and 7th July. The students worked in small groups, surveying a specific area each day. Training was given in the recognition of sites and the techniques of field survey, and in the academic background to the study by means of seminars and demonstration in the field. In the course of the two weeks students developed a high level of skill in identifying and recording earthworks and other aspects of the historic landscape.

The strategy of the survey was to move across the N. half of Hanbury, with groups beginning in both N.W. and N.E. Nearly a third of the parish was covered: in the W. the area bounded by the Droitwich-Alcester road and School Lane (see map), and in the E.the area of Ditchford Bank Farm, Forest Farm, and Great Lodge Farm.

Hanbury proved to be an ideal parish for fieldwork because of the high quantity and quality of sites, especially of the earthworks. Two sites produced R-B pottery and worked flints - more will presumably be found when fields are ploughed in the Autumn. At least 14 deserted settlements were recorded, of which only two had been noted previously. They appear as terraced hollows, raised platforms, and rectangular areas enclosed by banks and/or ditches. Some of them are marked as houses and cottages on the 1731-2 estate map; but more were not, suggesting that they had been abandoned before the 18th C. Presumably most of these sites were occupied in the middle ages. One known to have been abandoned recently produced 14th-15th C pottery, and at another site near the church 13th-14th C sherds were found.

Evidence of early cultivation - ridge and furrow, headlands, lynchets - were found in great quantity, extending into most of the modern pasture fields. The width of the ridges varied considerably, mostly narrow (c 4m), but going up to 8m. These puzzling variations will need further investigation.

Particular attention was paid to boundaries: those of individual fields, the parks, and the parish itself. Many were of recent origin, marked by modern enclosure hedges. The boundary of the royal park was visible as a substantial bank at its N. end. The parish boundary often coincides with holloways, either in use as modern roads or now simply earthworks; at some points it is indicated by an old (species rich) hedge on a low bank.

There is evidence of a whole network of holloways now in disuse, often continuing the lines of modern roads. Fishpond dams were found at Great Lodge Farm and Webbhouse. The majority of the numerous modern ponds seem to have their origins as marl pits.

The only belowground archaeology of the fortnight came on the last day, when observation of a trench dug mechanically from the coach house to School Lane produced R-B sherds, and a pit containing charcoal, slag, and numerous fragments of 13th - 14th C pottery.

We can make some preliminary interpretations of the history of settlement and landscape in Hanbury. Settlements seem to be scattered throughout the parish, but with a concentration in the W. None of them is sufficiently dense to be called a village, though there are some clusters of house sites, notably that at Ditchford Bank Farm. The discovery of so many of these sites shows that in woodland areas with a dispersed settlement pattern it is possible to locate abandoned settlement sites much smaller than the wellknown deserted medieval villages.

The field system seems to have been complicated, with a very large area under the plough - much more than at present. The medieval road pattern cannot yet be fully reconstructed; but it is clear that in the west the creation of the modern Vernon park disrupted a

system of communications quite different from that of today.

#### Further work:

During the winter we hope to organise a number of weekend visits, to look at pasture fields under different growth conditions, and at the ploughed arable fields. Reconnaissance at Goosehill by the extramural students shows that many more sites await systematic recording in the future. This work will need to continue for at least two more seasons.

The recognition of species rich hedges near Webbhouse, and of a medieval open hall at Moreweysend, suggest the possibilities of further investigation of botanical and architectural evidence.

#### Acknowledgements:

We wish to thank the following for all their help: Mr. S. Clewer and the National Trust, for allowing us to use Hanbury Hall as a base, the farmers and landowners who so readily allowed us to walk over their land; Messrs. A. Harris, C. Jennings, and R. Reading, who helped with local information; Dr. R. Cameron, for his scientific expertise; Mr. J. Rudge, for allowing us to observe contractors' works at the coach house; and the students: Diane Hutton and Kyle Rae (PG); Elaine Atkinson, Alison Barclay, Jane Drive, Simon Forde, Sylvia Gill, Elisabeth Grey, David Hay, Caroline Ralph, Barrie Simpson, Penny Thomas and Breffni Walsh.

S.R. BASSETT & C.C. DYER for Birmingham University School of History

# Field Survey Work in West Warwickshire 1978-79

#### The Central Avon Valley

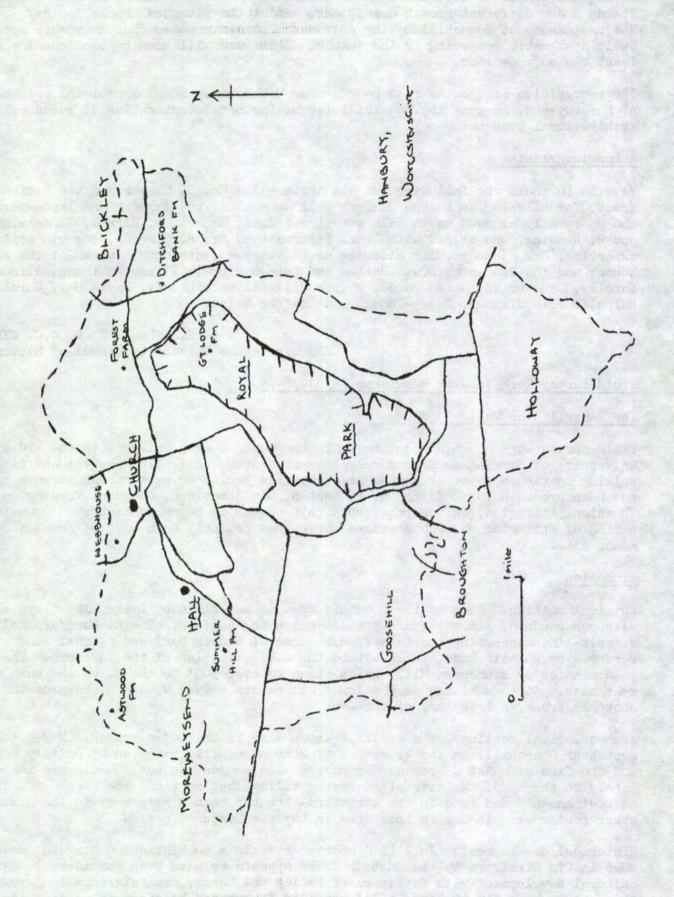
Field survey work has been continuing in the Central Avon Valley with the aid of University of Birmingham Extramural class students. While field survey and field-walking continues to cover a wide area detailed parish or part-parish surveys have now been produced for Luddington, Bishopton, Old Stratford, Longdon, Tredington, Thornton, Ettington, Whitchurch. Work this season is being concentrated upon the parish of Ettington where a measured survey has recently been made of the moated manor site.

#### Bishopton

Physical setting: Most of the township area is underlain by Lower Lias clays, although bands of limestone are present below the surface. The E. boundary follows a fault-line separating the Lias from an area of Keuper Marl and a small area of marl, bordered by Rhaetic beds, falls within the S.E. extension of the township. The area is dominated by Bishopton Hill, which rises to over 300° to the N. of the main settlement site. Streams rising on the lower slopes drain away W. and S. towards the Shottery Brook, a tributary of the Avon.

Archaeological setting: The earliest known site is that of a probable R-B settlement near Churchill, on the W. slopes of Bishopton Hill, revealed by pottery scatter and the find of a 1st C brooch. Cropmarks also suggest an early enclosure immediately to the E. of the site of Bishopton village but no finds are recorded. The nearest known Roman road is the Stratford-Alcester road a mile away to the S.W. but other routes were in use in this area in the pre-Conquest period.

Historical development: An 11th C charter reveals a sophisticated stage of development in Old Stratford by that date. There appears to have been considerable agricultural development with fields under barley and beans, and reference to "every third acre...on the bishop's hill' suggests fragmented holdings in an open field system. Additional parcels of land had been attached to the estate from other holdings by the Church of Worcester and included parcels of meadow-land and ploughland.



Some of these are again recorded in medieval and post-medieval documents but had no effect upon the actual Bishopton boundary. In the medieval period the open fields extended throughout most of the township and were subdivided into fields known as Nunhills Field, Blatherne Field and Clay Field, known collectively as 'Bishopton Field'.

The medieval village grew up alongside a lane leading from the main Stratford-Henley road towards Shottery Brook. The manorial structure was destroyed in the 16th C but the village survived until the early 19th C. The open fields were enclosed in 1775 and by the 19th C two farms dominated a small community of agricultural labourers. The church was in disrepair by the early 19th C and was demolished in 1836. Some of the smaller cottages still stood near Manor Farm in 1862 and depopulation seems to have been a lingering process which was only finally accomplished during the later 19th C. Eleven houses were occupied in the village in 1841 in addition to Burton Farm, only one house remaining empty. By 1851, however, three houses stood empty and only ten were recorded occupied. By 1871 the number of empty houses had risen to five. Roads leading from the Stratford-Birmingham road and N. towards Snitterfield fell into disuse. A new farm holding was established at Bishopton Hill.

Attempts to develop a fashionable spa in association with mineral springs in the S. of the area were made in the 19th C. A pump room, baths and hotel were opened in 1837 and speculative plans produced for high-class housing in the vicinity. A number of large houses were built in the Victorian period and a new church erected. Although the focus of settlement shifted S. this scheme met with little lasting success and the church has now been demolished. The area is now a suburb of Stratford with a number of isolated farm holdings.

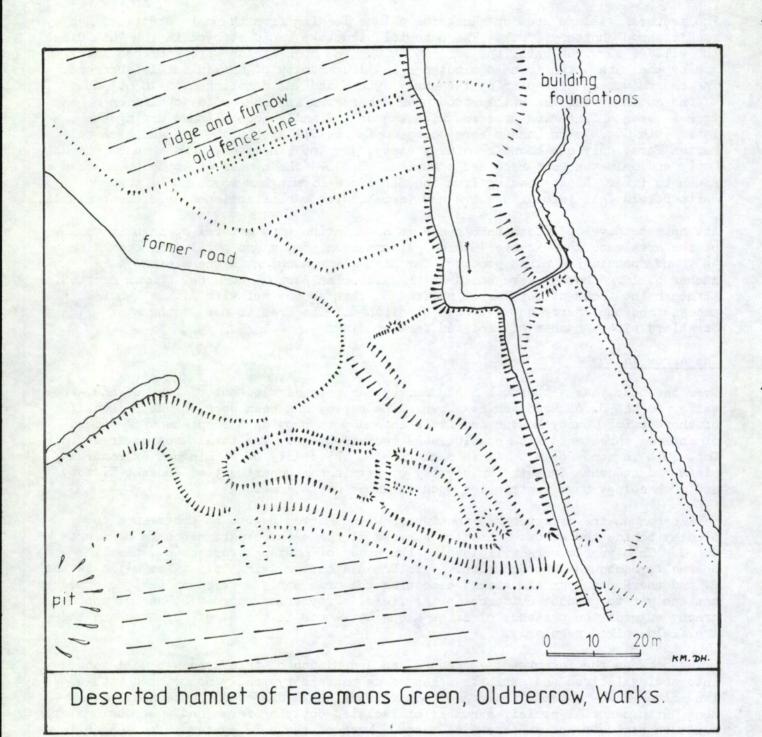
### The Arrow Valley

Over the past year a thorough field survey has been carried out of part of the Arrow valley to the S. of Redditch New Town. The survey has been carried out on behalf of the Warwick County Museum and it is intended to provide a comprehensive record of an area threatened with considerable redevelopment. The total area covered since Oct. 1978 is some 28 km<sup>2</sup>. Again members of a University of Birmingham Extramural class and students from the University of Birmingham Department of Ancient History and Archaeology have contributed much valuable assistance.

Work began on the E. watershed in Oldberrow and Morton Bagot and progressed to Studley beside the Arrow. Detailed surveys of these three parishes have been produced. This year's work will involve the study of parishes further S., namely Spernall, Sambourne and Coughton. With Roman Alcester lying only a few miles to the S. and the Roman Ryknield Street bisecting the area early settlement must be expected but has yet to produce evidence in the field. Cropmarks recorded by aerial photography suggest the presence of sites along the Arrow in the S. of the area and these are field-walked regularly.

Lying between the Forests of Feckenham and Arden much of this area was well-wooded into medieval times and exhibits a landscape pattern typically associated with woodland clearance - a dense network of minor roads and a dispersed pattern of settle - ment, with manorial nuclei, a number of isolated outlying farms and numerous hamlet clusters beside roads and areas of waste. Much of the road system is no longer in use and is represented only by earthworks and hollow ways. Many of the hamlet clusters are also deserted and survive only as minor earthworks which had not previously been recorded.

Oldberrow, on the fringes of Arden, was the least-developed parish, but at Morton Bagot and Studley the manorial nucleus attained the proportions of a fortified motte in the early medieval period. No associated village nucleus survives in any of these parishes. Although moated farmhouses were established at an early date beyond the main open field nucleus these were frequently associated with holdings in common arable fields in Morton Bagot and Studley and the open fields were far more extensive than had hitherto been expected. Documentary and field evidence shows that a large



proportion of the area, much of it now pasture, had at one time been under the plough. However, extensive areas of common waste also survived until the 19th C inclosure.

In Studley site investigation has also yielded further information about the Augustinian Priory founded at Studley in the 12th C. A large number of decorated medieval floor tiles have been recovered from the site of the Priory buildings and it has been confirmed that Priory Farmhouse developed around an early open-halled building containing a 14th C window and wall-plate beams decorated with billet ornament. Many other fine timber-framed buildings are to be found in the area and a survey of all notable standing buildings is progressing. All sites of historical and archaeological significance discovered so far have been recorded and measured surveys made of individual sites, but emphasis is placed upon the significance of these within the landscape.

#### Settlement depopulation:

It has been possible to reconstruct to a large extent the layout of the open fields and the associated medieval road pattern. While most major deserted medieval village sites with surviving earthworks have now been noted in Warwickshire a large number of smaller hamlets remain unrecorded, especially in this formerly more heavily wooded part of the country. In Arden numerous hamlets grew up beside roads and patches of waste-land and many of these failed to survive to the present day. Some appear on the early county maps but others have been found only by field investigation. To date no fewer than 12 cottage clusters and numerous single-house sites of this nature have been noted:

Oldberrow: Oldberrow has no village nucleus and settlement has diminished near the church since the early 19th C. There has also been total abandonment of a number of roadside hamlets and isolated cottages associated largely with the closure of many of the roads in the parish due to estate policy. The most notable clusters lay in the N. of the parish, one formerly known as Freeman's Green (location map, WMANS 21).

Morton Bagot: Again there has been depopulation of cottages which grew up as encroachments upon common waste, notably beside the commons of Woodwards Green, Greenhill Green, Church Green and Morton Common (map WMANS 21). At the latter site 15 houses have disappeared since 1807. A further deserted road-side hamlet lies at Warnap. At all of these sites depopulation was relatively late and concerned the more lowly cottages. Many of the occupants may have been affected by the final enclosure of the common land in the early 19th C and by movement to growing industrial centres.

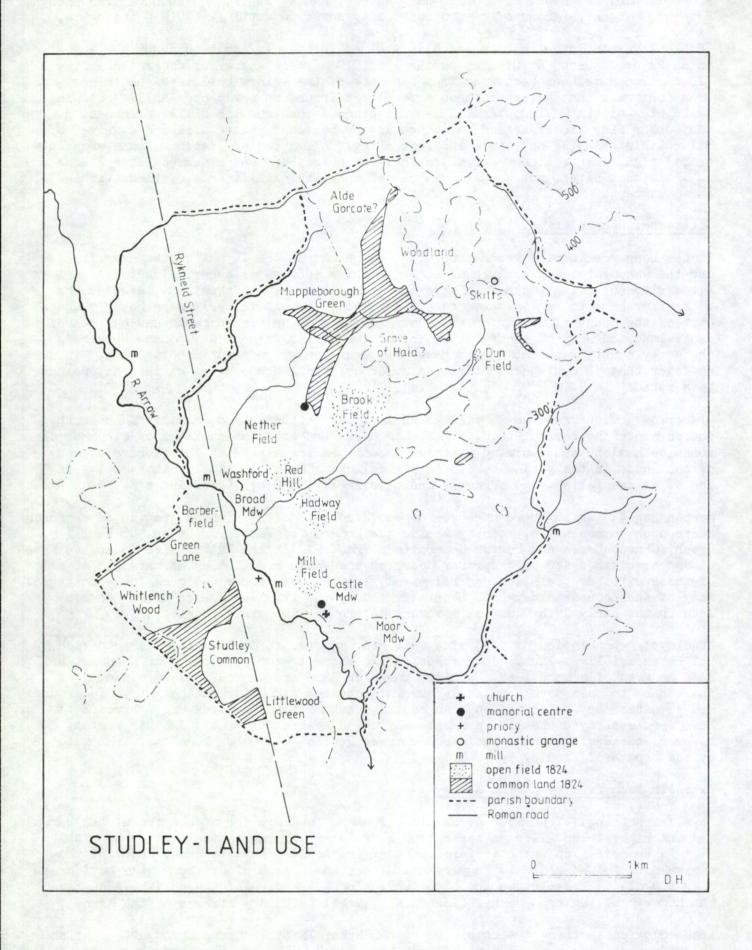
Studley: Depopulation of road-side cottages occurred throughout this large parish but is especially evident along roads in the E. part of the parish near Cracknut Hill, long an area of common land, Outhill, Hardwick Lane and Church End. Again many of these seem to have developed as labourers' cottages alongside patches of waste ground and 16 sites can be identified. An additional hamlet at Hardwick Green appears to have been destroyed when the present castle was erected in 1834. In this parish, however, the demolition of isolated cottages in the 19th C has been more than matched by the growth of Studley town.

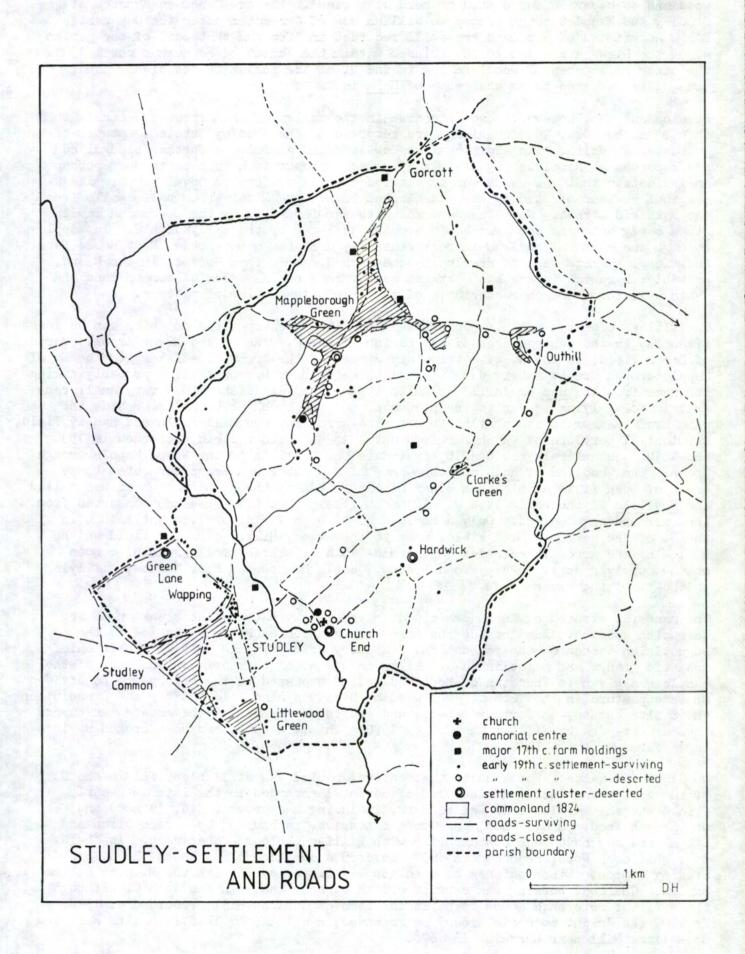
#### Extracts from Studley parish survey

Physical setting: The River Arrow flows from N. to S. in the W. section of the parish and the highest land lies on the N. and E. fringes, rising in the most N. section to 542° in Upper Skilts where it forms part of the Arrow-Alne watershed. Most of the parish area is underlain by Keuper Marl with a small area of drift, mostly boulder clay and clayey gravels, on the high land. The E. section of the parish is characterised by rolling topography, dissected by small tributary streams of the Arrow.

Archaeological setting: Although the Roman Ryknield Street runs through the parish no evidence of early settlement has yet been found. The earliest object located to date is a Viking or Saxon axe found within the churchyard.

Historical development: Studley lay between the wooded areas of NE Worcestershire





and W. Warwickshire and much of it appears to have been an area of marginal development in the pre-Conquest period. Its name, <u>Stodelege</u> in AD 1005, indicates 'the woodland or clearing for a stud or herd of horses'. The pre-Conquest estates of Studley and Mappleborough passed to William son of Corbucion after the Conquest. Large quantities of woodland are still recorded in 1086 and that part of the parish W. of the River Arrow was to be included within the Forest of Feckenham until 1301. The other major area of woodland lay in the N. of the parish on the higher land, some of it referred to as the grove of <u>Haia</u> in 1201.

Development was, however, more intensive in the valley of the Arrow, especially to the S, and by 1086, 19 ploughlands are recorded on the Studley estates, estates of 4 and 1-hide units, with additional meadow-land and a mill. 3 further ploughlands are recorded at Mappleborough. Only 17 ploughs appear to have been in use, perhaps an indication that the waste was considered capable of further development. The original nucleus of Studley was established beside the River Arrow half-a-mile from the Ryknield Street. Here the manorial site was fortified by the Corbucion family at an early date and the church was erected at least by the early 12th C. In Mapple-borough the manorial nucleus is represented by a moated manor-house, Moat House Farm. Additional hamlets were to develop by the 14th C, among them Gorcott in the N and, probably, Hardwick in the E. Cottages established beside areas of common land and waste were to become characteristic of this parish's settlement pattern.

The Village economy: open field arable: most of those open fields which can be identified lay in the central area of the parish on the E. side of the River Arrow. Parts of Brook Field, to the N. of a tributary stream of the Arrow immediately to the E. of Mappleborough Green, survived until Inclosure in 1824, but Dun Field, probably taking its name from the dun or 'hill' on which it lay, had diminished to a very small remnant in 1824, lying nearer to the headwaters of the brook at Outhill. Beside the same brook nearer to its confluence with the Arrow lay Red Hill Field and Hadway Field, substantial portions of which survived until 1824. Nether Field, recorded in 1598 and 1617, was entirely enclosed by that date but had lain to the W. of Mappleborough Green. The woodland of Haia and the waste of Mappleborough Green separated these areas of open field arable from other arable fields to the N, one of which was called the Heyfield in the early 14th C. It seems likely that these had been assarted from the surrounding woodland. Only a small area of open field survived until 1824 in the S. of the parish - Mill Field, near to the Priory Mills, a Barter Field on the W side of the Arrow is recorded in the mid- 16th C. Three small areas of common meadow survived until 1824 - Broad Meadow, Castle Meadow and Moor Meadow, all lying to the E. of the River Arrow.

The manorial structure was undermined at a very early date by the break-up of the Corbucion estates. Land beside the Arrow was granted by Peter Corbucion to the Augustinian canons on the foundation of Studley Priory in the 12th C. Their chief monastic grange was established at Skilts in the N. of the parish. The park of the castle was given to Thurstan de Montford and also passed to the Priory, to be divided up into pasture in the 16th C. The wood of Haye was also sold. After the Dissolution the Skilts estate was further sub-divided and the main part of the estate was turned into a deer-park by William Sheldon by 1570. This, in turn, had been broken up into three farms by the 17th C.

Woodland and waste: Woodland in the medieval period was still plentiful in the N. of the parish and included 'the wood of Gorcote' recorded in the late 13th-early 14th C and the woodlands in Skilts Park, including Ladygrove (13th, 14th C) and Graingcumb Wood. Grove Wood, once more extensive, is bounded by a deep ditch and a bank and may have been contemporary with William Sheldon's deer-park. In the W. too, Whitlench Wood, recorded in 1699, covered a considerable area to the N. of Studley Common. Other patches of woodland lay dispersed through the E. part of the parish. Charcoal burning was carried out throughout the 17th and 18th C, although the earliest reference seems to be in the name of Collday Hill, recorded c. 1540. In 1707 the 'right to coale trees' is reserved in a lease of land in Skilts Park and on Wallers Hill near Hardwick in 1678.

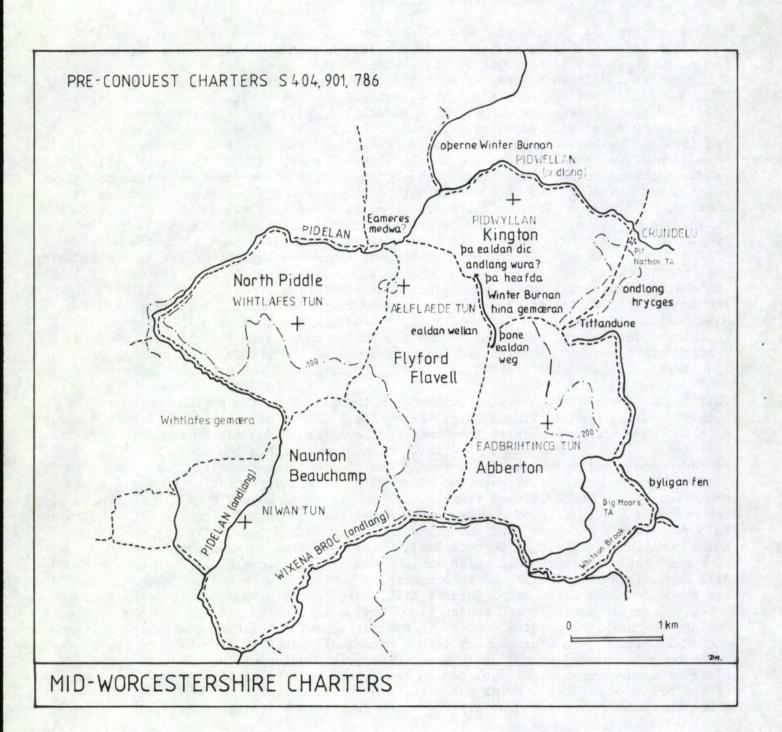
In common with Arden parishes relatively large areas of common land remained until

the early 19th C. Although some land had been enclosed to the W. of Ryknield Street (some known as 'Newlands' in the 19th C) Studley Common and Littlewood Green were still extensive in 1824, lying between the roads to Crabbs Cross and Birmingham, with an additional strip of common land along Green Lane. In the N. of the parish Mapple-borough Green extended along roads to the N. of the main Mappleborough settlement, with a small extension on to Cracknut Hill. Other tiny areas of waste lay alongside roads in the E. of the parish, especially at Outhill and Clarks Green. Both of these areas attracted the cottage-type settlement so familiar in this part of Warwickshire, much of which was to disappear in the 19th C.

Settlement growth: The development of Studley town is an example of settlement shift, for the original manorial centre beside the church remained only as a small hamlet known as Church End in the 19th C, since when further depopulation has taken place. A new centre had begun to develop near the junction of the Redditch-Studley and Birmingham-Studley road by the early 17th C, extending S. along the Ryknield Street, the main road from Alcester to Birmingham. Industrial growth was associated with the tanning, malting and needle industries. Although much of the trade of needle making remained a home industry the two water corn-mills of Washford Mill and the Priory Mills were adapted to needle manufacture in the 18th and early 19th C, the later still a needle scouring mill. James Pardow, who first applied steam-power to needle-making, established his mill here in 1800 and within 50 years the population of Studley had doubled. Outlying artisan colonies developed at Green Lane, where part of a further mill-building is incorporated in the present Griffin Inn, and at Thomas Town. Urban growth was rapid after 1849 and the town of Studley spread S. and W. to the margins of the parish, largely in response to the continued development of the needle industry and related industries including the manufacture of fishing -tackle, branches of light engineering and metal work. The development of Studley since the 19th C. reflects the impact of the Industrial Revolution upon a rural community. More recently, the N.W. portion of the parish has been lost to Redditch New Town with the subsequent industrial development extending to the new parish margins in that area. However, farming still remains important in the parish and at the present time housing and industrial development affects only a small proportion of the present parish area.

Buildings: The oldest surviving building in the parish is the parish church of the Nativity of the Blessed Virgin Mary, the earliest fabric of which dates from the early 12th C. No buildings remain of the early castle although Dugdale in the 17th C refers to ruins visible at that date. A 16th C house stands within the moat, known in 1523 as 'Corpsons', after the Corbucion family who retained the manorial centre until the 14th C. The house is jettied on two sides with later under-building on a third and preserves close-studded timber framing. A timber-framed house, Moat House Farm, also occupies the moated site of Mappleborough Manor but the 16th C wing has been destroyed in modern times. Another fine house incorporating 15th C timber-framing and later brick additions survives at Gorcott Hall. Timber-framing is also preserved in a number of outlying farmhouses which include Common Farm, Lowe House Farm and Highland Hill Farm, in Washford Mill and in a number of smaller houses and cottages. Examples are to be found at Green Lane, Gorcott Hill, Haye Lane and what was formerly Hardwick Green. Several timber-framed houses also survive in Studley itself. Priory Farmhouse appears to have incorporated part of an earlier monastic building containing a large open hall, and a 14th C window set into a stone wall has later been blocked by the addition of a chimney-stack. Holt Manor House, in Studley village was the manorhouse of a sub-manor which developed in the 15th C. It is of late 17th C date, mainly of red brick. The 16th C brick house built by William Sheldon at Lower Skilts was demolished some years ago and only the outer courtyard buildings survive.

Earthworks: Although no classic deserted medieval village site can be identified near the church it is possible to suggest the site of some early settlement. A number of the house sites abandoned in the 19th C can be recognised, both here and elsewhere in the parish. Earthworks near the E. end of Haye Lane may also indicate a settlement site. The castle moat of Studley Old Castle survives on the W. side and that of Moat House Farm in Mappleborough Green on the SW and SE sides. A moat indicated on the tithe award map at Haye Farm survives now only as a linear ornamental pond but may have been associated with the 'Heyplace' recorded c. 1536. A series of fish-ponds also appear to have linked with the River Arrow to encircle the Priory site. No earthwork features survive on the site of the priory although foundations have been located below ground and numerous floor fragments discovered. The large mill



pool of the Priory Mill has been drained in recent years and part of it filled in but the W. end of the earthen dam survives. At Washford mill the pool and tail race are well-preserved. A number of water features can be identified along the Arrow to the S. of Priory Mill. These include flood channels running across the necks of meanders and a series of shallow depressions, many of rectangular shape. A large irregular depression near the mill cut into the ridge and furrow may have been connected with the extraction of river gravel.

Ridge and furrow has been virtually eradicated from much of the parish but is splendidly preserved in the meadows alongside the River Arrow near Studley church. Here headlands and interlocking furlongs can be clearly traced. A disused road system is also clearly preserved as a number of hollow ways and disused roads elsewhere in the parish can still be traced on the ground. Many were deliberately closed when Francis Holyoake built the present Studley Castle in 1834, imparking an extensive area in the S.E. of the parish. No indications have been found of any park pale associated with the earlier park or that of Skilts and the only notable bank and ditch system surrounds Grove Wood in the N. of the parish. A linear earthwork has also been formed by a leat driven across the lower flanks of a hill near Gorcott Hall.

A fish-pond at Cranhills is of 19th C construction and a pond to the W. of Mapple-borough Green was destroyed by modern factory construction. Water was also diverted in the past through a brick-lined culvert to the needle works at Green Lane and a pond there has also been filled-in.

Archaeological potential: There is at present no evidence of prehistoric or R-B settlement in the parish. The most interesting area is that around the church where the original nucleus appears to have been established and the discovery of the axe dating from the A.S. period suggests some early development. The Priory site obviously warrants preservation. The river meadows near the church also contain some of the best surviving examples of medieval ridge and furrow in the area. It is to be hoped that most of the future housing development in the parish will continue to be in the W part of the parish to the W of the Birmingham-Alcester road.

DELLA HOOKE Dept. of Geography, University of Birmingham

# Pre-Conquest charters with boundary clauses

Following a detailed study of W. Midland charters accompanied by boundary clauses it is possible to offer more precise solutions for a number of those concerning land in Worcs., Warwicks and Glos. Solutions are offered here for two mid-Worcs. estates which lay in the wooded area near the Piddle Brook, an area known as Fleferth, after the O.E. fyrho 'a wood, woodland, wooded countryside'.

S 786 is a charter of AD 972 in which King Edgar grants privileges and restoration of land to Pershore Abbey. Its authenticity has been described as either 'authentic' or 'suspicious' but its bounds appear to describe the lands held by Pershore Abbey in the 10th C. Numerous estates are described, including the 4 adjacent estates of Wihtlafes tun, Eadbrihting tun, Niwan tun and AElflaede tun. Grundy, attempting to solve the accompanying clause in 1928, failed to identify Wihtlafes tun correctly and believed the boundary clause to be that of Naunton Beauchamp. In fact the estates are N. Piddle, Abberton, Naunton Beauchamp and Flyford Flavell, estates held by either St. Mary's of Pershore or St. Peter's of Westminister in 1086. The boundary clause is printed in Birch', B. 1282, Kemble', K. 570, and Earle':

B. 1282: pis sind para feower tuna lond gemaera Wihtlafes tun 7 Eadbrihting tun 7 Niwan tun 7 Ælflæde tun: æerest of Pidelan on pa ealdan dic; of pæere dic 7 lang wura on pa heafda to Winter burnan; of Winter burnan on hina gemæeran on pone ealdan weg; of pan wege on Tittandune; of Tittandune on byligan fen; of byligan fenne on Wixena broc; ondlang broces on Pidelan; 7lang Pidelan p eft on Wihtlafes gemæera.

aerest of Pidelan on pa ealdan dic: 'first from the Piddle to the old dyke', of paere dic andlang wura on pa heafda to Winter burnan: 'from the dyke along the furrow? to

the head (land?), wura may be a corrupt spelling of fura, from OE furh, 'a furrow' and the boundary is following a dyke and a furrow as it leaves the River Piddle on the N.E. boundary of Flyford Flavell; the headland appears to have lain where the boundary makes a right-angled turn around the furlongs of former ploughed land still bearing signs of ridge and furrow cultivation; the Winterbourne would be a brook of marked seasonal flow and although unmarked on the OS 1:25,000 was flowing strongly along the E. boundary of Flyford Flavell in January this year; of Winter burnan on hina gemaeran on pone ealdan weg: 'from the Winterbourne to the monks' boundary to the old way', following the boundary of Pershore lands the bounds make their way across a track leading towards Abberton, possibly a continuation of a N.-S. routeway tracable across mid-Worcs. from the N of Hanbury to Fladbury and beyond; of ban wege on Tittandune: 'from the way to Titta's hill', here the boundary meets the S end of a ridge followed by the E boundary of Kington parish; of Tittandune on byligan fen on Wixena broc: 'from Titta's hill to the bag-like fen to the Whitsun Brook', 'the bag-like fen' alludes to marshy land in the S.E. corner of Abberton parish, an area still known as 'Big Moors' from OE mor 'marshland' in the 19th C; the Whitsun Brook has been associated by some with the Anglo-Saxon tribe of the Wixna; ondlang broces on Pidelan: 'along the brook to the Piddle', the boundary follows the Whitsun Brook to its junction with the River Piddle near the S most point of Naunton Beauchamp parish; andlang Pidelan b eft on Wihtlafes gemaera: 'along the Piddle back to the boundary of North Piddle'; the clause quite obviously omits that part of Naunton Beauchamp lying to the W of the Piddle but this formed the separate township of Sheriff's Naunton, later a deserted medieval village on the site of Naunton Court; the charter in fact granted only 7 hides in Naunton, which in 1086 was assessed as a 10-hide estate.

A 404 is a charter allegedly of AD 930 in which King Athelstan grants 5 tracts of woodland at Fleferth lying on both sides of the Piddle, giving the boundary of a land unit 'at Piddle' (B. 667, B. 668, K. 346). The charter is described as 'spurious' or 'interpolated but based on a genuine text'. The same estate is described in AD 901 in a genuine charter, S901, in which King AEthelred leases the land to Archbishop AElfric for life. Grundy identifies this estate as N Piddle but an alternative suggestion may be presented for an identification as Kington: B. 667: Sonne sind bis Sa landgemaeru aet Pid wellan: of Pid wellan in crundelu; of crundelum sus ryhte ond long hrycges on Tittandune; of Tittandune west on ealdan wellan bonon in Winterburnan; swa in Pid wellan; of Pid wellan on Eomeres Medwe 7 swa on operne Winter burnan; baet in Pid wellan 7 swa ond long Pid wellan oppo crundelu. of Pid wellan in crundelu: 'from the Piddle to the quarry', the E boundary of Kington leaves the River Piddle to run past a stone digging known as 'Pit Nathan' in the 19th C; the pit appears to have been the source of Lias limestone rubble used for building; suo ryhte ond long hrycges on Tittandune: 'S directly along the ridge to Titta's hill', here the boundary follows the ridge on the E boundary of Kington; of Tittandune west on ealdan wellan conon in Winterburnan: 'from Titta's hill W to the old spring (or streamlet) thence to the Winterbourne, the Winterbourne was the seasonal brook referred to on the boundary of Flyford Flavell; swa in Pid wellan: 'in this way to the River Piddle', here the boundary returns to the Piddle at the W corner of the parish; of Pid wellan on Eomeres Medwa: 'from the River Piddle to Eomer's meadow, this feature has not been identified and a further complication arises from its occurrence in an unsolved boundary clause of Felferd which may refer to land on the N side of the Piddle Brook (S 786). It is just possible that the grant included the N extension of Kington parish; and swa operne Winter Burnan baet in Pid wellan: and thus to the other Winterbourne, then to the Piddle ; "the other Winterbourne" may have been the stream flowing into the Piddle from the N along the E boundary of the N extension of the modern Kington parish. The boundary then follows the Piddle back to the point at which it began.

#### References:

- 1. S numbers refer to those in P H Sawyer, Anglo-Saxon Charters, an annotated list and bibliography; (London 1968); Sawyer quotes comments on authenticity.
- 2. G B Grundy, Saxon Charters of Worcestershire Birmingham Archaeological Society
  Transactions and Proceedings liii (1928) 18-19

- 3. W de Gray Birch Cartularium Saxonicum 3 vols and index (London 1885-99)
- 4. J M Kemble, Codex Diplomaticus Aevi Saxonici 6 vols. (London 1839-48)
- 5. J Earle A handbook to the Land-Charters and other Saxonic Documents (Oxford 1888) 441-52
- 6. A Mawer F M Stenton and F T S Houghton, The Place-Names of Worcestershire English Place-Name Society IV (Cambridge 1927) 16
- 7. G B Grundy, op cit 40-42

DELLA HOOKE
University of Birmingham, Department of Geography

# PREHISTORIC

# Wasperton

Preliminary work was undertaken on a cropmark complex at Wasperton by the Oxfordshire Archaeological Unit in co-operation with Warwickshire Museum. The cropmarks, which were threatened by gravel extraction were recorded in the survey of the Warwickshire Avon by Webster and Hobley in 1964.

The site was then divided into three parts:

- Site 75: to the S. a pit alignment crossing a small square enclosure and a large rectilinear enclosure further S.
- Site 70: intersecting rectangular enclosure transversed by several linear ditches. Site 72: to the N, a series of linear ditches and rectangular enclosures and a pit alignment.

Recent aerial photographs show that there is in reality no gap between sites 72 and 70. The field dividing the two sites is now known to contain a series of linear ditches and many sub-rectangular and circular enclosures. The track extending S. from the village still appears to delimit the complex with only ring ditches appearing to the E. of it.

The aim of preliminary investigation was to assess the sites; archaeological and environmental potential, and to suggest future strategy for it.

# Excavation

A small excavation was carried out on the remaining fragment of Webster and Hobley's site 75. Most of this site had already been destroyed, but part survived under a quarry service track. Three of the pits of the alignment and one and a half sides of the enclosure—were exposed and investigated. In addition, one pit in the field to the E. of the footpath was excavated.

The enclosure, which appears from air photographs to be double ditched and approximately square, was found to be of at least three phases. No interruption was found in the excavated parts of the inner and outer ditches: if the enclosure had an entrance it must be in the obscured E. side. The enclosed area would have been 200-300 m2. Small square/rectangular enclosures sited apparently on the periphery of cropmark complexes are slowly being recognised as a recurrent type. Lack of associated occupation evidence may suggest a function to do with stock.

The pits excavated were all comparable in terms of dimensions, profiles and fill. They were all circular or slightly angular, with a surviving depth of 0.70 m top width 1.70 m bottom width c. 0.80 m and distance between pit centres of 2.5 to 3 m. The fills provided no evidence of ever having contained posts, and suggested even natural silting. A small post-hole was located midway between two pits. As this was within the enclosure, it is uncertain whether it related to the alignment or the enclosure. Unfortunately no more of the pit alignment could be excavated to establish whether this was a regular associated feature. One of the pits cut the inner, second phase of the enclosure, and the alignment can be assumed to postdate the third phase as well.

The alignment is similar to other excavated alignments. It is smaller than the square/rectangular shaped pits recently excavated in Northampton, but shows the same characteristic fill of uninterrupted natural silting. An Iron Age date is suggested by the presence of split wheat in one pit and the absence of R -B wares found elsewhere on the site: this would compare with other excavated examples.

The exact function of pit alignments remains unclear. They may in some cases form boundaries between land units. At Wasperton proof of contemporaneity of both pit alignments and the settlement within is necessary for the acceptance of this theory.

# Finds

The excavation produced very little occupation material: a small amount of pottery and flint but no bone. A total of twenty small body sherds were recovered, representing three fabric types: flint, flint with angular glassy quartz, and vegetable material represented by voids. None of the recovered sherds was diagnostic.

# Environmental Assessment

The quality and potential of the whole range of environmental data on the site was considered. Pollen, waterlogged material, carbonised material, animal bones, molluscan remains, buried soils and phosphate distributions were all investigated. The evidence suggested that the site, which is well-drained and circumneutral, is unexceptional in these terms. However, any future excavation programme should contain a strong environmental component.

# Conclusions

The importance and excavation potential of the Wasperton complex lies in its apparent completeness as a land unit, defined by the two pit alignments and the Avon. If treated as such it could have great value in the reconstruction of Iron Age economic and settlement models, and would contribute to the research of Iron Age/Romano-British land units, by overcoming the usual fragmentary nature of the evidence derived from the majority of excavated gravel sites. It is hoped to carry out further excavation and sampling as extraction proceeds.

1. G. Webster and B. Hobley, 1964, Aerial Reconnaissance over the Warwickshire Avon, Archaeol. J. 121

S. PALMER Oxfordshire Archaeology Unit.

1possible retouched piece; 1 core; 1 broken blade-

1 broken retouched bladelet (part of a backed

point?); 1 broken bladelet; 4 cores; 1 core-

# The Kinver Edge Area: Sixth interim report of an Archaeological Survey

Flint-scatters found in 1977-8 have now been identified by Dr. Barfield, whose help is gratefully acknowledged. All the finds seem Mesolithic in character, except where otherwise stated. Numbers below 25 in the list refer to locations mentioned in previous years.

# Blakeshall (Wolverley).

SO 824844

so 825845

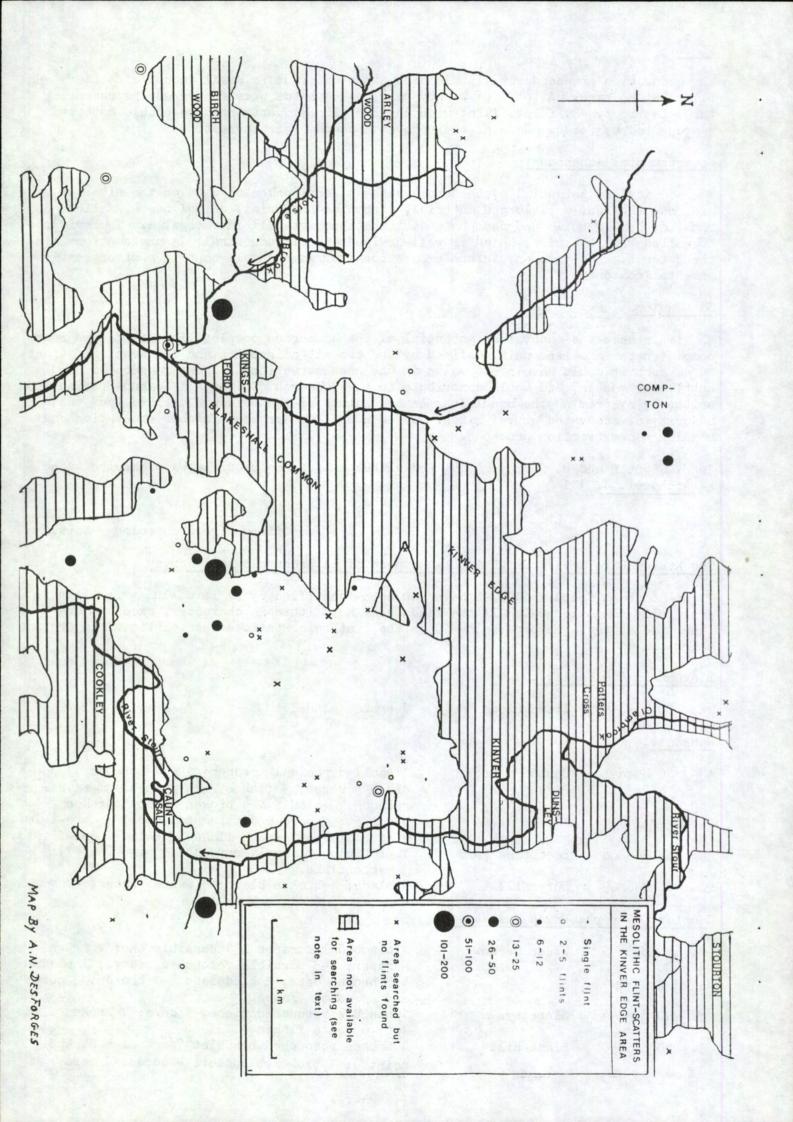
29.

Clareleys

Blaze Hill

DIGN	Conc	TTT (MOTACE	10,77	
18.	so	833814	Trows Piece	1 broken bladelet
Caun	sall			
13	50	858812	Benson's Pool Piece	1 small discoidal scraper; 1 end-scraper; 1 possible scraper; 3 flakes with possible marginal retouch; 2 blades & 4 broken ones; 1 broken bladelet; 1 core & 1 attempted core; 3 core-trimming flakes; 41 waste flakes. (Also 1 gun-flint).
25.	so	861808	Beechtree Farm	1 probable obliquely-retouched point (Meso?); 1 waste flake.
26.	so	846809	Bury Hill	1 blade; 1 broken blade; 3 waste flakes.
Comp	ton	(Kinver):	Union Hall Farm.	
27.	SO	823845	House Meadow	1 discoidal scraper & 1 possible one; 1 rough scraper; 2-3 possible retouched pieces; 1 blade & 3 broken ones; 2 bladelets & 1 broken; 2 cores and 23 waste flakes.

let: 6 waste flakes.



trimming flake; 23 waste flakes; 1 retouched piece, possibly not prehistoric.

# Kinver Hill.

23	so 849823	Barn Meadow,	
-).	20 01/02/	High Grove Farm	6 waste flakes.
30.	so 835823	Kinver Edge Farm, Lower Racecourse	1 retouched piece (point or arrow-head roughout?), probably Neolithic; 1 blade & 1 broken; 2 core-
			trimming flakes; 5 waste flakes.

# Wolverley.

16.	so 797807	Lower Birch Farm	1	small	end-scraper;	5	waste	flakes,
31.	so 83408003	Walk Piece	1	core				

# Collection of Mr. Reg Fisher of Cookley.

		have kindly been ide	entified by Miss J. Peirson Jones of Birmingham
	Museum. SO 833803	Liddy, Wolverley	30+ flints, inclusing 1 bifacially worked knife
26.	20 0))00)	Litary, wolvering	or awl; 4 scrapers; 1 core and a number of waste
			flakes; also 2 hammerstones.
33.	so 835804	Gloucester Coppice	
		Wolverley	1 blade
34.	SO 851787	Near Park Gate Inn	1 broken blade
	so 858812	Benson's Pool Piece	1 bifacially worked point; 1 scraper; 1 core; 3 waste flakes.

# Collection of Mr. G.R. Gilley, Little Kingsford Farm (SO 815813).

This has now been briefly examined by Dr. L.H. Barfield, and is seen to contain:

5 microliths (all of a narrow blade industry)
1 leaf-shaped arrowhead (Early-Middle Neolithic)

1 petit tranchet derivative arrowhead (Late Neolithic) 2 barbed and tanged arrowheads (Bell Beaker - E.B.A)

About 19 cores, mostly Mesolithic but one possibly Neolithic; about 9 scrapers; 1 point; several retouched pieces; 3 worked blades and several unworked; a large quantity of waste material; also one stone spindle-whorl.

This collection has been made by the land-owner over a number of years.

#### Note on the accompanying map:

This shows all known flints of apparently Mesolithic type from the area. The hatching represents the approximate extent of land not available for systematic searching; this includes built-up areas, woodland, heathland and some permanent grassland such as playing-fields and valley-bottom meadows. Small woods and isolated farms have been omitted for the sake of clarity. Some large blank areas on the map represent land which has reverted in recent years to semi-permanent pasture; these have not been hatched because they are occasionally ploughed and re-sown.

A small 'x' represents an area of at least 1½-2 acres systematically searched without flint finds; a larger 'X' implies an area of several acres examined.

# Bromfield, Salop (SO 483 766) - Excavations in 1979

Rescue excavations have continued on this multi-period gravel quarry site. No other features of the Neolithic and Beaker periods have been found to add to the pits excavated in 1978. A nearby ring-ditch has been discovered by drag-line by Mr F. Ellis, bringing the total of probable barrows on the Bromfield terrace to 20, a concentration unparalleled in the Welsh Marches. No artefacts have yet been obtained from this new

feature, nor from the excavated part of a nearby barrow ditch which was first recognised from the air in 1974.

Work on the interior of the square single-ditched enclosure is virtually complete. An irregular hollow in the N. half proved to be an ancient gravel quarry, probably for flooring since there was a heap of discarded large stones in its deepest part. This leaves the two 4-post buildings (2.9 m2 and 2.8 x 2.4 m overall) as the only possible house structures for which any evidence has been recovered.

The enclosure ditch is V-shaped and about 1.1 m deep from the natural gravel surface. A small internal rampart would have left a space of about 28 x 26 m for buildings, racks and pits. So far two and a half sides of the enclosure ditch have been emptied; a fourth side is inaccessible under a modern topsoil dump. Although finds have been few their position may be significant in reflecting the function of internal buildings. Near the larger buildings the ditch yielded sherds of several different Iron Age pots and a grey silt with charcoal flecks was found down the inside as though ashes had been thrown down the rampart over a long period. Around the ditch corner flanking the smaller 4-post building no such ashy deposit was found and sherds of only one pot have been recovered. These observations are consistent with the larger buildings being the dwelling and the smaller one the store building. A similar pairing of large and small 4-posters has been argued for hillforts like Croft Ambrey and Midsummer Hill and it is interesting to see the same family (?) unit represented at Bromfield.

The record of the boiling stones (or pot-boilers) from the ditch shows they were in use throughout the occupations of the enclosure. They have been found in all parts of the ditch as though derived from several different working sites inside but the only large concentrations have been in the S.W. and S.E. sides, furthest from the conjectured 4-post dwelling. This is seen to indicate that although they were probably used for boiling potfuls of water they were more commonly utilised for boiling larger quantities, perhaps for cooking meat or preparing hides. Unfortunately no bones of this period survive; nor has any carbonized grain been recovered. It is possible, but not proven, that the shallow clay-lined pits found in the interior are related in some way to the operations for which the boiling stones were required. As neither 4-post hut was rebuilt the occupation is unlikely to have lasted more than about 50-90 years. Only Iron Age pottery has been found so far; but it is not known whether the site is Iron Age or Roman in date. A second unused grave, next to and parallel to the first, has been found in addition to the 20 other A-S Christian graves found within the enclosure in 1978.

The excavations, which will continue in 1980 have been undertaken by the writer for the Shropshire County Museum Service and the DoE with the assistance particularly of Mrs Yvonne Stanford and Messrs.W.E. Jenks, R.C. Lett, D. Milsom, C.A. Stanford and P. Throssell. Lord Plymouth and the quarry staff have been generous with their help and interest.

DR S.C. STANFORD University of Birmingham.

#### ROMAN

# The Roman Fort at Eaton Constantine, Salop.

In 1975 Professor J.K.S. St. Joseph when carrying out aerial reconnaisance of the Severn valley found a triple ditched fort on the left bank of the river about three miles downstream of Wroxeter. (0.S., S.J. 600050) Traces of marching camps were visible in the flat land near the river in an area still subject to flooding.

The greater part of the fort is on a river terrace with an average slope of 1 in 26, the area enclosed being about 6 h. It is rectangular, the long sides following the slope and an entrance is seen on the short N. side where the fort lies on the flat summit of the terrace commanding a direct view to the Wrekin and the Watling street. The nearest modern roads are those from Wroxeter to Ironbridge and from the Eaton Constantine cross roads to the bridge at Cressage. These are nearly parallel to the N & W sides of the fort. There is a series of lanes from the Watling street Wrockwardine cross roads via Rushton and Upper Longwood which, taken together, form a straight line to the Ironbridge road in the valley N. of the fort.

GEOLOGY. The fort is set on a glacial deposit of gravel, compact sand and reddish clay, the underlying solid rock being the Upper Cambrian Shineton rather soft, blackish shales.

From a tactical point of view the site could not have been better chosen having regard to the serious military situation then prevailing. There is a 180° view to the whole W highland zone. It appears likely that Ostorius Scapula built this great road in his N.W. advance and probed towards the Severn in this area in the early fifties with a view to the destruction of Caratacus.

The site is wet and modern field drains are seen in the aerial photographs. The only artefacts consisted in the lower half of a corn grinding mill and a few brick sherds. A section 2 m wide was cut across the ditches 25 m E. of the N. entrance. Here, at the top of the terrace the topsoil was only 0.3 m thick and the glacial deposit weathered so that the ditches had to be cut into the soft black shale. All were lined with clay which contained quantities of burnt wood fragments of small size. The work seems to have been done in a hurry or else not well supervised for with the exception of uneven "ankle breaker" slots in the inner and outer ditches there was no attempt in the outer two ditches to cut them in the prescribed V shaped military fashion. A scrutiny of the aerial photographs confirms these findings at other points in the perimeter. Only in the inner ditch was there any evidence of a V shaped profile. The outer ditch was 4.8 m wide and 1.3 m deep.

The primary fill consisted of a dense greyish anaerobic gley (very fine silt) into which large stones had rolled. Next came a leached pale mass of turves and earth and small stones the uppermost layer being finely gritty.

The middle ditch was 3.4 m wide and 1.4 m deep but here the fill was much more sandy and the clay lining set on this insubstantial foundation had largely collapsed into the bottom of the ditch. Only in the inner ditch, 3.2 m wide and 1.9 m deep was there any attempt to cut a true V profile. A stony base which had supported an inner turf rampart had partly collapsed into the ditch.

A stony surface, about 1 m wide separated the outer and middle ditches whereas a compact mass of sand and some clay, containing burnt wood fragments itself lying on blackish shale lay between the inner two ditches. It appears that there was not suffient time to permit the growth of a thorn hedge between the ditches as was found in a striking decayed root pattern at Duncot N of Wroxeter. But turf ramparts, judging from the ditch fill, may have provided a substitute for the thorny equivalent of barbed wire.

The only artefacts were a few scraps of brick and burnt wood but it is hoped to continue the trench into the interior of the fort next season.

The group is much indebted to Professor F.W. Shotton F.R.S. for his help in interpre-

ROMAN FORT, EATON CONSTANTINE. TRIPLE DITCHES. EAST SIDE.

# Tiddington, Stratford-upon-Avon, Warwickshire

In April and Aug. 1979, a geophysical survey was undertaken on land adjacent to the R-B site partly excavated in 1925-7 by W.J. Fieldhouse and others. This excavation revealed evidence of cobbled floors, a cobble and gravel road, and assorted industrial features. The survey was commissioned by Warwickshire Museum in response to a planning application to develop land to the NE of the excavated area.

The survey covered two fields, both currently under pasture, to the NE of the golf course, S of the Tiddington Road. The main aims were to establish the limits of the settlement, and to assess the site's archaeological potential. Fluxgate gradiometers manufactured by Littlemore and Plessey were used, and to enable a rapid coverage of a large area, readings were taken every 2 m. With this relatively coarse grid, only major features were expected to be visible. Burnt structures, ditches and pits should appear as positive anomalies: walls and roads as minor negative anomalies. The survey indicated that archaeological features extend over most of the two fields investigated. The most striking feature identified appears as two arms of a substantial ditch; this is estimated to be of 4 to 4.5 m wide, 1.5 to 2 m deep, and perhaps 0.6m below present ground surface, possibly with an associated bank. This feature enclosed an area to the N of the golf course of at least 5000m2. The excavations of the 1920's appear also to fall within this enclosure.

Within the enclosure is a complex of features, some linear and some perhaps representing smaller ditched enclosures. There are also some intense anomalies which may represent industrial activity similar to that revealed in the 1920's excavations. Outside the enclosure the area is magnetically quieter, but features of interest are still present. Prominent is a linear anomaly (perhaps a droveway), approaching the major enclosure from the E, with possible structures aligned on it. The evidence of occupation covers most of the N-W field, adjacent to the road, and approximately the NW half of the SE field; it then appears to fade out.

The survey has suggested that the site is larger and more interesting than was originally thought: it is hoped to carry out trial excavations to examine the quality and depth of the deposits.

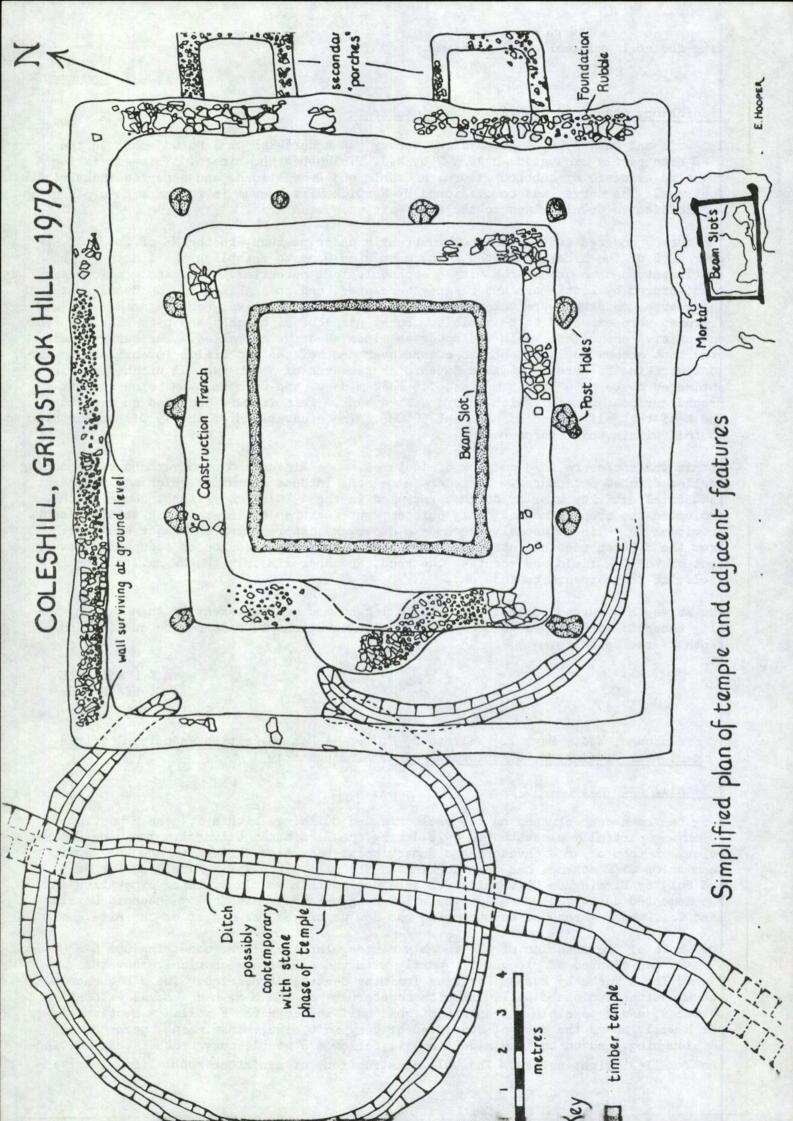
A & P ASPINALL C. HEATHCOTE Bradford University.

1. Fieldhouse, W.J., May, T., Wellstood, F.C., - A Romano-British Industrial Settlement near Tiddington, Stratford-on-Avon; Birmingham 1931

#### Coleshill Excavations, 1979

Work has been concentrated on the enclosure and buildings within it, the S portion of which was partially excavated in 1978 during the Birmingham University Training Excavation. A team of 18 excavators and supervisors, recruited through a Manpower Services Commission STEP scheme, has been working on the site since April, assisted for June and July by Birmingham University students during this year's training excavation and supplemented during July and Aug. by students generously paid for by Shepherd Development Co., whose warehouse construction has now destroyed the N part of the site.

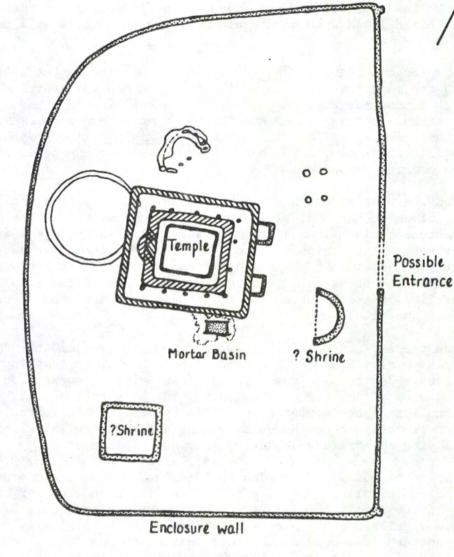
The whole of the interior of the roughly rectangular enclosure, measuring 65m N-S by 45mE-W, was cleared of ploughsoil, partly with the aid of a mechanical excavator loaned for 3 weeks by Massey Ferguson Training Centre, Stoneleigh. The N E corner of the sandstone enclosure wall, like its counterpart on the S E, had a small external buttress, and a possible entrance was found half-way down the E wall. A section of the N wall, where the natural consisted of very soft sand, was missing, perhaps due to ploughing, and on the N W side the wall followed a gentle curve rather than meeting the W wall at right angles. The wall construction, of sandstone rubble and river



# COLESHILL. GRIMSTOCK HILL 1979

Plan showing stone structures and other major features in and around the

enclosure

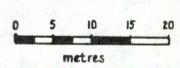


# Key

- timber temple
- zzz first stone temple
- Inter additions
- other stone structures
- 1.0 other features

Bath House





cobbles set in a clay-filled bedding trench, was fairly consistent, although the buttress on the N E corner had been mortared.

The centre of the enclosure was occupied by a Romano-Celtic temple, the S E corner of which was located in 1978. In its latest phase, it consisted of a rectangular stone-built cella measuring 11m E-W by 10 m N-S and floored with opus signinum on sandstone rubble makeup. The ambulatory, 2m wide, had a floor of gravel which was also found W of the temple, where its edge was defined by a shallow ditch, perhaps a storm-water channel to collect rain-water running down the hillside. At a later stage, two small annexes with shallow foundations were added to the E wall of the ambulatory, and a shallow mortar basin lined with planks was built against the S wall near the S.E. corner.

The building replaced an earlier cella without an ambulatory but with a small apse in its W wall, the footings of which were sealed beneath the gravel floor of the later ambulatory. It is unclear what sort of floor the building had, and it is probable that, when the ambulatory was added and the cella apse removed only minor modifications were made to the original cella. If so, the opus signium floor may belong to both phases, although a thick clay layer beneath its rubble makeup could have constituted a floor to the original stone cella.

The clay sealed the remains of an earlier, wooden temple, with a smaller cella 6.5m E-W by 6m N-S, of which the beam-slots survived, enclosed within the construction trench of the stone cella. It had an ambulatory, 11m E-W by 10 m N-S, of which 5 post-pits survived on the S side and 5 on the N. cut by the outer edge of the cella construction trench and two at the E end. Those on the W side were probably lost when the apsidal end of the stone cella was constructed. Associated with this structure was a layer of fire-cracked cobbles found in the temple area and extending over most of the S half of the site.

W of the wooden temple, and pre-dating it, was a circular building 12m in diam. with an E entrance and a clay floor with a central hearth. It is tempting to see it as a precursor of the wooden temple, but a phase of activity or occupation on the site separated the demise of the circular building, cut by a substantial N-S boundary ditch, and the construction of the wooden temple. It may be that the circular building is one of a number of early or pre-Roman buildings and that the later temples are on a new site overlaying an earlier habitation area and field system.

The interpretation of the square wooden building and its stone successors as temples is based on the ground plan. With the exception of a number of very small pots, often described as 'votive cups', in a number of different fabrics, some of which may be parts of triple or ring vases, there are no items with specifically religious connotations. The pottery recovered during this season, as last year, can mostly be ascribed to the 2nd C or earlier, although the coin series continues to the 370s. This absence of later pottery may be due to the religious nature of the site rather than to an early abandonment of the temple and its precincts.

The dating of the various temple phases is difficult due to the small quantity of material recovered from useful contexts. The circular building, defined by a narrow steep-sided gully, had no Roman material associated with it other than in the uppermost fill of the gully where it could have accumulated after the abandonment of the structure. The only direct evidence for the stone temples comes from the E wall of the ambulatory, which contained a <u>sestertius</u> of Domitian (c. AD 85) in its construction trench. The robbing of the stone temple seems, on the basis of several sherds, to belong to the mid- 17th C, and Dugdale's mention (1656) of walls 'lately digged up' in Grimeshill field may refer to this building.

The area N of the temple contained few features other than ditches, although a shallow semi-circular gully was found N of the temple with a row of posts across its axis. A 4-post structure N.E. of the temple had a Constantinian coin in the sandstone packing for one of its posts, and is the only structure known to be of a late date.

Excavation in the SW part of the enclosure, all which now remains of this area, is

continuing with the examination of features sealed beneath the burnt cobble layer associated with the square timber temple, and further work on the square stone (?) shrine and the free-standing stone apse S.E. of the temple, uncovered in 1978, is in progress. Further trial excavations and a re-examination of the bath-house partly excavated in 1978 are planned during the winter until the STEP scheme terminates in March 1980.

J.R. MAGILTON.

# Ryknild Street, Birmingham

On 8th Feb. 1979, during the laying of a new sewage pipe, a section was cut across Ryknild Street in Sutton Park, Sutton Coldfield, Birmingham (SP08459675). No trace of the road survived at this point at ground level and the section showed only what is interpreted as the bottom of the hard core. It is suggested that the bulk of the road material here has been removed and reused elsewhere as hard core or gravel.

DAVID SYMONS, for City Museums & Art Gallery,
Birmingham.

# Wall (Letocetum), Staffs. SK/098066

The excavation to the N.E. of the stone building (so-called 'Villa') has been completed and there is evidence of earlier 1st, 2nd and 3rd phase timber buildings; also what appears to be an E/W clay and cobble foundation which was totally robbed except for patches of clay. The stratigraphy is very difficult and the relationship of these structures to the latest phase of the stone building very tenuous as the early excavators had trenched along the walls. The Department of the Environment having moved the access gate, excavation is continuing to the N of the stone building where it is hoped to establish this relationship. The clay and cobble foundation of an early N/S wall is known extending N. from the stone building through the latest excavation and here stratification should be possible.

In order to concentrate on this important part of the site, the extended excavation of the "granary" mentioned in the previous report to the E. of the stone building has temporarily ceased. It has reached a stage where there is evidence of early 19th C drainage having been carried out by cutting land drains at 10 ft. intervals, these features then being packed carefully with sandstone, tile and river cobbles with some pieces of clay, the pottery recovered ranging from Roman to late 18th/early 19th C with some early 17th appearing towards the bottom of the plough soil.

Research work undertaken by Mrs Wilkes in relation to land ownership, tenure and usage is progressing but not yet complete. Excavation over the whole of the site will be carried out with a view to establishing the continuity of usage and occupation.

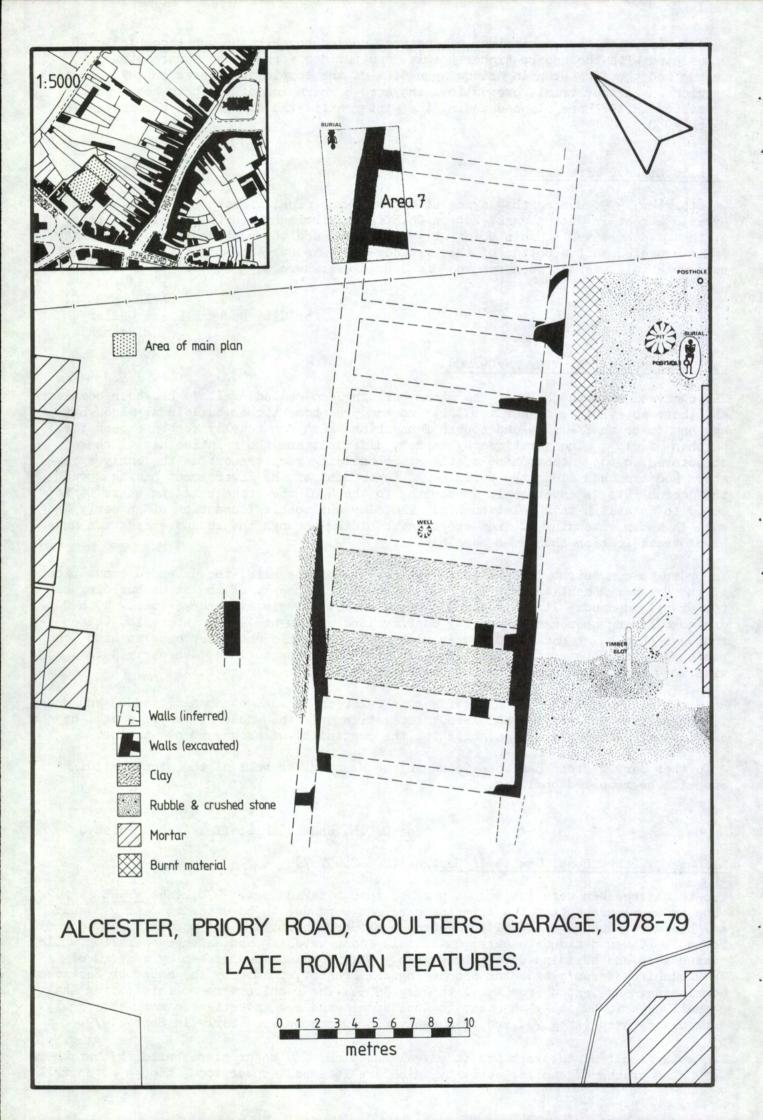
A further carved stone has been found in the N. corridor wall of the stone building and will be reported on later.

FRANK and NANCY BALL For D.O.E. and South Staffs. Arch. Society.

# Alcester, Priory Road, Coulter's Garage. (SP 08865737)

Two trial trenches were cut across part of this site in Sept. 1978, (see WMANS 21 p.79), when it was learned that the existing premises were due to be extended. As a result of this work, though excavation in advance of development was not possible for economic reasons, it was decided to carry out a full-scale watching and salvage operation while earthmoving and building were in progress. This work was undertaken by members of Warwickshire Museum's Alcester Archaeological Project, funded by the Manpower Services Commission, and lasted from April to July 1979. The results were so interesting that a small area immediately adjacent to Coulter's yard was investigated more thoroughly entirely by hand (Area 7), and this excavation was completed early in Sept. 1979.

The main result of the work was to reveal the plan of a major stone building, but there were also traces of earlier activity which are less well understood, though potentially



very interesting. There appeared to be three major periods represented on the site. Evidence for the first two was seen only in deep excavation for foundation trenches and drainage.

# Period 1.

Extensive organic deposits, encountered all over the area examined. These usually overlie river gravels directly, and in most cases incorporate wooden fragments. Some large pieces of wood were seen, the largest at least 1.5 m long. In two places several timbers were seen lying together, possibly laid to form a platform; and at another point the end of a large horizontal plank was found to have been held in place by small vertical stakes. The date of these deposits is not known but environmental work may help to solve this problem.

The period 1 deposits were sealed by a deposit of clean red/brown Keuper marl. This varied in thickness from c. 0.5 to 1.0 m and contained no archaeological material except in Area 7 where a single flint, perhaps of Bronze Age date, was found. It is tentatively suggested that this deposit may compare with others noted in the Avon Valley by Shotton, and thought possibly to date to the late Bronze Age. (See F.W. Shotton, "Archaeological inferences from the study of alluvium in the lower Severn-Avon valleys" in CBA Research Report no. 21)

# Period II.

Appears to be of Roman date. Some material was recovered from layers sealing the red marl build up; but the main features, probably roughly contemporary, were the water-logged bases of seven large posts. The possible positions of two other posts were noted. The timbers, of oak, were flat bottomed and set in large gravel packed pits. The best preserved was 0.88m tall, and 0.23 x 0.34 m in section. The function of the posts is unknown. Since they were found at random in deep trenches the plan of any possible structure is quite unknown. Extensive burnt deposits containing a few Roman sherds were located across the site at a depth which may be associated with the posts, but there is no stratigraphical evidence for a direct relationship. This period remains enigmatic.

# Period III

This period was represented chiefly by the large stone building which had been partly located by the trial trenching. It became clear from the stripping of the central part of the garage yard, and from subsequent trenches, that the building was much larger than had been supposed. Area 7 was excavated to confirm the details of the plan.

The building was of stone, the walls varying in thickness from 0.8 to 1.05 m, and the foundations were up to 1 m deep. Coursed masonary survived in places up to four courses high. The plan is remarkable; a series of rooms (probably at least 10) with internal dimensions of approximately 3 x 10 m, formed a building or wing of a building at least 40 m long. There were rubble, clay and mortar surfaces on both sides of the building, but these, while clearly related and roughly contemporary, may not be part of the same structure.

On the N.W. side of the building a length of wall was found which may represent a further structure of similar type and date. It lay at an angle to the alignment of the main building and is not considered to be a part of it. Unfortunately no floor surfaces within the building could be positively identified. A single clay surface appeared to have served during the useful life of the building, and nothing was found on it which gave any real clue to the date or function of the building. There is slight evidence which suggests a terminus post quem of early/mid third for the construction. Two late 3rd C coins were found in the robber trenches, but coins of Julian (361-3) and Valentinian 1 (364-75) may also have been associated with the robbing.

There is some evidence of later activity on the site. A pit, 3 stone packed postholes and a couple of burials are probably of late Roman date. Evidence of mediaeval occupation is very slight. A pit and several small? postholes in area 7 contained medie-

val pottery.

The main outstanding problem is that of the function of the large bullding. Some sort of public enterprise seems to be implied, but no comparable structures are known, from lowland Britain at least. The closest parallel for the plan is a cavalry barrack block at Benwell, which has nine rooms of very similar size to those of the Coulter's building. However, military occupation in Alcester at this time is, at the very least, unlikely. One possible line of enquiry might be to link the building with the period II structure. This seems to be unusually substantial, judging by the large posts, and it is possible that there could have been continuity of function, whatever that may have been, from the timber building to the stone one.

The siting of these buildings is interesting, in that they are apparently located outside the defended part of the Roman town, but to the N of the well known extra-mural area. They are also very close to the marshy deposits in Bulls Head Yard (WMANS 21 p. 79). Whether this unusual siting has any bearing on the function of the buildings is unknown.

The N end of the building remains available for investigation, and it is important that no opportunity should be missed here, particularly should redevelopment take place, as seems quite possible. The main part of the building was very badly damaged by the building operations, but fragments survive beneath the new yard of the garage. The records and finds are in Alcester, and work on the full report is in hand.

PAUL BOOTH

# Wroxeter Roman City Baths Basilica 1979

#### Interim Note

Work in the 1979 season was confined to structures overlying the W end of the basilica and the portico between it and the Watling St., and in removing the remainder of the 'gravel street', dissecting the 'guard room' building at its W end, and continuing the excavation of the robber trenches of the portico colonnade and the great drain which lay along the N end of the basilica.

#### The Basilican Area

By removing the public catwalk between the museum and the baths the W limit of our excavation was moved to the outer edge of the W portico. It will now be possible to examine the later development of the portico which Dr. Webster has shown, further S, to be complex and highly relevant to the history of the whole insula.

The removal of the rubble platforms of the last period buildings overlying the W end of the basilica was continued, revealing further worn surfaces and buried soils. The occupation surface lying over the W end of the basilican nave may prove to be of the greatest importance for the estimation of the length of the whole site's chronology. The surface consists of brown soil with pebbles and larger, flat stones all worn by continued use. There was a mass of bones from this surface, but only a small handful of pot-sherds and three or four coins. This contrasts markedly with the quantities of pottery and coins from the superimposed, later, layers of rubble. This occupation therefore, only centimetres above the level of the original basilican floors, may already be aceramic and with few or no contemporary coins. Since it can now be demonstrated that all the rubble and soil layers overlying the basilican floors must have been imported from elsewhere (though not necessarily more than a matters of yards, say from the ruined baths) it now appears possible that the bulk of the pottery, coins and other finds from the previous nine or ten years' work on the site of the basilica is residual. This view, which is as yet only tentative, is reinforced by the discovery of late cross-bow brooches in these earlier layers, and by the memory of a bonepit without pottery discovered cut into the basilican floor in 1967, when a long trench was dug by prisoners. Much more work will be needed on the coins, the pottery types and on the metalwork before this suggestion can be confirmed, but it is a most interesting possibility.

# The 'Gravel Street'

The remaining length of the E-W 'gravel street' was dissected and removed, revealing the very large trench left by the digging out of the previous cobbled street. The 'guard room-like' building at the W end of the street was dissected and proved to have had a small room attached to its W wall. The building may also have been of 2 periods, though this has yet to be confirmed. The excavation of the robber trench of the E-W portico colonnade was continued, together with the examination of the spine of material left between the removal of the 'gravel street' and the robber trench. This spine which is, in fact, the filling of the trench left by the removal of the E-W stone drain, consisted of water-washed gravel and sand. This leads to the conclusion that the drain, and, subsequently, the trench left by its removal (at an unknown date) were the line of a conduit of constantly flowing water (probably from the aqueduct) rather than an intermittent drain.

Work continued on the small area in insula 2 N of the E-W street and close to the Iron-bridge road. Here the massive clay and cobble-lined pits of the very large post-built structure discovered in previous years were emptied and examination of the features underlying them began. There was a very large and complicated pit, perhaps fed by a gulley similar to those previously found on site A and shown to be industrial. Close by were the remains of a furnace which may be associated, as on site A, with this pit. A coin of Constantine I was sealed within the collapsed clay dome of the furnace. It is clear, therefore, that at some time after the early 4th C an industrial complex was cleared to make way for the succession of very large timber buildings of the last phase of this part of insula 2. This is consistent with the evidence of reconstruction from the baths insula, 5.

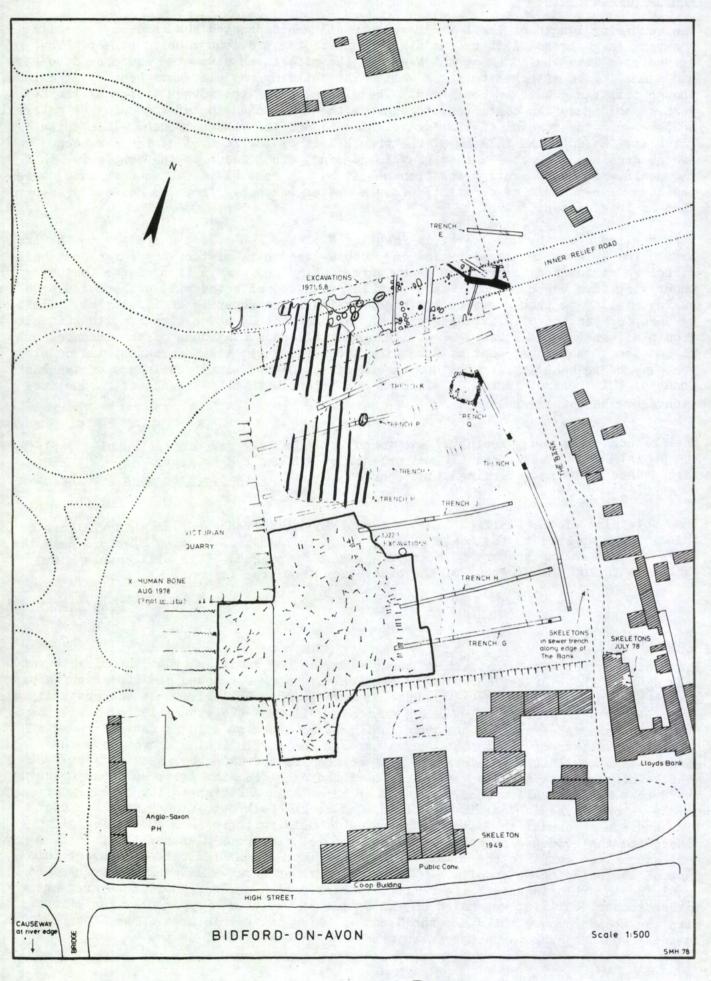
The skeleton of a young woman (?) was found in a shallow grave in the rubble overlying the N aisle of the basilica. It was orientated N-S and had no grave goods. A radio-carbon date is being determined, and should give us a terminus ante quem for the abandonment of the site.

The hole plan of the basilica has now been laid out in red sand, so that visitors to the site can appreciate the scale of this great building. A viewing platform near the Old Work with an explanatory text and drawings is promised. This will enable the public to follow the progress of the excavation from year to year.

P.A. BARKER

#### Wroxeter Report 1979

The most important factors in this season were the DOE decisions that the disintegrated herring-bone floor of the macellum inner portico could be removed and that open working was better than in small heavily shuttered areas. This will give us the opportunity of removing the deep Hadrianic levelling dump of spoil from the excavation of the baths from the whole inner area of the macellum. It soon became evident that there were no early civil structures in the central area. The levels inside and outside the stone rampart building were found to be more complicated than they seemed to be last year. There appears to be a used surface extending E from the stone wall and covering the W edge of intervallum road, but whether this is an addition to the building or merely an open area in use, is not clear, and it has been cut through by a N-S abortive Hadrianic foundation. Inside the rampart building there is a succession of floors and the evidence suggests that they were of timber. An unusual feature is a small fireplace cut into the E wall. These new factors may indicate the use of this part of the building as an office. In the N corridor (Area 91), work was started in examining the relationship between military destruction and early civil layers, and a timber rampart building was noted on the N side of the trench apparently contemporary with the stone rampart building, the N end of which is in this area. The timber building would appear to have been superseded by the series of ovens.



RCHAN FEATURES

E'ARLY SAXON GRAVES

LATE SAXON FEATURES

Work continued on the stripping of the W portico and in the N half, the primary construction levels were exposed. The S area was taken down to a continuous pebble layer with evidence of much sinkage and patching. Coins of the late 3rd century were found above this, suggesting that it was the surface belonging to the renovated macellum (c.300). The W end of the S corridor was stripped down to the undisturbed stratified layers. This area now extends up to the large N-S drain. The area of this corridor to the E between the two huts (Area 80) is still very difficult to understand. The sequence of lateral trenches and pits is gradually being resolved, but it all seems to show that this corridor could not have been used to service the praefurnium, which must have had a separate entrance from the street.

GRAHAM WEBSTER

# ANGLO - SAXON

# Bidford-on-Avon 1979

In June 1979 a further 10 days excavation in advance of redevelopment was carried out on the site belonging to Birmingham Co-operative Soc. in the area between the Anglo-Saxon cemetery and the new Inner Relief Road.

Three E-W trenches M, N and P were cut by machine and a N-S cutting Q c. 11 x 2 m was excavated by hand from the bottom of the ploughsoil. The aim of cutting Q was to obtain further information about the pitched lias foundations revealed in Nov. 1978 at the N end of trench L. The foundations were found to be the footings of a small square building c. 8 m across (exterior width). Fragments of Roman roof tile, mortar, bone and a few sherds of probably 2nd C pottery were the only finds, suggesting a roofed aisled building with probably mortared walls on the wider pitched unmortared footings. When two extension trenches were dug by machine to locate the S and W walls of the building a complete Roman pit apparently containing a cremation was found within the building, though its stratigraphic relationship to the building could not be determined. This raises the interesting possibility of continuity of burial from the Roman to the Anglo-Saxon period. Bone from the undated skeletons found in the Iloyds Bank extensions in Aug. 1978 has been sent for C14 dating, and the possibility that these may be Roman can now be raised.

The three E-W trenches were dug to check for further Anglo-Saxon burials. There were a number of isolated negative features, further N-S ditches, a further S extension of the Roman quarry and a single Anglo-Saxon grave (trench P). The N-S ditches which are mostly Roman or later in date are potential boundary ditches either to the Roman building and/or to the Anglo-Saxon cemetery and it would be an advantage to obtain further information on these.

The grave contained a well-preserved probably male skeleton in an extended supine position with head to the S. With it were an iron spearhead and knife, a pair of bronze tweezers, a bronze strap end and a bronze buckle with pierced triangular buckle plate. Although only one burial was found and there is no evidence for any great density of graves in this area, it is clear that any excavations in the area E of the Roman quarry (and possibly W of one or both of the N-S ditches at the N end of the site) may disturb further burials. If possible an archaeologist should be on site when foundation and service trenches are dug during the redevelopment of the site for housing.

S.M. HIRST for Warwick Museum

#### MEDIEVAL

# Bordesley Abbey 1979

# Interim report

The excavation this year was in August for 3 weeks, with a further week of analysis; it was characterised by a very wet and windly second half, which precluded completion of intended goals, and high-quality excavation techniques.

Ten students from Rochester University (New York) were the main student force, with Professor and Mrs Walsh; there were also single students from Lancaster and Reading Universities, and one intending student from York. There were also volunteers, among whom we must especially acknowledge the help of Joan Tanner and Steve and Verna Wass. Susan Hirst directed the church excavation, and Dr Grenville Astill of the University of Reading and Dr Tania Dickinson of the University of York that of the E cemetery. Lorna Watts was in charge of finds, Ian Burrow continued work on the vestry area report, and Ian McCabe assisted survey and elevation drawing. John Bateman supervised camp management, and Marion Yoxall was our cook.

The Redditch D.C. and the Redditch Development Corporation again gave generous financial grants and other assistance, and the latter body gave a reception and meal for all the diggers, which was much appreciated. The School of History of the University of Birmingham lent us tools and a marquee.

# The Church

The E. bay of the nave, the crossing and presbytery were virtually completed after seven seasons of excavation. All that remains to be done is the final examination of the pre-monastic ground surface in the presbytery which was made impossible this year by rain.

Period 1 Primary builders' levels were extensively examined, mixtures of lime, mortar, half-burnt limestone and kiln-lining, charcoal, pebbles and sand. Some small areas of green sandstone chips could be ascribed to the final dressing of masonry elements, but it is clear that most blocks were prefabricated. After the insertion of foundations for the E end, a layer of clay was laid down (c 40-70 cm thick). This was covered with a lime-rich screed which formed the working surface for the erection of the superstructure, associated with scaffolding, which was dealt with in 1978. The clay layer took 50 person-days to remove, the largest single layer which has been excavated at Bordesley Abbey.

Associated with these earliest building levels at the W edge of the crossing (i.e. the E end of the nave) were timber-slots. These are interpreted as having held timbers for a temporary wall of wood. This is believed to mark the W termination of the first building programme, the completion of enough of the church to enable its E end to be brought into use for liturgical purposes, and the abandonment of the temporary wooden church which had served until this time.

Excavation located for the first time the existence of sleeper walls between the piers of the first (E) bay of the nave. These consisted of a trench-set raft of cobbles, on which was set a single course of ashlar, buried by make-up beneath the period 1 floor.

Period 3A It will be remembered that the N-W crossing pier of c 1250 had collapsed, c 1340 and been replaced by a massive new construction. A large section of the fallen pier had embedded itself in the ground, extruding natural clays and soil to form a ridge all round it. This year the natural around this embedded section was removed. The block of masonary proved to be up to four courses of the easterly respond of the N-W pier, which had embedded itself into the natural to a depth of over a metre. Three factors must be understood here:

1. the height from which the masonry fell

- 2. how much fell apart from the piece found embedded
- 3. the nature of the subsoil at the time of the disaster.

Further research may be able to define perameters within which these factors were effective.

Beneath the embedded masonry was a piece of preserved wood interpreted as a fragment of the choir stalls through which the masonry crashed. On its S edge was a wedge-shaped void with some preserved timber, interpreted as a wedge driven in after the collapse in an unsuccessful attempt to prise apart and remove the embedded masonry.

The four courses of the respond exhibit false jointing, the first evidence that this technique was being used in period 3A (later 13th C). Below this each E facing member of stone is lightly incised with the letter B, perhaps to facilitate construcion.

Period 4 The rough foundations for the period 4 (14th to 15th C) N-E crossing pier were removed, and found to consist partly of some important late 13th C mouldings. Behind these were the lowest ashlar courses of the N-E pier of period 1, a mirror image of that of the S-E crossing pier.

# The E and N-E Cemetery

25 more graves were excavated which included the whole of the E row of the cemetery E of the presbytery, and a group of slightly radial graves in the angle between these and the N transept. The graves were principally of pre- 14th C date as far as could be ascertained, and some (if one may judge by the absence of tile fragments) were of period 1 (12th C) date. 'Containers' included multi-component stone 'coffins', wooden coffins, holes in the ground covered by wooden lids, and earth graves. A good deal of wood survived, in variable condition. One stone coffin had not only a head-recess of the usual kind, but also a lid for it, with a corresponding recess in its underside: inside this the skull was perfectly preserved. The skeletons were mostly well-preserved, but a few were very soft. The principal variation was in arm position. Many had hands folded across the pelvis, some with arms folded across the waist, and a few more irregular. One had clearly been buried in an advanced stage of decomposition or moved from a temporary grave, to judge by the anomalous position of several parts of the body. There were several cases of super-imposition, and the next row to the E had encroached on the ends of the graves of the first row. The three memorial slabs (one named HENRICUS) found earlier were removed; no grave at all was found beneath one: it may therefore have been a memorial stone to a monk who died or was buried elsewhere.

#### Future Work

In 1980 there will be a final examination of the pre-monastic ground surface under the presbytery (Steve Wass), and completion of the remaining graves in the E/N-E cemetery area (Tania Dickinson). Susan Hirst will direct work on the next monograph which deals with the rooms S of the S transept, the E bay of the nave, crossing and presbytery, and the E and N-E exterior.

Further excavation of the church will be resumed in 1981 with the excavation of parts of the cloister, E and N cloister walks, S aisle, nave and N aisle. The principal excavation in 1980 will be on the Industrial Site and Watermill complex at the lower end of the valley, under the direction of Dr Grenville Astill of the University of Reading. This university is now joining York and Rochester USA in the Bordesley Abbey project, and we anticipate a rather larger scale of work and training from 1980 onwards, with 30 or more students taking part.

P.A. RAHTZ The University of York

# Hulton Abbey, Stoke-on-Trent, Staffs. (SJ/905493)

After completion of the excavation and the restoration of the foundations in the S transept work continued in the N transept of this 13th C Cistercian Abbey. During

1979 most of the walls of the N transept were excavated and restored and excavation of the interior of the transept has commenced. At the junction with the E end of the N aisle a burial was discovered close to a large trench filled with boulders. The trench, parallel with the N wall of the aisle and the N-W tower-crossing pier, may have been cut subsequent to the erection of the church to give added support to the foundations.

S.J. GREAVES

# Pipe and Lyde, Herefordshire: An unrecorded castle (SO497439).

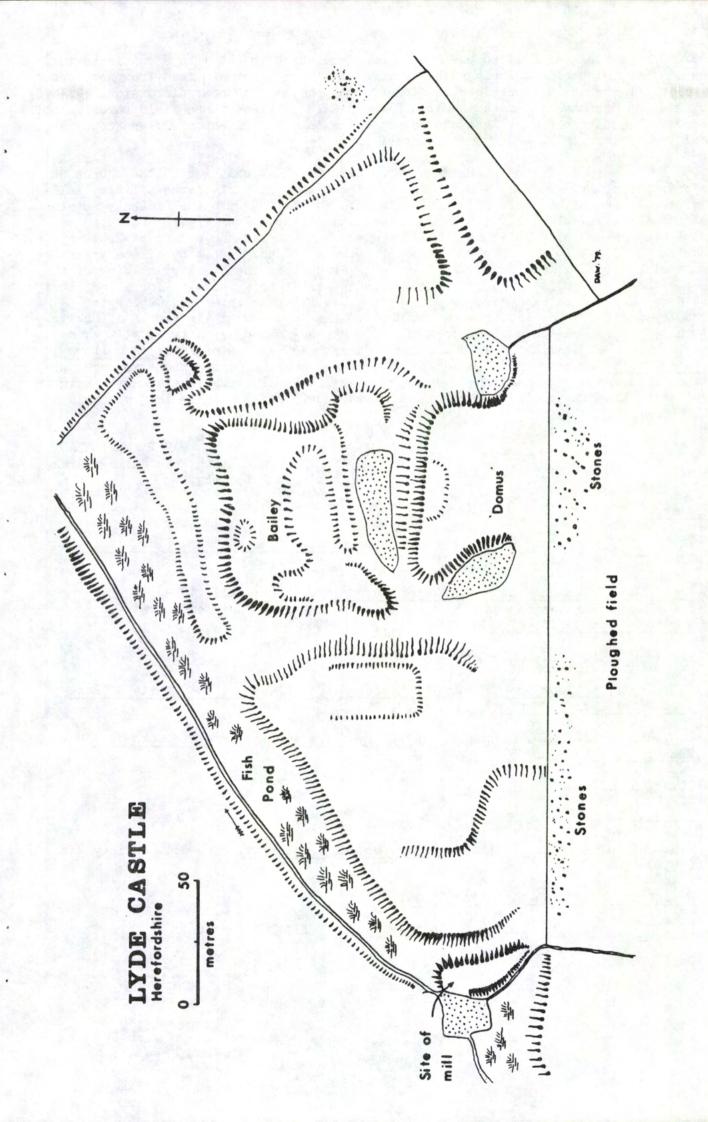
The earthworks described below were discovered by accident in 1976. They cover an area of c.5h in a field of rough pasture 400 m W of Pipe and Lyde church adjacent to a public right of way running towards Elton's Marsh. Due to their irregular character at first it was thought they may have been created by the quarrying of Old Red Sand stone which is recorded in the Parish in the 19th C or possibly, since Pipe and Lyde has several dispersed settlements, a DMV similar to the site recorded near Lower Lyde Court. However, on the 1838 Tithe Award a field above the earthworks is called 'Castle Head' which suggested quite a different line of thought, one which was subsequently confirmed by a sketch plan made in Jan. 1979

The most prominent features on the site are (i) an irregular raised platform surrounded by a ditch on three sides which is separated on the N from (ii) a larger rectangular enclosure also defined by ditches which in turn overlooks (iii) a dried out fishpond. To the W there is (iv) a much larger raised area which terminates in a sunken road leading to the tail of the fishpond. Since the smaller platform (i) is only 3 m above the bottom of the enclosing ditch it makes a very poor 'motte' yet, even this elevation and its relative position to the 'bailey' (ii) is such that it does not conform to the conventional moated site. The nearest parallels known to the present writer are the 'domus defensabilis' at Eardisley where the mound stands 4 m above a rectangular bailey, and the low earthwork known as the 'camp' at Breinton which when excavated in 1961-2 turned out to be a substantial 12th-13th C house defended by a ditch? The largest enclosure (iv) presumably formed a garden or orchard which in documentary sources appears to have been a regular appurtenance of castles on the Welsh border. The slight rectangular area above the ditch is perhaps the site of a barn or stable.

The area to the S of the 'domus' platform has been ploughed out and the field boundaries altered since the 1903 O.S. map. The S edge of the platform is indicated by a slight declivity and a scatter of stones in the ploughed field. Further to the E, above the larger raised enclosure (iv) there is another scatter of stones suggesting that there were other buildings situated here. There are also several large blocks of sandstone, some of which appear to have been worked, lying at random on the site and the irregular hollows which are a prominent feature of the earthwork are presumably due to the robbing of stone foundations. The approach from Pipe and Lyde church is marked by a hollow way clearly visible where it draws near to the 'domus' platform.

The presence of a mill site at the top of the fish pool is corroborated by the name 'Mill Close' on the Tithe Award. The raised mound which supported the mill and the mill pond are well defined features. There is no sign of a dam at the E end of the large fish pool but since the brook flows rapidly towards Pipe Bridge through a deep channel, a large head of water could have been secured by a relatively small bank.

A reference to the castle occurs in a charter of c. 1225-50 where Edith de Homptun grants to the almshouse of St. Ethelbert in Hereford 3 acres of land at Lud Godfridi. One of the acres is said to lie 'below the castle (sub Castello) in the field called Middelfeld' between the land which formerly belonged to Walter de Luda and the land of William Ermelin. The name Lyde Godfrey no longer exists and seems to have disappeared during the 14th C, when the estate became identified with its new lease holders the Arundels - hence Lyde Arundel 450 m to the S-W of the earthworks. On one occasion in the 13th C Pipe and Lyde Church is referred to as 'the church of Lude Godfrey'. Several 13th C charters mention the Middlefield at Lyde Godfrey together with Churchfield, Westfield and Eastfield. The last is said to extend towards the highway and the cross at Lyde which can be identified as Lyde Cross on the road which runs from



Hereford over Munstone Hill to Lower Lyde Farm and which in the 13th C continued to Marden.6 Thus, Middlefield would probably straddle the modern main road from Hereford to Leominster and would, therefore, be close to the earthworks under discussion. Westfield was presumably located towards Elton's Marsh. Since these field names do not survive beyond the Middle Ages and do not occur on the earliest maps, any topographical identification is bound to be tentative.

In 1086 there were 5 estates at Pipe and Lyde, two of these belonged to the church at Hereford? Since Lyde Godfrey was regarded in the 13th C as part of the military holding of the bishop of Hereford it can therefore be identified with the Domesday estate assessed at two hides which was held by an unnamed knight. Possibly, it was his descendent Stephen who held it in c. 1160-70 and who had sub-let the estate to Geoffrey de Morton in 1210-12.8 Geoffrey's descendents were still holding it by military service as part of a knight's fee in the early 14th C.9 As part of the military holding of the bishop of Hereford it is not surprising to find a castle here; similar fortified sites existed on church land elsewhere in Herefordshire e.g. at Breinton and Cublington (in Madley parish). The latter gave its name to the 'prebend of the castle of Coblynton' in 1315.10The castle at Lyde seems to have already disappeared in c. 1320 when Lucy, the widow of William de Arundel, made a grant of 1½ acres of land 'in cultura que vocat castel'to her son.11The castle, therefore, probably came into existence during'the first century of English feudalism' as the focus of a small estate by a knight enfeoffed by the bishop of Hereford to fulfil the quota of 15 knights laid upon him by the Norman kings.

DAVID WHITEHEAD for Hereford Sixth Form College Archaeological Society.

# References

- 1. R. Hickling 'Deserted Medieval Villages', Trans. Woolhope Natur. Fld. Club, XL (1972), 401; XLII (1976). 107
- 2. Royal Commission on Historical Monuments: Herefordshire, III (1934), 52-3. F.G. Heys, 'Excavations on a Medieval Site at Breinton, Herefordshire', Trans. Woolhope Natur. Fld, Club, XXXVII (1963), 272-294
- 3. Hereford Cath. Lib., Charter 814
- 4. W.H. Cooke, Collections towards the History and Antiques of the County of Hereford (Grimsworth Hundred), ii (1892), 149.
- 5. B.G. Charles and H.D. Emanuel, A calendar of the earlier Hereford Cathedral Muniments, I (1955), 357.
- 6. Ibid., 213, 216, 335.
- 7. Domesday Bk., i, ff. 1826, 184, 1866.
- 8. V.H. Galbraith and J. Tait (eds.) Herefordshire Domesday, Pipe Roll Society XXV (1950), 28, 90
- 9. Registrum Ricardi de Swinfield(1909), 405.
- 10. F.G. Heys loc. cit., 285; B.G. Charles op.cit., II, 762.
- 11. Hereford Cath. Lib., Charter 4039.

# Trial excavations in the Bishop's Palace Gardens, Hereford

# Introduction

The committee was advised in 1978 that the Cathedral School were hoping to lease the W part of the Bishop's Garden and construct two tennis courts. A report was prepared (Proposed Tennis Courts in the Bishop's Palace Garden, Hereford) in May 1978 and as a result the DoE provided a small grant to undertake trial excavations which were organised for a one-week period between the 17 and 23 Oct. 1979.

The site lies below the river terrace on which the Bishop's Palace and Cathedral stand and is on ground which slopes down to the river. It adjoins the grounds of Gwynne House to the S.W. and is separated from Gwynne St. on the N and W by a high stone wall. To the E is the remainder of the Bishop's Palace gardens, and a low wall and some trees separate the site from the steep river bank on the S. Until recently the area has been laid out as a vegetable garden, but it is now overgrown.

# Historical Background

The history of the site is probably associated with that of Gwynne St. rather than that of the Cathedral Precencts. Both Taylor's map (1757) and Speed's map (1610) show a row of houses on the S and E sides of Gwynne St and these were not demolished until late in the 19th C. One of the houses is reputed to have been the birthplace of Nell Gwynne (1650-87). Speed shows no detail of the site but Taylor shows a double row of trees and a wall leading down to the river. Gwynne st. was so named about 1855, previously having been Pipe Lane (Taylor) or Pipewellestrete. Taylor lists Pipe Lane as having 15 houses and 69 inhabitants in 1757.

Gwynne St. is the only non-rectilinear street within the boundary of the Saxon city. This suggests either that the street was built around a pre-existing feature or that its line was altered at some time in the city's history. There are two published explanations of this anomaly.

- 1. A ford across the river, from a point adjoining the site, has been postulated. It would appear possible however, that the original ford could be at any point on the river between the Wye Bridge and the continuation of the line of Broad St. through the Palace gardens.
- 2. A trench was excavated behind the old Methodist Chapel in Bridge St. to examine the conjectural line of the King's Ditch. This ditch was considered to mark the boundary of the Bishop's Fee and was thought to run from the N line of the city defences, down the E side of Aubrey St. and then in a direct line to the river.

The trench was excavated to a total depth of 15 ft. The first 8ft. had no significant features but below that depth, the ground became increasingly waterlogged with many organic finds, including wooden and leather objects. The trench could not be taken down to the natural gravel, but finds within the lower levels suggested a 13th C date. The stratification was horizontal and there were no signs of a man-made ditch.

This excavation indicates the presence of either a wide ditch or a marshy area. In both cases it would seem likely that the feature continued towards the river.

The line of the parish boundary between St. John's and St. Nicholas' parishes, and the trees and wall shown on taylor's plan of 1757 gives some credence to both these explanations.

#### The Excavation

The site was examined by means of two machine-cut trenches. The main trench was cut roughly E-W through the area which would suffer most disturbance and a subsidiary trench was cut in a N-S direction towards the river. Both trenches were cut 1.5 m wide but were limited vertically to the depth which will be disturbed by the tennis courts. When the machine work was completed, the sides and bottoms of the trenches were cleaned and several limited areas were excavated to a greater depth by hand. After hand clean-

ing of the machine trenches, dating evidence for the various features exposed was lacking, so it was decided to excavate three 1m square areas, in the bottom of the trench, to a greater depth. The three trenches, 1340, 1341 and 1342, were dug, by hand, to just below the water table of the area.

All three trenches contained waterlogged, organic remains in the lower levels, with little sign of occupation. They were evidently part of a marsh or boggy area which was over 15 m wide and therefore unlikely to be a man-made ditch. The few sherds of pottery found indicated a general date range from the 12th to the 14th C.

The marshy area was sealed by a thick layer of gravel and pebbles in the 15th or 16th C and a soil level gradually accumulated above. The site level was raised, particularly in the subsidiary trench, during the 19th C, using stones, brick, and other building debris. The present top-soil averaged 0.4 m thick.

Several features were seen both in plan and section which are worthy of comment. To the W, the robbed out foundation trench of a N-S wall (1338) was found. This was evidently the wall shown on Taylor's plan and separated the gravel fill of the marshy area over the main site from a garden soil, containing 18th and 19th C pottery, to the E. The marsh originally continued to both sides of the line of the wall.

In the centre of the main trench, cut into the gravel fill, was a large, roughly cylindrical stone (1335) carefully set into the ground. It could have been the base for a timber pillar, a sundial or some similar garden feature.

Further E, the footings of a N-S stone wall (1333) may have been earlier than some of the gravel fill. To the E of this wall the marshy area may have been reclaimed at an earlier date than over the rest of the site. It contained a soil level predominantly containing 15th C pottery.

At the E extremity of the site was a stone built well (1330) with the upper stones some 0.9 m below the present ground level. The finds indicate that the well was constructed about the 16th C and was filled in in the 19th C.

#### Comment

The excavation has demonstrated the existence of a large marshy area in this central part of the city. It may have continued N.as the line of King's Ditch. The marsh was filled in by the 16th C and the area became cultivated. This use continued, with some build-up of the ground, until recently. The well may have been for general use of the houses in Gwynne St. but its 16th C construction date indicates that it was probably not the original Pipe well.

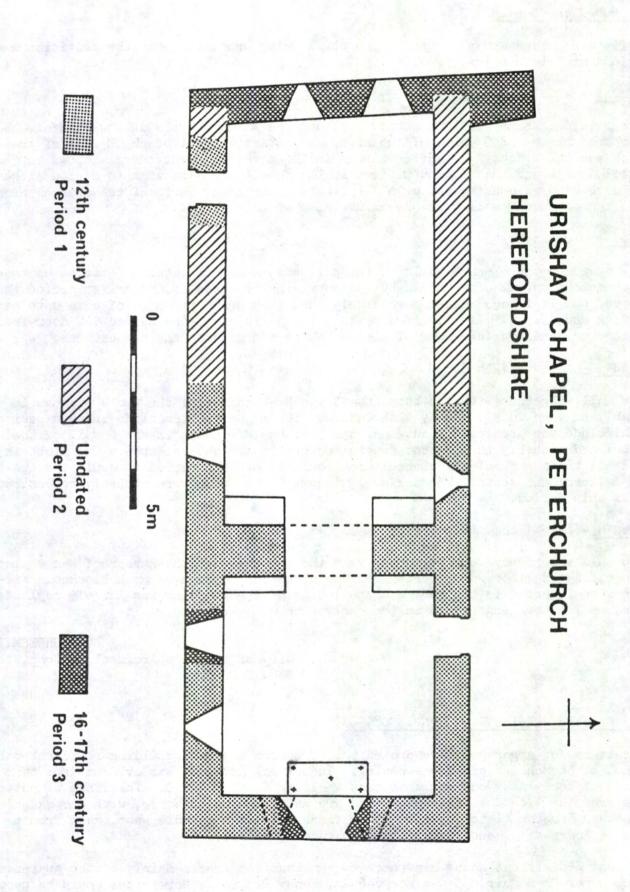
RON SHOESMITH City of Hereford Archaeology Committee Bewell House Hereford

# Urishay Chapel, Peterchurch, Herefordshire

A survey of the ruined chapel at Urishay was undertaken between 6 Aug. and 7 Sept 1979. The work was financed by the DoE.

# Extent of the Survey

- 1. A ground plan of the interior of the building was prepared at a scale of 1:20.
- 2. An area plan was prepared at a scale of 1:100.
- 3. Internal and external elevations were drawn at a scale of 1:10 of the following
  - a. The exterior of the W wall
  - b. The interior of the W wall
  - c. The exterior of the N wall of the nave up to and including the N door
  - d. The interior of the N wall of the nave
  - e. The exterior of the W part of the S wall including the S door



- 4. Cross-sections and plans were produced for both doors and for the windows in the N and W walls.
- 5. A photographic survey of the building was prepared.
- 6. Samples of mortar and plaster were collected.

# Results of the Survey

The final drawings and photographs are still being processed, but the provisional conclusions are given below.

#### Period 1 - 12th C

The surviving masonry of this period includes the N and S walls of the chancel, the E parts of the N and S walls of the nave, a substantial part of the E wall of the church and the S doorway. The 2 windows in the nave, the E of the 2 windows in the chancel S wall and the blocked windows in the E wall are also of this period although some have been re-constructed at a later date. The lower parts of the chancel arch, up to approximately wall plate level are also of this period.

# Period 2 - undated

The W parts of the N and S walls of the nave have no architectural features whatsoever and cannot be dated. They could be the surviving remnants of an earlier period than 1 above, but it is considered more likely that they are a re-build of some date between the 13th and 15th C. If this is accepted, the position of the period 1 S door indicates that the original building was of similar shape and size to the present one.

# Period 3 - 16th to 17th C

The W wall, together with the buttress at the N -W corner of the two W windows is probably of late 16th or early 17th C date. The major constructions in this period also include the present E window and the W of the 2 windows in the S wall of the chancel and probably the present superstructure to the chancel arch. The niche in the W side of the N part of the chancel arch could be of this period as could the two stone side 'alters' and seats. The period 1 windows in the nave were probably reconstructed during this period.

# Period 4 - Late 17th C and Later

The W wall was partly rebuilt probably at the same time as the nave roof was replaced. A stone-flagged floor was inserted and the niche in the chancel arch blocked. Tiebeams were inserted in the roof and the inside of the building was largely replastered. Minor repairs were undertaken in the early 20th C.

RON SHOESMITH City of Hereford Archaeology Committee Bewell House Hereford

# Fenny Drayton, (Leics) 1979 (SP.35089685)

Excavations for a garage drive proved the edge of a Medieval building represented by postholes, stokeholes and stone paving. Industrial activity was evident from fair amounts of heavy slag and suggests iron smelting in the 14th C. The finds of pottery range from the 13th C to the 16th C and are mainly Nuneaton Wares, with one example of Potters Marston (Leics) ware. Other finds include a spindle whorl made from a piece of Roman tile, and a whet-stone (micaceous schist).

Site recorded without undue hindrance to construction thanks mainly to the awareness of the owner Mr B Muir, 35 Old Forge Road, Fenny Drayton. More sites could be recorded if there was similar co-operation from builders doing any type of foundation or excavation work.

KEITH SCOTT

# Site at 16-22 Bermuda Road, Nuneaton. (SP 35129061)

Excavation in advance of building consisted of stripping an area approximately 17°0" x 42°0", i.e. between the footpath and the new building line/foundations, the upper layer of top soil was removed by machine, the rest by hand. It soon became apparent that most of the area was taken up by successive roadside ditches, which had all but removed earlier fillings, the exception being a narrow wedge 6°0" long at the S end and producing 13th C wasters. Other pot sherds recovered were mainly 15th C and well represented from earlier kilns (1967) in the front garden of No. 11.

Although the finds did not amount to much, one prize find of a zoomorphic finial (dogs head), the first from the Chilvers Coton complex, and dating from the late 13th C. The work in advance of building operations done earlier this year proved hardly any archaeological finds, nevertheless a watching brief was maintained. During the foundation work a kiln was proved to lay mainly inside the bungalow, also a ditch fill of wasters was found alongside the E foundation trench. The owner allowed excavations to continue on the 5-flue kiln a 7'6" dia. with several phases of flue alignment.

Normally Nuneaton kilns have kiln floor and flues at the same level in this case the evidence suggests a raised floor. When the foundations were up to damp proof course a 4 m length of waster filled ditch was excavated. It all proved well worth the effort several near complete vessels are restored and new information on the roulette period c. late 15th C recovered.

KEITH SCOTT

# Hen Domen Montgomery 1979

Interim Note

The 1979 season at Hen Domen consisted of a 3-week summer school in excavation techniques and field work followed by a week of excavation alone. In general, it was a year of dissection of structure discovered in previous seasons. The post-pits into which the posts of the 12-post granary building XXXVIII, had been inserted proved to be rectangular, very large and carefully cut with vertical sides and flat bottoms. There are reasons, to be explored next season, for thinking that they may be earlier in date than was at first suspected. They may even be part of Roger de Montgomery's first castle. Their massive and precise construction matches what has been seen of Roger's work in stage 1 of the excavation.

Continued dissection of building XXII on the back of the rampart confirmed its construction, with clay walls outside a timber frame.

Pit 15 on the N-E corner of the rampart was emptied and proved to be simply a large D-shaped pit cut through the rampart and the buried soil beneath into the boulder clay subsoil. There was no trace of timber lining or any other clue to its purpose. The pebble surface which lay diagonally under building XXXIX, discovered in 1978, was found to continue N-W under the balk between stages 1 and 2 of the excavation and is now seen to be an extension of pebble surface 14 of stage 1. Its date is unknown, though it must be early and belong to the castle rather than an earlier occupation of the site.

The pebbles and cobbles of building XLII at the entrance to the site were removed and were found to have sealed the remains of a fine pebble surface which had elsewhere been eroded completely away.

The first volume of the report on the excavation covering the years 1960-1977 is complete and is with the editor. It will appear as a monograph of the Royal Archaeological Institute.

P.A. BARKER

# Tong Castle Excavation - 1978 to 1979

#### Foreword

The year has seen the formation of the Tong Archaeological Group from out of the Medieval Research Group, to cover the work in and around the Tong area, and the new Group is very slowly creating an identity of its own which started with the excavation of the Mound at Shackerley in the autumn of 1978.

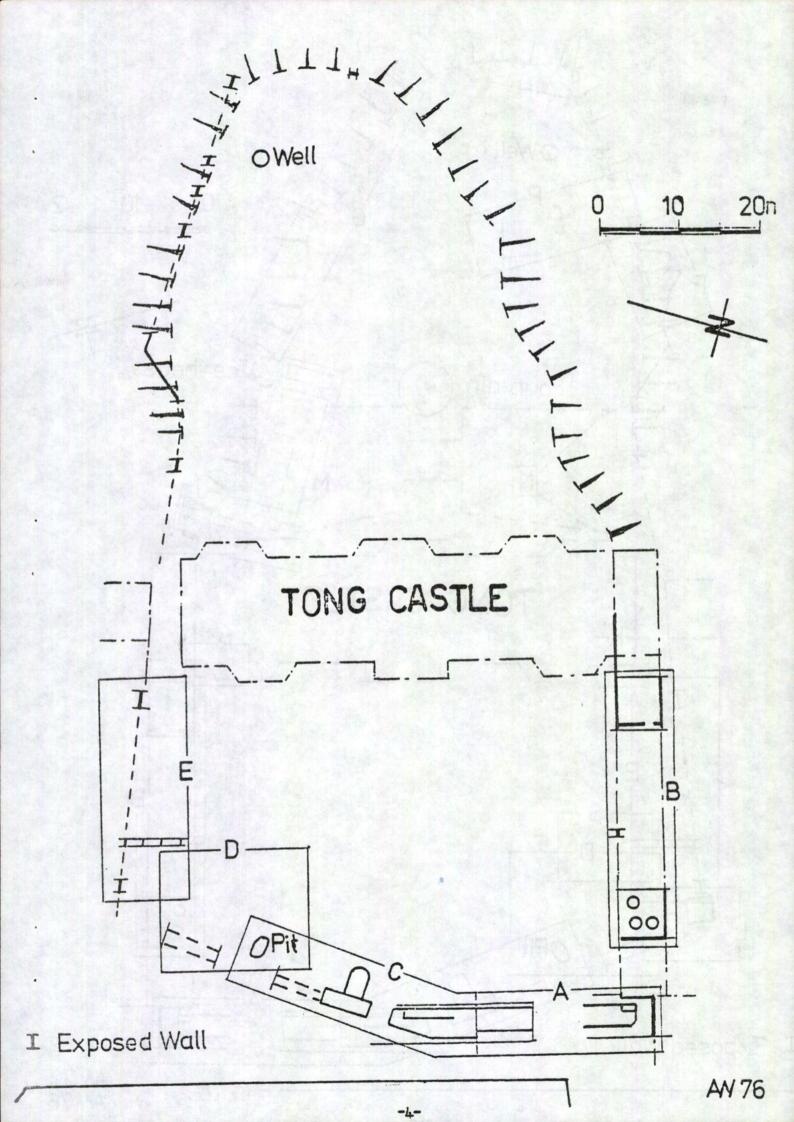
The excavation at Tong Castle started during the winter with the preparations for the large scale machine clearance of the S Outer Wall to the Inner Ditch area, on the top and across the site, the Keep Outer Wall and finally the excavation of the Inner Ditch area. The continuous excavation work has carried on through snow, rain and sunshine and has only been possible by the continued efforts of the small hardy team of volunteers who, along with Bert Clemmett and Graham Lawley who have photographed the site and the artifacts, have produced an excavation equal to any full time excavation. I am indebted to the Earl of Bradford for his continued support and interest and to the help given by the Bradford Estate at the Convent Lodge, which has proved invaluable to the work of the Group. I am further indebted to Patrick Cormack, M.P., Mr. M. Gale, Mr. J.M.Sankey and the many other people who have given help and support outside the actual excavation.

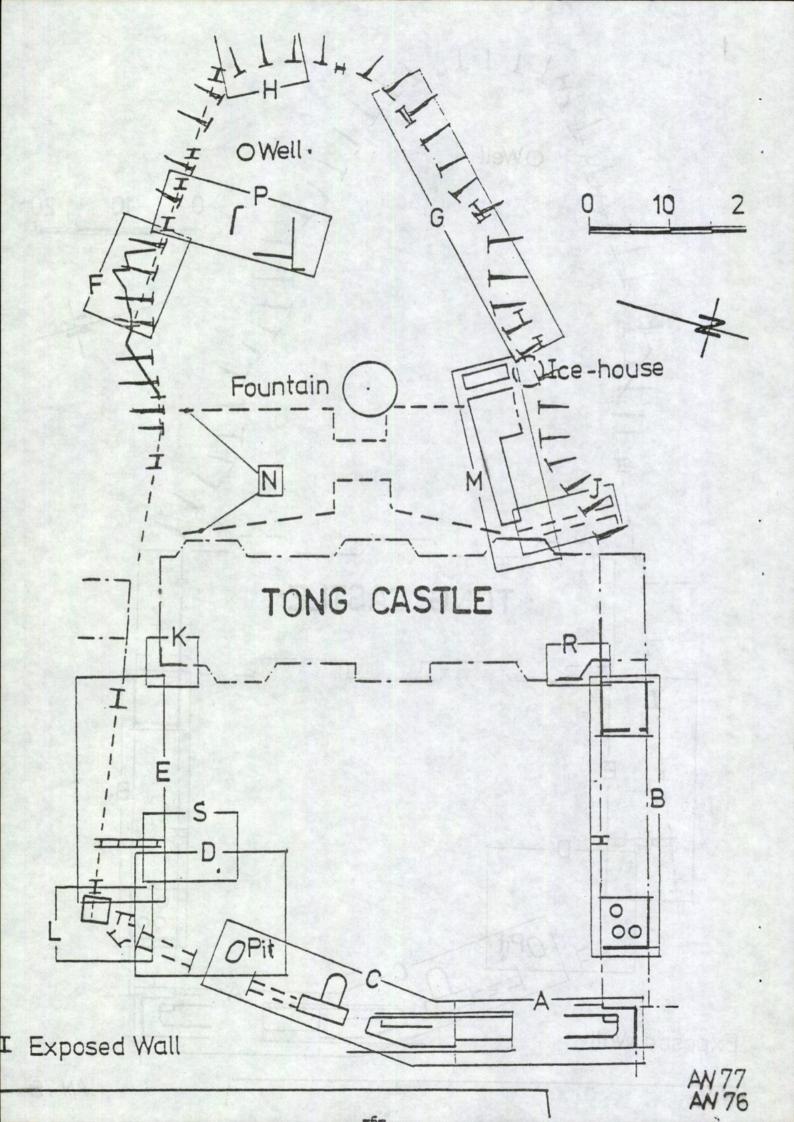
The current machine programme would not have been possible without the generous help given by the Telford Development Corporation, Reg Anslow of Telford, Tom Morris of Tong and John Pearson of Shifnal. The work of the excavation has been made easier by the continued help of the Bridgnorth D.C. and the Walker Trust.

Finally, the completion of the Well Excavation Report and the inclusion of the 17/18 C Claypipes in the Archaeology of Clay Tobacco Pipes - Vol. III, ends a very successful year for the Group.

#### Excavation

S Outer Wall - The machining was carried out by a Priestman excavator and cleared from the Underground Chamber through to the W end of the Inner Ditch. This led to the excavation of the large Wine Cellar and the Garderobe Pit under the E Landscape Arches. The rubble from within the Wine Cellar was gradually removed to reveal a flight of stone steps from the Cellar into the last Durant Castle. Work at the top of the steps revealed the existence of early timber edged steps cut into the bedrock which had survived all the subsequent building alterations. During the excavation of the Cellar, a Well was located at the rear and in the corner of the Cellar which, from its position, had obviously been cut into the sandstone bedrock prior to the construction of the Cellar. The top was covered by demolition brick rubble overlying a deposit of sterile building sand which extended to the bottom of the Well, a depth of only 0.8m. The bottom cut had partly cut channels ready for removal of further bedrock to deepen the Well further and was therefore left unfinished. Water within the surrounding bedrock filled the Well and during the wet weather also flooded the floor of the Cellar. The position of the Well and the 18 C clearance suggested that it was originally the 16/ 17 C Well for the Vernon/Kingston Castle. Work in the Landscape Arches to the E revealed a sealed pit under the floors and was identified as being the remains of an outside garderobe shute of the Vernon Castle. The re-building of the S Outer Wall following the Civil War damage had sealed the pit exit and the artifacts from the pit, inclu-





ding a quantity of fine glassware amongst a large amount of pottery, will be the subject of a report on the garderobe pit currently under preparation.

Clearance of the remains of the Landscape arches to the W revealed a large quantity of early 18 C glazed and un-glazed decorated pottery sealed under the arch floor. The large holes in the bases suggest their use as flower pots, but the variety of shapes and sizes causes speculation as to the reason for the quantity and depositing in one small area. Inner Ditch-Excavation work at both ends of the Inner Ditch and by the Buttress Building, revealed steep bedrock cuttings, details of which are within the attached Inner Ditch Excavation Report.

Keep Courtyard Area-Clearance of the Durant ruins and an E to W trench by a D6 Bulldozer, enabled the excavation of part of the Courtyard area. The machine scraped over the top of stonework, being the N and only remaining wall of a building within the courtyard. Excavation inside the building revealed an area of laid cobbles against the wall forming the base of a hearth.

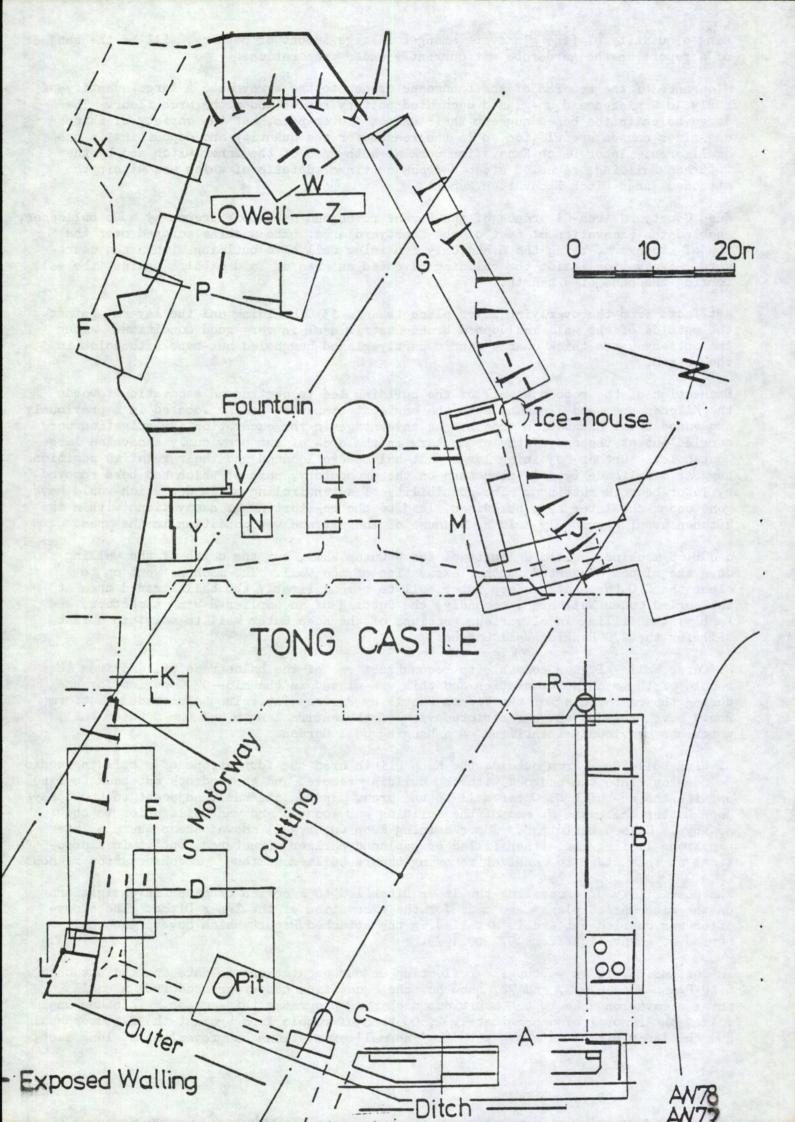
Artifacts from the overlying layer place it as a 13 C building and the layers against the outside of the wall included a bronze matrix seal in very good condition. Among the pottery was a thick coarse fabric partly glazed bungholed pot-base with holes in the bottom.

Excavation of the robbed W wall of the building led to continuous excavation towards the Kitchen area and lined up with the earliest stonework so far located in a previously excavated trial excavation trench. At this stage in the excavation investigations were carried out at the end of the promontory in the area of the previously excavated large post-hole. Further adjoining large post-holes were located and their relative positions suggest a palisade type of structure on the promontory, part of which had been removed by later bedrock cuttings. The possibility of an encircling palisade, which would have gone under the later keep buildings, lead to the re-starting of excavations within the kitchen area, previously held up because of the extreme wet condition in the area.

- A JCB 6C machine located a length of the W Outer Wall, but the depth of the walling down the slopes prevented further excavation of the wall. The machine went on to clear the S Outer and the Keep Outer Wall to reveal firstly the ballustraded area at the angled Outer Wall area, secondly, the cutting of an earlier S Wing structure, and lastly, the filling in of various sections of the Keep Outer Wall to maintain a flat wall for the 17C Hanging Wall Garden.
- S. Outer Wall It was possible to reconstruct one of the balustrade pillars from the rubble of the machine excavation and this was placed in the mid- 17 C period for use during the re-building of the Vernon Castle by Pierrepoint. The balustraded platform would have provided an un-restricted view of the entire length of the S Outer Wall, which has previously identified as a Hanging Wall Garden.
- 3. Wing Building From outside the Keep Plinth area the foundations of a building could be seen cut into the bedrock with the building removed and the bedrock cut back to line up with the re-built S. Outer Wall in the area. Inside the wall, adjacent to the early Keep Batter Wall, the N. end of the building was located and was built prior to the nearby 14 C Keep Buildings. The remaining Keep Outer Wall showed areas where a later sandstone filling had either filled or replaced earlier structures, but it is impractical at this stage to consider removing the re-built sandstone for conservation reasons.

The possibility of excavating the Inner Ditch led to a series of other investigations on the site whilst plans were made for the excavation of the Inner Ditch. The excavation was carried out and is detailed in the attached Report which covers the whole period of excavation from 1977 to 1979.

In conclusion, it is worthwhile reflecting on our excavations to date and the attached Site Plans for 1976,77 and 78, show how the excavation has progressed from a small trial excavation area to the ambitious machining programme this season. This has involved the removal of approximately 2,500 tons of rubble from against the S. Outer Wall and the Inner Ditch and along with the 'normal' excavations has revealed, at long last,



a defensive castle for all to see.

## Inner Ditch Excavation

#### Introduction

The possibility of an Inner Ditch cutting between the forward Castle buildings, under the present Durant ruins, and the rear Keep Buildings, came to light during the machining of the Keep area in Feb. 1977. Further machining and excavation at various periods led to the approximate shape of a very unusual early defensive ditch across the castle site, from N to S, with the possibility of a timber gateway at the centre of the ditch for access to the keep.

The unusual shape and nature of the ditch showed the necessity to try and excavate the ditch as it was within the proposed Motorway cutting area and there was therefore a need to define the shape and date of the ditch and the Gateway. The offer of machine help to 'empty' the Inner Ditch in Aug. of 1979 led to the excavation of both ends of the ditch cutting and the gateway, which resulted in the solving of many of the Inner Ditch problems and period of fill within the ditch cutting.

#### Excavation - 1977

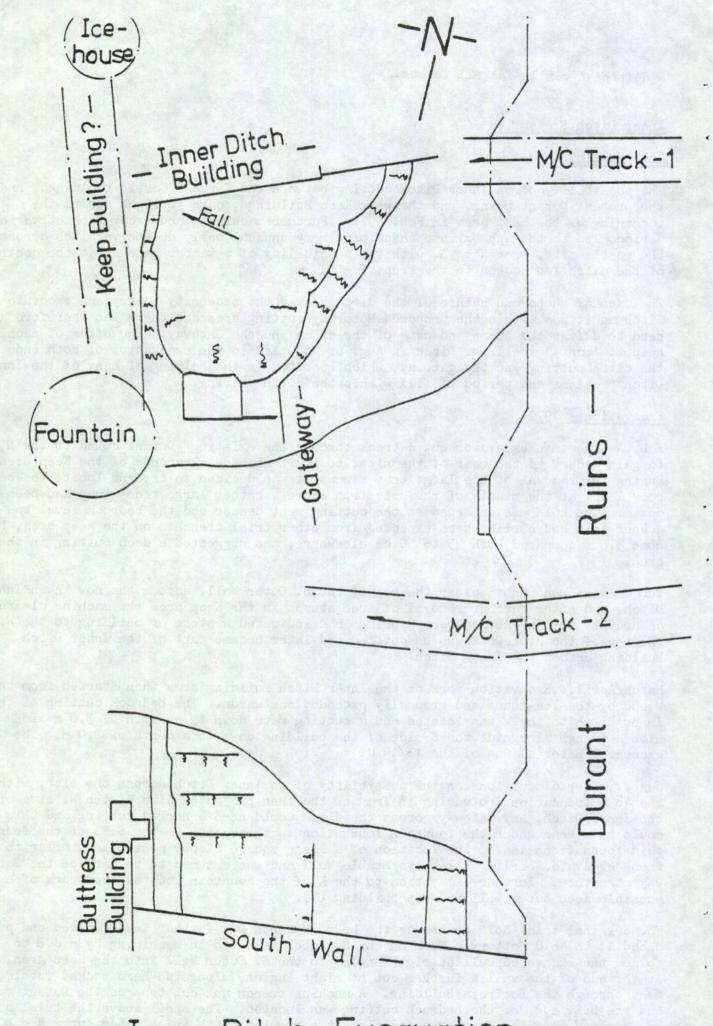
Feb..A Priestman excavator cut a track through the existing Durant ruins to the N, to gain access to the rear of the site, to start machine clearance of the Keep area. During the removal of the large tree stumps it was decided to try and locate the bedrock level at the middle of the site from where a rather large tree stump had been removed. The hole was enlarged as the cutting went deeper and the bedrock level was much deeper than had earlier been expected from other trial trenches on the keep area, being some 3.0 m compared with 25 to 50 cm elsewhere, and suggested a deep cutting in the area.

The machine went on to clear the top of the S. Outer Wall, across the now known Inner Ditch, and after further removal of tree stumps in the Keep area the machine cleared an area by the Ice-house where probings had indicated a stone or building to the E. The top of the stonework was un-covered and later became part of the Inner Ditch Building across the Inner Ditch.

March/April...Excavation work on the Inner Ditch Building area then started from the W end by the Ice-house and gradually extended eastwards. The bedrock cutting of the Inner Ditch to the W was located and a cutting made down to a depth of 3.0 m along with a trench alongside the S side of the building down to a depth of 2.0 m. The excavated material was of the 13/14 C.

June...After discussions on the possibility of an Inner Ditch across the site, with the 18 C foundation protruding in front of the then projected line of the W. side of the Inner Ditch, any Gateway across the ditch would need a narrow cutting and this could have been under the fountain foundations. Excavation to the S.E. of the fountain foundations led to the location of a large square timber post-hole similar to those excavated earlier below the Stable Wall and was assumed to be part of the Gateway structure. Further excavation to the N of the Fountain located stonework of a possible Keep outer wall or Keep building (?).

The original trial hole to locate the bedrock depth was further investigated and produced 13 to 16 C pottery. Work on the S. Outer Wall led to machining by a JCB to follow the excavated wall at right angles to the S. Outer Wall into the Keep area. At the end of the wall a further cut at right angles, alongside hard packed rubble, went through the Buttress Building. A machine trench was cut towards the Durant ruins and the S.E. edge of the bedrock cutting was located. The spoil above the trial hole was removed to allow further excavation at a greater depth which, when carried out later, produced 12/13 C pottery below a series of demolition rubble layers.



- Inner Ditch · Excavation -

0 5m

-6-

4

July...Work continued on the Ice-house-Inner Ditch Building - Keep Buildings and the Foundation areas based on investigations into a possible secondary building around a Keep Courtyard outside the early Keep Buildings.

Oct./Nov...Excavation work started on the Buttress Building area and a revetted wall was exposed along with a length of ashlar walling on the edge of the Inner Ditch cutting. Material from the layers against the ashlar wall was of the 14 C. A marl-bound wall at right angles to the ashlar wall was located with a 'cemented' slab overlying the walls. Work re-started by the fountain foundations and an inner bedrock cutting at a higher level than the N. or S. ends was located. Trenches were cut between the trial hole and the fountain sections to try and locate the possible gateway. This was not possible because of the depth of the overlay rubble, which is now known to be the gateway rubble.

Further excavation on the Buttress Building revealed a double buttress at the corner which had previously been covered over in error. The machining had unfortunately gone through part of the ashlar walling of the building, but without the machining the Buttress building would not have been located. A further attempt was made to try and locate the gateway by the trial hole, but the depth of the rubble overlay caused this once again to be abandoned.

Dec... Work at the E. end of the Inner Ditch Building revealed a 'batter wall' building period and also the E. end of the ditch bedrock cutting. A JCB placed a trial cut down the E. end of the Inner Ditch Building and just about located the bedrock floor of the Inner Ditch, some 4,0 m deep. The wet conditions prevented any further work in the area and a machine cut was made along the bedrock cutting to the W. and although it was thought at the time to have bottomed the cutting, it is now known that this would not have been possible with a JCB becauseof the depth. The spoil heap along the S. side of the Inner Ditch Building was moved back to give a further start to the excavation of the trench along the outside of the S. wall of the building.

1978 - The extreme wet winter effectively stopped any further work in the area during the winter and the early part of the year.

May... The JCB cleared the top of the Buttress Building and removed the spoil heap from the outside of the building, which enabled work to continue and led to the full excavation of the Buttress Building walling and floor. The trial hole and other excavated areas were back-filled for safety reasons.

June... Work on the cross walling abutting the Buttress Building parallel to the S. Outer Wall produced a double period of build in a dog-leg form with the outer face of one lining up with the inner face of the other. Both were excavated to a depth of 1,5m with no solution as to the reason for the dog-leg, there being too much rubble in both trenches. Probing along the bedrock cutting to the E. of the Buttress Building suggested a much deeper cutting and a need for further machining. Large scale machine work on the S. Outer Wall and the Underground Chamber prevented any further excavation in the Inner Ditch area, before the Shackerley Mound Excavation started in the autumn.

1979 - Feb...After a programme of tree removal during the winter for the S. Outer Wall clearance, a Priestman excavator enlarged the area at the E. area of the Inner Ditch and the bedrock floor was located. A further cut was made at the W. end of the Inner Ditch, but again was not bottomed. A further trench was cut at right angles to the S. Inner Wall and revealed the dog-leg as having been the result of a re-built wall over and inside the main S. Inner Wall across the inner Ditch.

March/April...Excavation in the area behind the dog-leg wall and adjacent to the Buttress Building exposed a deeper bedrock cutting to the N. and E. of the building. A JCB again removed the spoil back from the Buttress Building and also located the continuation of the S. Inner Wall to the E. The machine cutting at the W. end of the Inner Ditch Building was extended to the S. to reveal a clean and hard bedrock cutting.

May/June...Further excavation work in the Buttress Building area revealed the relationship between the building and the cross walling and the S. Inner Wall, with the cross walling being the later build. Machine clearance across the site to give better access to the centre and rear of the site by a D6 Bulldozer, cleared the spoil heaps away from the Inner Ditch Building area and cut a trench adjacent to the fountain and onto the W. Outer Wall. Excavation within the trench by the fountain located firstly a further timber post-hole, which lined up with the earlier larger post-hole, and also the cutting into the bedrock for a 17 C garden feature. The circular garden feature was under the fountain foundations and placed the Inner Ditch cutting at this point further to the E. than had been thought. The location of the further bedrock cutting again brought out the possibility of the gateway protruding beyond the projected line of the W. Inner Ditch cutting.

Sept...Following discussions as to how the Inner Ditch could be excavated and where the excavated spoil, estimated at 1,000 tons, should be deposited, a Priestman excavator arrived and started clearance of the S. end of the Inner Ditch against the Durant ruins, levelling out for the last part of the programme. The rubble and tree stumps adjacent to the N. Durant ruins were removed and deposited onto the ruins up to a point from where the N-E corner of the Inner Ditch could be reached by the excavator bucket. Further rubble was cleared above the Durant foundations to the N. and a platform made across the Inner Ditch to allow the machine to work with a lorry from a lower level in the ditch.

The addition of a tipping lorry enabled the spoil to be taken from the Inner Ditch spoil heaps and dumped progressively within the front Courtyard area of the site. The N.E. area of the Inner Ditch was cleared of spoil and the E. bedrock cutting followed, but because of the loose fill in the area the machine had to move towards the centre of the Inner Ditch. A 'baulk' was left against the Inner Ditch Building wall for further excavation of the main occupation deposits, so that the periods of use of the building and the date of its construction could be established.

The N.W. corner proved equally difficult owing to the increase in depth, some 5,50 m and the change in fill to a hard-packed demolition rubble from the adjacent Keep building at the lower levels. Although a single cut was made to bottom the floor of the ditch, the lower silt layer was left as the machine had by then reached its working limit. The ditch was then emptied across the section to the E. bedrock cutting, which was again followed until it returned suddenly at right angles to run inline with the Inner Ditch Building. The indications at this stage were that this was the start of the gateway cutting even though it was close to the N. end of the ditch.

The machine then moved to the W. cutting of the ditch and the lower cutting also turned inwards. Removal of 'large' demolition rubble from the centre of the ditch at this point suggested that it had come from a possible gateway building and after a period of large-scale removal of rubble a vertical cutting was located parallel to the W. edge and at a higher level than the other cutting. With a similar cutting on the W. side, the rubble was removed backwards into the gateway and then sloped upwards for safety and access to the Inner Ditch area.

The machine then moved to the S. Inner Ditch area and the spoil heaps above the Buttress Building were removed. The rubble was then removed from the ditch alongside the building and the bedrock was seen to step downin levels towards the S. Inner Wall, where it was some 4,0 m deep. Part of the dog-leg wall was removed and this was seen to have been built over the main part of the S. Wall. The machine then moved to the E.end of the S. Inner Wall and a further trench was cut to the wall and alongside the bedrock cutting by the Durant ruins, which went down in a series of steps to the bedrock floor of the Inner Ditch. On top of a layer of sandy silt, left against the wall for further excavation, was a hearth with pottery in the ash and the surrounding wall was heavily sooted. A step in the silt was caused by the re-cutting of the bedrock to the 4,0 m level and a further hearth was located at a lower level of silt with a corresponding sooting of the wall. The heavy demolition rubble in the Inner Ditch was removed as far back as possible and made safe to complete an extraordinary excavation of the Inner Ditch by machining.

#### Conclusions

The attached plan of the Inner ditch area shows what has been achieved by the excavation

of the Inner Ditch and although the area above the Gateway and the ends of the cross walls have still to be excavated, it is possible to put forward certain conclusions from the excavation work to date. The Inner Ditch was cut as a means of defence in the 12th C with a form of gateway across the middle with a timber drawbridge for access to the Keep area. The steep bedrock cutting would make the Keep almost impregnable, but the flat bottom of the ditch suggests either that the ditch was not completed or that it is a very unusual form of defensive ditch. Further excavation in the gateway cutting exposed a deeper centre section with cutting grooves indicating that the gateway cutting was un-finished.

A Curtain Wall was built across the N. and S. ends of the Inner Ditch which, along with the vertical bedrock cuttings outside the walls, provided an equally defensive system. The N. Curtain Wall was strengthened and widened to allow a building on top and artifacts so far excavated place the building in the 13 C. The S. Curtain Wall was repaired sometime after the completed Buttress Building, which was built against an earlier outside wall or building at right angles to the S. Curtain Wall.

The fill of the Inner Ditch would appear to have been deposited in the following stages..

1. Demolition of the gateway building into the Gateway - 13 C

2. Part filling of the S. Inner Ditch from the E. - 13 C

Part filling of the N. end by demolition of the Keep Building - 13 C
 A period of general dumping to fill in remainder of the N. end - 14 C

5. Completion of the S. end filling by the Buttress Building demolition - 14 C

6. An overall layer of demolition rubble from the Vernon Castle - 17 C

7. A final landscaping layer overall for the W. lawn of the last Castle - 18 C

The completion of the last machine programme has provided more information about the Inner Ditch and adjacent buildings than could ever have been envisaged when the large stump was removed during the machining in 1977.

The group is indebted to the Telford Development Corporation and Mr. John Pearson of Shifnal without whose help this could never have been achieved.

ALAN WHARTON Director of Excavations

# St. Mary's Church, Lichfield (SK.119097)

It is proposed to convert St. Mary's Church into a 'Heritage Centre' for Lichfield, leaving only the Choir for liturgical use. The earliest reference to a church on the site dates from 1296, the present building being largely 19th C. The conversion will necessitate some additions to the interior, and the digging of service trenches. In July of this year the church architects had an exploratory hole dug in the S. aisle to examine the foundations and subsoil. The opportunity was taken to examine the archaeology at the same time. The most notable discovery was that of three burials. Previously it had been thought that St. Mary's never had right of burial, and that all burials took place in the cemeteries of St. Michael's or St. Chad's.

P.R. WILSON

# The Green Lane Enclosure, Astley, Nr. Alveley, Shrops.

Ground Owner: - Mrs Lloyd, Green Lanes Farm, Astley, Nr. Alveley, Salop

As already reported - WMANS No 21, the above is a small work, roughly square and approx. 27 x 27 m., enclosed by a simple moat, still rather damp on its N. side. The existence of stone work below ground on the E. side is suspected. It is of additional interest in that it lies on a suspected roadline to ALVELEY village some 3 miles distant, and thence directly to a known ford across the Severn. In June 1979, a limited excavation was undertaken with a view to establishing its construction and use. A trench was cut into the top of the N. bank, which appeared to be of clay construction only, and no stone or brickwork was encountered. The only finds were limited to pottery all stafford ware of varied design and one clay pipe stem, all at a depth of some 18" all lying



Romsley

on the clay construction. It is hoped that investigation of the E. side will throw more light on the subject during the coming season. The possible roadline which runs alongside the N. Bank at a distance of a metre or so will also be examined.

My thanks to Mrs Lloyd for her kindness in allowing the use of her ground.

E.W. TIPLER, for The Alveley and Romsley Hist. Soc.

## Hunningham, Warws. (SP371680)

Excavation has continued on this moated site. (see W MANS 21 (1978) 95). About two thirds of the platform has been stripped of topsoil; but the underlying layer, a gravelly soil, has no clear evidence of building plans. There is, however, some building material (fragments of red sandstone, clearly distinguishable from the gravel, as well as clay tiles and nails) and there are groups of worked red sandstone blocks which may be stylobates for a timber building. More work will have to be done before this can be confirmed; but the presence of a small quantity of medieval pottery and a little oyster shell as well as the building material, does suggest that there were buildings of some sort on the platform. The finds all occur on or just below the surface of this gravel layer, which does not itself appear to have been disturbed by the removal of any foundations. The structures must therefore have been almost entirely of timber, and laid on the gravel surface.

A section has also been cut across the moat, showing that it was shallow and flat-bottomed, nearly 9 m wide and about 1.6 m deep. There was no evidence of a re-cut. A small amount of cooking pot of probable 13th C date was recovered from the primary silt. The moat trench has now been extended some 6 m into the sloping edge of the platform. The section confirms that the platform is composed of the sands and gravel dug out of the moat. Underlying the platform is the sealed ground surface, a grey clayey soil, which is being examined for pre-platform occupation and/or cultivation.

FABIAN RADCLIFFE, with Trinity School Archaeologists and the Leamington Archaeol. Group

Abandoned Church Site - Romsley, Nr. Bridgnorth, Shropshire.

Ground Owner: - Mr. W. Rodenhurst, The Low Farm, Romsley. (SO/786829).

The subject of previous reports WMANS:In Sept. 1979, Mr. Rodenhurst reported the ploughing up of a large stone on the site
of the above church. - the stone bearing an incised cross motif. The object was duly
cleaned and deposited safely within the owners farm compound. Subsequent examination
noted the stone to be of the local sandstone, being some 31" in length with a thickness
of approx 7". The stone was cut with tapering effect, measuring some 16" across the
apex and 10" at the base, the cross incision being approx ½" in depth with dimensions
of 10" for the upright and 14" for the cross-piece. The stone was well cut, and still
bore gentle work marks.

The function is rather puzzling, but it could possibly be the key stone of an arch, or a tombstone although the former is the more probable. This ancient chapel was formerly a chapel of ease to Alveley the adjacent Parish Church of the district. Its dedication is not known and its history obscure, but the subject is being well borne in mind. My thanks to Mr. Rodenhurst for his interest.

E.W. TIPLER. for The Alveley and Romsley Hist. Soc.

#### Experimental firing of bowl furnaces.

Recently two colleagues and the writer carried out the experimental firing of two 45cm diam bowl furnaces of iron age type, with assisted blast, designed to produce blooms of malleable iron by direct reduction from ore with charcoal fuel. The reconstruction was based partly on the usual interpretation of Jobey's furnaces excavated at West Brandon, according to which a bowl furnace dug into the ground had a dome shaped superstructure with a small feeding hole at the top.

Furnace 1 failed to produce a bloom, probably mostly due to faulty technique in the clay construction of the furnace wall and tuyere. A little reduced iron in infused form and much slag and cinder were produced. Important lessons were also learned on the manner of charging the furnace contents, which were applied in Furnace 11. This behaved better and appears to have succeeded metallurgically. Fig. 1 shows the section of the latter furnace after firing.

The experimentors concluded that the dome shaped superstructure or the squat distorted conical shape used in this experiment are probably not correct. Not only are they lower and flatter than the superstructure of modern primitive bowl furnaces, but they encourage voids to form as the charge settles. The furnace has therefore to be tamped continually if the air blast is not to run over the top of the charge and fail to achieve the intensity of burning required. Furnace 11 only worked by dint of careful management, a temperature of about 1000°C probably being reached in the hottest part. 900°C was recorded at the rear of the furnace.

Feeding the  $2^4$ kg of charcoal consumed in  $5\frac{1}{2}$ hrs in Furnace ll was found very troublesome through the narrow top hole. Either it should be bigger or some form of shelf or hopper, as used by some modern primitive ironmarkers, should have been provided.

If successfully moved, the remains of Furnace 11 will be available for study in the Museum of Iron in Coalbrookdale. An interim report will shortly be published by the Association for Industrial Archaeology, at whose Annual Conference the experiment took place. For inclusion in a full report the metallurgical results are being analysed by colleagues at Aston University.

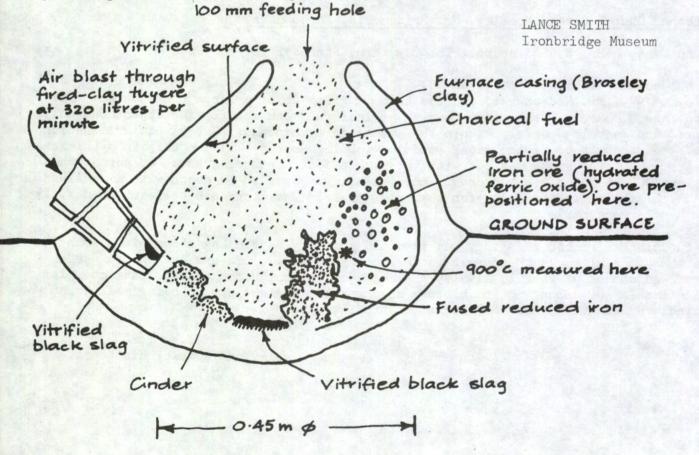


FIG. 1. EXPERIMENTAL IRON REDUCING FURNACE

# Rescue Excavations Chilvers Coton, Nuneaton. 1979. 19th C. Lime Kilns. N.G. Ref. SP355897

During Feb this year in advance of a proposed Drainage Scheme, the remains of a brick built Kiln, visible at the surface was duly recorded. Only the rounded end remained the rest had been truncated by the canal construction in 1795. The contractors site clearance began, and a kiln was unearthed with a little help from a J.C.B. Unfortunately the structure had been robbed for its brick lining and was poorly represented, the plan was useful and gave a size of 32'0" x 12'3". As the work progressed two more kilns were located, both having upstanding walls to 5'0" high, unfortunately time was running out and these were not excavated, all that could be recorded was the front entrance of one more kiln.

The seven week-ends struggle now seems worth-while, the Kiln design links other sites (WM NS. 16, (1973) & 17, (1974)) and may represent a family concern through approximately 200 years. The basic design remained the same for years, when a move was made from the fields, perhaps because of drainage problems created by mining, the change to a brick structure above ground reinforced with an earth/clay mound and 10% larger might have been to meet the market demands.

In the end five kilns were recorded.

KEITH SCOTT

# Little Aston Mill - Mill Green - Little Aston (NMR SK.00.083009)

The Sutton Coldfield Archaeology Group hope to engage in a preliminary study of the above unusual and important site of a 16/17th C. forge, powered by a watermill which used charcoal as fuel. The mill buildings which are still standing, although in a ruinous condition, are situated in a countryside setting, dating from the days when charcoal fuel, iron ore and fireclay had to be taken to the source of power, the watermill. Many early similar sites in the West Midlands have either been lost, destroyed, or buried under 18/20th C. industrial development. A decayed forge, with a chafery, but not a furnace, is recorded at Little Aston in 1590 when it belonged to Roger Fowke. In 1600 it was let to Thomas Parkes of Wednesbury who entirely rebuilt the structures including the mill dam. That a furnace was afterwards added is evident, for in 1681 the forge was being operated by Philip Foley for making charcoal iron.

There was a Foley family of nail-makers in Dudley, and Richard Foley, born 1580, married the daughter of Wm Brindley of Kinver, who introduced German methods of making iron to his Kinver mill. This mill was the first erected in England for rolling and slitting iron. Brindley had previously travelled into Germany, affecting the character of a harmless half-witted wanderer, as a cover for his industrial espionage.

There was com petition from Sweden, so Richard Foley went there in the guise of a travelling musician and journeyed on foot with his violin to Danesmorra, near Upsala, so as to learn Swedish methods for slitting iron, later returning to Sweden a second time to keep himself up to date - hence his nickname of "Fiddler" Foley.

There is about a 100 years gap between the experiments of Dud Dudley about 1619/1620 in producing a small quantity of iron smelted with COKE as fuel - and the Darby dynasty of ironmasters at Coalbrookdale from 1708 onwards at the Old Furnace, culminating in the first cast iron bridge at Ironbridge, in 1779. This transition period is not very rich in records of techniques and much is hidden by half truths, lost word-of-mouth, family trade secrets handed down from father to son. During the Civil War experimental techniques were very much Top Secret, particularly as Parliament had annulled monopolies early in the 17th C.

## Bibliography.

Chafery - Nuttalls dictionary - 1909 edition - "In ironworks a forge in which the metal is subjected to a welding heat".

"Historic Staffordshire" Dent and Hill. published 1895

"Fiddler" Foley - Coleridges "Table Talk" S. Smiles in "Self Help" and "Dictionary of National Biography"

# J.E.P. METCALFE Field Secretary - for Sutton Coldfield Archaeology Group

During 1979 a survey was commenced of the remaining buildings of the Shropshire Lead Mines. The purpose of this survey is to record these structures in terms of measured drawings and descriptions so that a record can be made of these buildings before they disappear.

We commenced by drawing a collapsed Pit Frame and cage on the top of Old Shaft at the Snailbeach Mine site. At this mine site we have also recorded the Cornish engine house on the Lordshill shaft and the Winder house associated with the Old Shaft. Recently drawings have been made of the Ladywell Engine house and the fine engine house on the Wood Shaft. At present we are working on the broken engine house at the White Grit mine. Here a small engine house was later heightened and enlarged to contain a larger engine with a longer stroke cylinder. Some excavation has been carried out at this site to answer some constructional questions.

N.A. CHAPMAN

## Madeley Court, Telford, Shropshire.

## SJ 695051

An archaeological excavation has taken place at Madeley Court during 1978 and 1979, and a detailed architectural record has been compiled, for Telford Development Corporation. The group of standing buildings includes a unique twin-towered Elizabethan stone gatehouse, a large brick and timber-framed barn, and two substantial domestic stone ranges. Beneath a courtyard in the angle between the latter ranges are the stone foundations of medieval and post-medieval buildings (see plan).

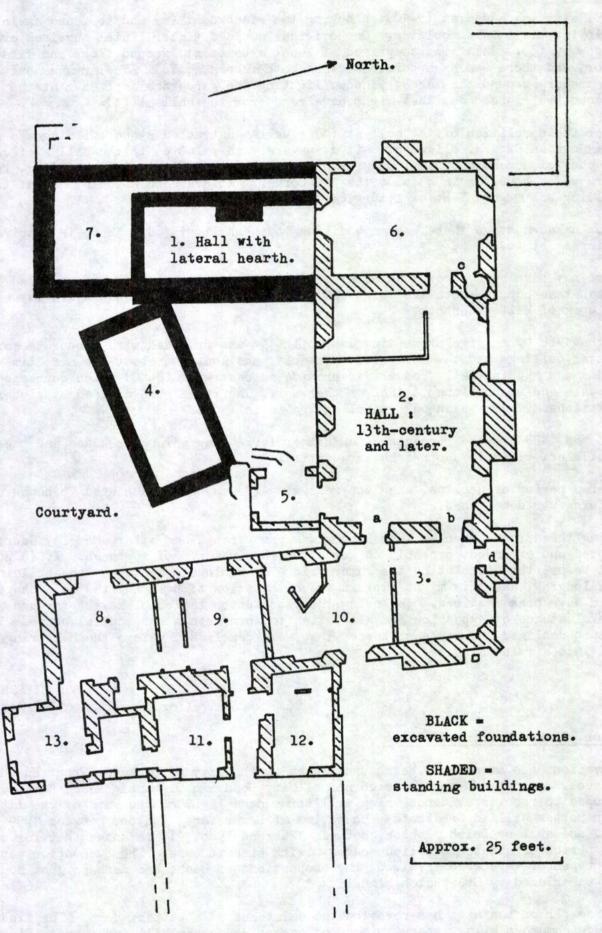
Between the Norman conquest and the Dissolution, Madeley Court was held by the priors of Wenlock and may have been a priory grange for much of that time. The last prior of Wenlock retired to Madeley until his death in 1553. In 1544 Madeley Court was bought by Robert Brooke. The first Basil Brooke, a renowned industrialist, held the Court from 1598 until 1646 and Abraham Darby 1 was a tenant until he died there in 1717. James Foster, ironmaster, bought the estate from the Dyott family in 1828. He sank pits there, and built blast furnaces E. of the house.

The purpose of these notes is to summarise the results of the fieldwork which has taken place and briefly discuss a provisional structural sequence for the house.

The earliest stone buildings found on the site are (1) and (2) (see plan). It is not yet possible to determine whether they are contemporary structures or not. The domestic hall at (1) had a lateral hearth inside the west wall, and there may have been a screen at the north end supported by earth-fast posts.

The stack built against the N. wall of (2) may be an addition, so as yet there is no clear evidence that (2) was originally conceived as a hall. Before (6) and (3-10) were added the E. and W. walls of (2) were external gables. There are tall windows with plain roll moulding inside and out at (a) and (b) and there is a buttress in the basement at (c). There is identical moulding on the fire surround.

The ground slopes down to the N. at the gable ends of (2), so ground floor on the N. side of (2) appears as a basement on the south, with a hall above. There is a fireplace to both levels so a ground floor and first floor hall arrangement is indicated. It is possible that the hall at (1) proved inadequate and was replaced by halls on two levels at (2), perhaps in the 13th C.



MADELEY COURT, TELFORD, SHROPSHIRE.

An E. wing was added at (3-10), blocking the windows at (a) and (b), and again employing plain roll moulding. One original moulded timber lintel survives over a window in (3). This wing comprised at least a basement, ground floor and first floor, and there was a garderobe serving both floors at (d). The arrangement of the masonry around the lancet windows lighting the garderobe implies that the windows are re-used and they might have come from the hall at (1).

After the demolition of the hall at (1) a well-constructed stone building was raised at (4) on an E. - W. alignment, sited awkwardly in relation to the hall at (2). No evidence of domestic or agricultural use was recovered within this building, though there was a stone drain outside the N-E corner. It has been speculated that the building was aligned E-W for liturgical reasons.

At an unknown stage there was an addition to the hall at (6). There is a spiral staircase at (c).

There may have been a tower adjacent to the hall at (5) but this was replaced by an Elizabethan porch. Both the porch and the gatehouse S. of the courtyard may be the work of Walter Hancock.

In the 17th C. a large stone wing was built. It was provided with elaborate moulded plaster ceilings and the walls were probably panelled. At about the same time (3-10) was substantially rebuilt to provide an east wing (8-10) which corresponded in scale and proportions to that on the west. The rooms were divided by timber-framed partitions. There is an oak spiral staircase in (10).

(11) and (12) are the remnants of a further large wing which was added and then partly demolished. (13) is another later addition.

After a period of decline, when the west wing (7) may have been used to house cattle, the wing was demolished.

During the 13th C. when Wenlock Priory was prospering, and after, Madeley Court was adapted and expanded, probably to serve the requirements of a grange. It is possible that before the Dissolution the later priors of Wenlock came to use the buildings as a lodging, and this might explain the orientation of building (4) as a chapel would have been required. Following the Dissolution the complex went through several stages of expansion and alteration to form into a substantial house. This in turn declined and at least three wings were demolished before the hall range (2) fell into a ruinous state.

BOB MEESON for Telford Development Corporation

## Fenton, Stoke-on-Trent SJ892446

Excavations are at present being undertaken by the City of Stoke-on-Trent Museum Archaeol. Soc. on a site at the corner of City Road and Glebedale Road, Fenton. It is hoped to recover evidence which will throw some light on the work of the little known potter William Greatbatch who potted at Lower Lane, Fenton, between 1759 and 1764, and at Lane Delph, Fenton, between 1764 and 1788. It is known that for much of this period Greatbatch supplied Wedgwood with biscuit ware. The excavation may show what types of ware were involved, the proportions of each, and perhaps just how much ware was glazed by Greatbatch himself.

Work so far on the site has revealed the existence of a pottery dump. The finds include numerous kiln wasters, pieces of saggar and other kiln furniture. Biscuit creamware forms the majority of the pottery, many sherds having cauliflower, pineapple and basket-trellis-and-fruit moulded decoration. Some unglazed sherds of bluepainted ware have also been found. A score or more plates have their undersides impressed with the monogram WG which lends support to the hypothesis that we are here dealing with wasters from Greatbatch's Lane Delph works. However, as yet, no glazed

pieces have been found with this monogram. The glazed pieces are all lead-glazed, some green coloured and some mottled. Sherds with red enamelled decoration are also quite common on the site.

We cannot yet prove the association of this ware with William Greatbatch, although the WG stamps make this a strong possibility. The pottery dumped here is certainly of the right period, almost all being datable to 1750-1790. Certainly some very important finds are coming to light. Much of the ware shows the influence of another Fenton potter Thomas Whieldon (potter 1740 - c. 1780) for whom Greatbatch worked, first as apprentice and later as chief modeller. In addition many pieces are of types which have been associated with the Yorkshire and Derbyshire potteries.

Work will continue throughout the winter of 1979 - 1980.

DAVID BARKER

City Museum and Art Gallery, Stoke-on-Trent.

#### The Ancient Salt Industry and the lost Upwich Pit at Droitwich

Background In 1921 the last vestiges of an ancient salt industry in Vines Park at Droitwich were removed after being worked for more than 2000 years. Along with them, during the next 57 years the site of three ancient brine pits disappeared. In 1964 a Master Plan was drawn up for redeveloping the town which included a motor-way on the perimeter of the town and a ring road through Vines Park in addition to other changes - none of which considered the historical importance of this area.

Droitwich was Salinae (salt-works) in Roman times and thereafter it became known as Viccium emptorium, Vico emptorio salis, the region of the Huich, Wic, Sealtwic - the name initially implying that salt was being recovered here. Saxon charters indicate that activity then as later, centered around three sites where natural artesian brine springs came to the surface; the principal site at Upwich, a secondary site at Netherwich and a third at Middlewich (which disappeared in the 15th C). These springs were located in Vines Park along the low-lying valley of the river Salwarpe. They were first mentioned in a lost charter attributed to Wulfhere c. 650; and the Upwich pit in a charter of 691 when Aethelred, King of the Mercians granted to Oftfor, Bishop of Worcester a shed and two furnaces belonging to the great brine pit at Wic. This name was still being used 1000 years later by Rastell who refers to the great pit at Upwich, sometimes spelled Upwic, Upper Wytche, etc. The name first appears in a charter of 962 when Oswald, Bishop of Worcester granted woodland at Bradley and 4 saltpans at Upwic for making salt. Ten years later the other two sites at Middelwic and Neodemestanwic (Netherwich) are mentioned. By this time Droitwich was renowned, described as a "Marvel" by Nennius in the 8th C, who lists these springs as being in the region of the Huich (an area embracing Gloucestershire, Worcestershire and a large part of Warwickshire). He writes that the springs "are not near the sea but spring from the earth".

Considering this long and illustrious past it seemed important in March 1973, when development was in progress in accordance with the Master Plan, to alert local authorities of the possible existence of Iron Age and Roman salt industrial debris known as briquetage. This occurs as coarse, porous, baked clay sherds, different from ordinary pottery and possibly made this way by saltmakers rather than by potters to meet the special needs of the process. At this time archaeologists were not widely familiar with these ceramics which were often overlooked. During the excavations on the site of the Fire Station in Friar St. in the vicinity of the Netherwich springs, deposits of briquetage were found. (WMNS 18,49). This stimulated interest in the historic background of Droitwich and a town archaeologist was appointed to observe the day to day developments in the town and an Archaeological Committee was formed under the Chairmanship of Dr Lawrence Barfield. Two excavation seasons were completed at Friar St. in 1973 and 1974, followed by two at the Bowling Green, Ricketts Lane in 1978 and 1979 (in the area of the Upwich Pit) both revealing similar types of briquetage evidence to that found at other salt sites in Britain and on the Continent.

Problems with Briquetage Deposits These typically occur as small fragmented baked clay sherds, usually associated with quantities of ash. When sites in Essex and Lincolnshire were being studied at the turn of the C. there was no agreement on their association

these ceramics were used; after 12 years of excavation and reports the matter was left unresolved, as it still is today. However, as the scale of excavations increased after the second world war this association was eventually recognized, but their precise functions remained unresolved. One suggestion was boiling brine and another was draining and drying salt after it was crystallized in an ordinary pottery or impermeable vessel. Either process would result in broken sherds when the salt loaf or cake was removed from the container, if not after one boiling or drying, then after several. Another problem is that baked clay was used for many purposes in the Iron Age such as ovens, hearth floors, moulds and before metal became widely available, for boiling pans. There are however other problems. Briquetage supports for vessels and other inexplicable pieces of baked clay occur at some sites and not others; some sherds are thinner, denser and more carefully made, and others are thick and coarse; there are differences in the morphology - many tapered which suggest they are ideal for draining; porosity seems intentional (the clay often containing 25% inclusions) but it is not clear if this is true or apparent porosity; sometimes a slip is apparent which suggests the vessel was made impermeable, and sometimes it is lacking. The question must also be asked, why was the vessel porous if ordinary pottery was available for boiling - was it because saltmakers did not have the skill to remove the wet salt crystals from the boiling pan to the mould, as was done later; if boiling was the intent why are vessels so unsuited to the purpose - some too thick and others, like the augets of Brittany, too thin?

Refining methods which utilize variations in the solubility of different salts, and even methods involving chemical reactions like burned plant ash, are universally documented, historically and ethnographically. Given the continuity of the briquetage method from at least 3200 BC to Roman times in Europe it must be concluded that it was a satisfactory technique. Certainly, morphology, porosity and thickness of the vessels are more conducive to draining and drying as well as refining. When wet salt crystals are removed from the boiling pan they may contain mineral impurities that are more soluble than sodium chloride, and when placed in a porous vessel these minerals still in solution will be absorbed by the clay and crystallize on the outside of the vessel when the salt cake is being dried, and can be effectively removed when the container is broken. Consequently, thick tapered vessels like those that occur at Droitwich would aid not only draining, but the slow drying of salt loaves by an open bonfire to prevent their disintegration. If, on the other hand, these vessels were used for boiling the advantage would be minimal - that is the time required to crystallize the salt would be excessive, bearing in mind that there would not be maximum exposure of the bottom surface to heat and the top surface to evaporation in a thick, or tall, or narrow vessel.

There is a question, however, as to whether the boiling or draining/drying concept would be applicable at all sites - to which the answer would seem to be no - and an explanation for this can perhaps be suggested which might account for differences in briquetage remains.

In the boiling (or solar evaporation) process the idea is to crystallize salt. Thereafter these crystals can be drained simply by stacking on the ground (in which case drainage is necessary), or moulds can be used to cake or form the salt which are allowed to drain before being thoroughly dried (usually with the aid of heat). These processes were known in the salt industry from the time of Pliny, and the only difference between them is additional handling and, therefore, in cost when moulding is involved. While either of these methods is possible at a site they are not always practical or economic. Apart from differences of climate, these processes are affected by the mineral content and the necessity to concentrate weak brines and separate out unwanted minerals. Brines in arid areas are usually high in carbonates, seawater in magnesium and potassium salts (the bitterns), inland brines in sulphates and calcium salts; all present different problems in the process according to their varying solubilities, the effect of saturated solutions and responses to temperature which sometimes results in a reversal of solubility characteristics. It is necessary, therefore, to know the mineral content of the resource being exploited in order to understand the method used.

Some sites gained a reputation for producing a certain kind of salt. This can be read-

ily demonstrated at Droitwich, which was renowned throughout history for producing a fine (grained) white salt. To test this thesis comparisons were made of methods used in Cheshire which were erroneously believed to be similar to those at Droitwich. Closer examination revealed, however, that methods differed because of differences in the mineral character of the brines. Historically documented methods can therefore be applied, with modifications for technology, to the periods before records. Taken into account with the eco-system as a whole (climate and fuel availability, etc) many problems with briquetage sites can be resolved, perhaps explaining the absence or presence of certain physical remains.

## Ancient Methods at Droitwich

The relationship between equipment found in an archaeological context and its purpose relative to the mineral content of the resource, can be illustrated by the two preliminary excavation reports on the Friar St. and Ricketts Lane sites (WMNS, No.21, 76-78) and a report titled "Droitwich (Iron Age Saltworking)" by Alan Hunt, and John Sawle. These reports describe the discovery of 14 boat shaped, wood-lined and claypuddled "pits" thought to have been used as "storage and sedimentation tanks" or possibly for "pickling animal carcasses". It is further suggested that the brine brought from the springs and stored in these tanks was allowed to "contentrate by evaporation", the"strengthened brine (or even wet salt crystals if the evaporation process was prolonged) was then heated in briquetage vessels over a hearth". That the result of this process would produce a "very impure form of salt containing calcium carbonate and calcium sulphate". That alternatively it would "be possible to precipitate calcium salts (which would precipitate before sodium chloride salts in an evaporation process), remove the brine and evaporate to dryness in briquetage vessels". This is described as a "two-stage process evidenced by the tanks and briquetage" and attempts to test this were in progress.

These concepts indicate a lack of understanding in the salt recovery at Droitwich. There is no need for sedimentation (settling out of earthy matter) at the brine pits here, as noted both by Horner in 1810 and Rastell in 1678. The latter writes "the brine itself is so clear nothing could be clearer". Misunderstanding may be due to a 17th C. term "unearthy muriates" which today would be described as mineral solids. As for strengthening the brine, it would be difficult to find a more saturated natural brine, as is demonstrated by numerous chemical analyses of Droitwich brine. At standard atmospheric pressure a brine can hold in solution a maximum of 26.395% by weight salt at 60°F (15.56°C) or less at a lower temperature. The brine at Droitwich was said to contain from 25-32% NaCl in solution or in its mineral solid state contained 98.48% NaCl plus 3.52% other mineral impurities. By comparison seawater contains in solution 3.675% by weight mineral salts of which 2.942% is NaCl (hence the need to "strengthen" or concentrate seawater by solar evaporation, or by increasing saturation with the aid of salt-saturated substances like sand and peat. The Droitwich brine specifically does not contain calcium carbonate as erroneously suggested by Hunt. Horner, writes that "the Droitwich brine is free of carbonate of lime (calcium carbonate) oxide of iron, and muriate of lime (calcium chloride) though all of these are contained in that of Cheshire". Calcium salts do precipitate out of solution before sodium chloride when the brine is boiled, as with the stoney sediment that forms in a tea kettle. idea of wet salt crystals forming in a deep tank, approximately 6 x 4 x 3 ft is also unacceptable, since evaporation of brine always takes place in shallow containers or ponds. For example, in solar evaporation, a reservoir or holding pond, is often about 10"; a concentrating pond about 6" and a crystallizing pond only about 12" deep. Overall size of the divisions may slightly alter these measurements, but in practice these are economically optimum depths. The very need to boil brine and use concentrated solutions in the process, testify to the principle of this practice. Brine tanks were used by saltmakers in order to have a convenient supply of brine adjacent to and ready for replenishing the boiling pan. As the first volume of brine in the pan is reduced additional brine is added (as it still is today) undoubtedly to make the maximum use of fuel. Moreover, similar pits, or wood-lined tanks in the ground occur in an archaeological context (neolithic period) at inland brine springs in Poland, and historically are well documented in Britain. In Camden's time (1586) they are described as "little barrels set in the ground", these too are found in a 12th C (archaeological) context in Poland. Rastell in 1678 described these tanks as "Tuns", he says the "brine was carried in Coolers (buckets) to every man's Seal (saltworks) and there put into

great Tuns for use". Wine barrels were known as tuns and possibly this 17th C term can be traced to Camden's "little (wine?) barrels in the ground". Curiously in Cheshire these brine tanks were called "ships", perhaps an ancient term deriving from the earlier Iron Age/Roman "boat shaped" pits in the ground found at Droitwich. The term cistern was also used in Cheshire but this more appropriately applied to tanks that directly fed the brine pan, to eliminate bailing by hand. 19-20th C maps and photographs at Droitwich illustrate huge wooden "Tanks" above ground which gravity fed the huge boiling pans of the period.

### Importance of Upwich Pit

Although the continuity of the 3 ancient sites has been well demonstrated, the Domesday Book suggests that there were in addition, 5 other brine pits. Habington, Leland and Rastell all try to correct this impression, but the idea still seems to persist. There is reason, however, to question the accuracy of the Domesday entry because the original census and returns of Worcestershire were re-copied at least 3 times. The number "five" is also coincidental, as there were according to Habington, 5 pits at the 3 sites; one at Upwich, two at Middlewich and two at Netherwich. This Domesday entry, and a reference to a charter of Henry I regarding a pit dug by the monks of Bordesley Abbey, cast doubt on all other evidence, even though the Bordesley pit survived for a much shorter duration (as far as we can tell) than did Middlewich which eventually also disappeared, probably because it was less economic to exploit than the other two sites.

There are specific economic reasons why Upwich was more important than the other sites. Not only was the brine almost fully saturated, but the flow of brine and quantity (relative to the other pits) was unaffected by drought which affected fresh-water wells in the area, there was also little or no dilution from groundwater. Because of these qualities, which were unusual, there was concern with interference from other pits which they believed would affect the flow of brine at Upwich. Leland suggested the burgesses restricted the number of pits allowed to be worked in order to conserve fuel and maintain the price of salt, and both of these were partly, but not the entire truth, for the reason just given. Justification for their concern can also be shown 150 years after the monopoly was broken, when the number of pits exploited was whittled down from 32 boreholes sunk during this period, to only one or two when the industry once again was in the hands of only one company, the Salt Union. Nash also cast doubt on the value of the old pits when he wrote that strong brine broke out in great abundance after deep man-made boreholes were sunk 150-200 ft below the surface to reach the underground brine stream. This implied that not only more brine was available but also more saturated brine. Actually this brine initially was more concentrated than that found in the shallow pits dug after the monopoly was broken between 1695-1725, because there were problems in these new pits with dilution from groundwater - but even the deep boreholes proved to be equally susceptible to the problem until technological improvements corrected the situation in the late 19th C. It was not, therefore, the concentration of brine but the quantity of brine available for use which allowed the industry to expand which dealt the final death blow to the ancient monopoly and the use of the old pits. A share of brine in 1678 was equal to 6,912 gallons of brine, and in 1215 the king gave the burgesses rights for 300 furnaces (measures of brine) which by Leland's time was increased to 400, so that a total of 2.8 million of brine was drawn, most from the Upwich pit in a six-month boiling season. While this quantity was not enough after the monopoly was broken to supply a fast expanding industry, it was certainly enough for one proprietor or small company, of which there were many in Droitwich in the latter period, before the Salt Union took over. For all these reasons it seemed likely that Upwich Pit continued in use after 1725.

## Discovery of Upwich Pit and Future Excavations in Vines Park

Intervention by the DOE who were recently approached by the author to consider scheduling this site as an ancient monument, have been fruitful in relocating the ancient Upwich Pit which was in danger of destruction during re-excavation of the canal (30ft N of its original line). A trial trench was therefore dug and a wood-lined pit discovered, thought to be Upwich (as reported by Julie Crickmore below). During this trial trench excavation a clean clay was found about 6 ft below 19th C and mediaeval levels, according to Dr Barfield, who tells me that this might cover earlier deposits, and if this should be the case would provide support for the textual evidence. Habington wrote that the river Salwarpe "runs close by the brynckes of these saltpyttes (and) if as sometymes happenethe the fresh water with exceedynge fluddes overfloweth the baulkes and for a season drowneth the salt wells". The deposition therefore of layers of silt along the river in Vines Park is entirely possible. Eckwall in his Place Names of Worcestershire also notes that the name Salwarpe (Sealweorpan) contained an NED element 'weorpan' to throw or being heaped up; and an OE element, 'sealu' descriptive of colour of alluvium which he says may have given rise to the name of the river Salwarpe.

#### Conclusion

It can be noted that cessation of salt recovery here was socially and politically motivated by the establishment of the brine baths when Spas were at the peak of their popularity in Britain in the 19th C. The two "industries" were not compatible; one was therapeutically oriented and needed a quiet attractive country setting and the other was a smokey, hot and unattractive industrial complex. The therapeutic value of the brine is hopefully soon to be re-established, and the site recognized as an ancient monument, but for the historian and archaeologist, the task has only just begun.

When the agrarian way of life was adopted the proximity of suitable salt recovery sites to centres of population and settlement were important, and sometimes this is reflected in changes that took place in tribal boundaries; salt sites included first in one then another of these territories. Otherwise, a sort of no-man's land developed which served surrounding tribes, with numerous trackways and ancient roads fanning out in all directions, as is found at Droitwich. The unique nature of the Droitwich brine undoubtedly attracted early settlement as evidenced by the Iron Age briquetage already found; more specifically it might be possible to determine from excavations in 1980, if Upwich Pit was constructed by the Saxons, the Romans or by the Iron Age occupants of the area before them. Certainly the location of the pits contributed to the way in which the town eventually developed; early parish boundaries of the Saxon period were perhaps affected by earlier more ancient tribal boundaries, again governed by the location of the pits. Certainly relocation of the principal pit at Upwich may contribute further to our understanding of tribal organisation and separation of industrial from habitation sites at this early time. Most important will be the careful scrunity of briquetage and other archaeological evidence found in Vines Park since it will provide an unusual opportunity to establish for the ancient salt industry what might be considered a "norm" (abnormal) guide to understanding more complex sites.

> B. HOPKINSON Los Angeles

In 1979, research was undertaken on behalf of the DOE to establish the exact location of the 'old pit at Upwich', Droitwich. This pit, documented by leases of the 18th and 19th C, was possibly the site of a brine pit at Upwich which was worked under the borough monopoly along with the pits at Middlewich and Netherwich in the medieval period. This monopoly was based on the charter of 1215 by which the king placed the control of the salt industry in Droitwich in the hands of the borough. It is thought that the burgesses used this authority to restrict the production of brine to the pits at Netherwich, Middlewich and Upwich which were under their control (VCH Worcs. 1906, II, 257-258, 261a; Freezer 1978. 12). Leland, Habington, Rastell and Nash, writing in the 16th and 18th C, mention the fact that, of these pits, that at Upwich was the most productive and they refer to it as 'the principall salt springe' or 'the great springe'; the great Pit'; 'the old pit' (Leland, 93; Habington, 296-297; Rastell 1677-1678, 1060-1060; Nash 1781, 298b-299a). The general location of the old pit at Upwich has long been known from the observations of these writers but its precise position was lost by the time Sterry Cooper was writing to the effect that he believed the medieval pit at Upwich to be identical with the pit known in the 19th and early 20th C. as the Corporation Pit (VCH Words. 1913 III, plan opp. p. 82; Sterry Cooper 1941, 6; Freezer 1978, fig. 5). Mrs. B. Hopkinson, a native of Droitwich now living in America, has been concerned for some years now to establish the precise location of the pit and to create a local awareness of its importance in the history of salt production in Droitwich. It was against the background of this activity and the proposal to reopen and extend the Droitwich canal, which ran through the main saltworking area, that the DOE requested I should undertake this research.

The position of the old pit at Upwich has now been established from two groups of indentures in the County Record Office, Worcester. The first group refers to the period from 1695 to 1778 (Bulk Accession 4963/Reference Number 261.4/Parcel Number 21); the second group begins in 1825 and continues until 1886 (4963/261.4/39). The information regarding the location of the pit was provided by an indenture dated 24th and 25th March 1828 with a sketch plan (4963/261.4/39) which described 'the Scite of an Old Salt Pit or spring' and, adjoining it, a newly erected saltworks known as Lees' saltworks. The indenture was accompanied by a plan sketched in its margin and the position of the pit was confirmed by a trial excavation conducted by D.F. Freezer, Droitwich Town Archaeologist, in autumn 1979, which located the E. side of the pit. Fig. 1 shows the approximate location of the pit plotted onto the OS 25" 1903 edition.

In addition to establishing the location of the pit, the leases add something to its history as previously understood through Nash (VCH Worcs. 1906 II, 260-262). Nash implies that the old pit went out of use in the early 18th C as a result of the breaking of the borough monopoly in 1695 and the introduction of deep boring in 1725. the breaking of the borough monopoly new pits were sunk, production expanded and the price of salt slumped. Under these conditions, the pits of the borough monopoly continued to be worked, though to little advantage, until 1725 when deep boring through the talc at the bottom of the pits so increased the quantity of brine available that 'the old pit became of no value at all' (Nash 1781, 298b-299a). This statement is confirmed by an indenture of 11 June 1737, which describes the brine pit at Upwich as 'utterly and totally ruined and destroyed by reason whereof also the said Bullarys of salt water are not worth one farthing' and the saltworks associated with the pit 'have fell down and been utterly demolished long since and either been converted into gardens or lie waste (4963/261.4/21). Nash makes no further mention of the pit and nothing was found amongst the 18th C leases to refute the conclusion that the pit was not worked again during that century. However, the 19th C leases reveal that the pit was reopened sometime between 1826 and 1828 and was worked in connection with a saltworks known as Lees' saltworks until sometime between 1876 and 1886 when it was closed down (4963/261. 4/39). This 19th C reworking of the pit appears not to have been known to the writers of the major published account of salt extraction in the town (VCH Worcs 1906 II, 256-263) although Sterry Cooper may have been referring indirectly to this in his discusion (Sterry Cooper 1941,6). It appears from the leases that John Lees bought up the property around the pit in the 1820s and by 1828 he had established a saltworks on the E side of the pit (4963/261.4/39). Lees was presumably leasing the pit since it remained the property of the Corporation until 1867. Lees expanded his saltworks to the N and W

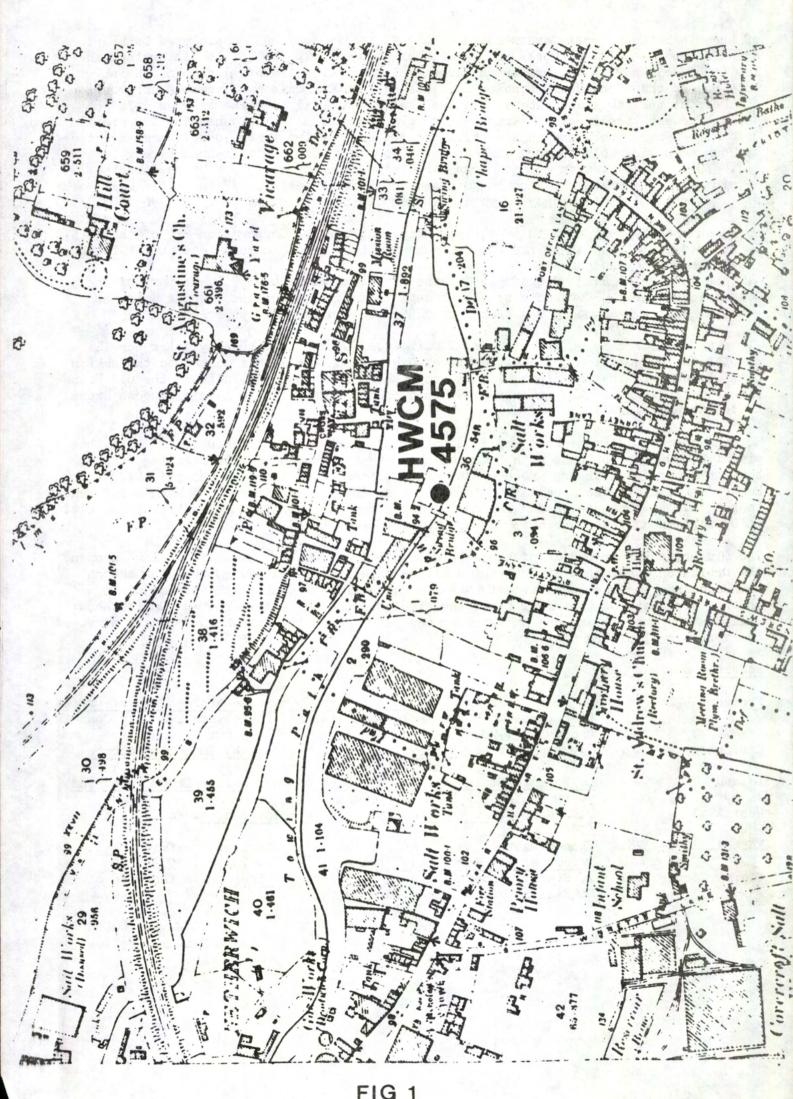


FIG 1

of the pit but apparently overstretched himself for in 1831 he was declared bankrupt and his two freehold saltworks and appurtenances were sold in 1832 to his brother-inlaw (4963/261.4/39). The Droitwich Borough Minutes for 13th Oct. 1836 and 6th Feb. 1854 record that John Henry Bradley was leasing the Old Brine Pit from the Corporation and he continued to lease the pit and Lees saltworks until sometime between 1876 and 1886. The pit itself actually passed into private hands in 1867 when the Corporation sold it to Samuel Tombs and in 1886 both the pit and the two freehold saltworks erected by John Lees were sold to John Corbett. But, by this time the saltworks were void (4963/ 261.4/39). In 1910, when much of John Corbett's was being mortgaged by the trustees of his will, the saltworks appear again amongst this property as 'Site of Old Salt Works now waster land; the tenancy is void but there is no mention of the pit (4963/261.4/53).

The documents do not prove that "the Old Brine Pit" or the Corporation Pit of the 19th C is the old pit at Upwich of the borough monopoly but there are some reasons for thinking that this may be the case:

- 1. the 'Old Brine Pit' of the 19th C leases situated at SO 89956356 was part of the Corporate porperty. Ownership by the borough is important because the new pits, sunk after the borough monopoly was broken in 1695, were in private ownership.
- 2. a map attached to an indenture of 21st Sept. 1889 has a presumably later pencil annotation 'Corporation Brine Pit' written over the site which is marked on the sketch plan attached to the indenture of 24th and 25th March 1828 as the site of the Old Brine Pit (4963/261.4/28). The pit at SO 89956356 appears therefore to have also been known as the Corporation Pit.
- 3. the names 'Old Brine Pit' and 'Old Salt Pit' which appear in connection with the pit at S089956356 contrast with those of the new pits sunk after the breaking of the borough monopoly which are known by the names of their owners e.g. Walwyn's Pit, Romney's Pit etc. The appellation 'old' is also interesting in view of Nash's references to the 'old pit' at Upwich and the use of the terms 'olde pitt' and 'ancient brine pitt at Upwich' in an indenture of 30 Sept. 1721 (4963/261.4/21).

The Old Brine Pit at Upwich of the 19th C leases is threatened by a proposal to reopen the Droitwich Canal on a line to the N of the existing (infilled) route. The sketch plan accompanying the indenture of 24th and 25th March 1828 shows the pit adjoining the N towing path of the canal (existing line) but the new canal, routed 10m to the N will destroy the pit and any saltworking deposits around the pit which may have survived the 19th C saltworking activity.

#### References

Freezer 1978

D. F. Freezer From Saltings to Spa Town. The Archaeology of Droitwich (Droitwich Archaeol Committee and He. & Worcs. County Council, Droitwich 1978)

Habington

J. Amphlett ed. A Survey of Worcestershire by Thomas Habington Vol. II (Worcestershire Hist. Soc. Oxford 1899)

Leland

L. Toulmin Smith ed. The Itinerary of John Leland in or about the years 1535-1543. Part IV (London 1910

Nash 1781

T.R. Nash Coll. for the history of Worcestershire. Vol.I (1st ed.

1781

Rastell 1677-1678

Thomas Rastell An Account of the Salt Waters of Droytwich Phil. Trans. of the Royal Soc. of London (1677-1678) 12, 1059-1064

Sterry Cooper 1941

W. Sterry Cooper Droitwich Medieval and Modern with the Life of St Richard of Droitwich (Droitwich 1941)

> JULIE CRICKMORE DOE Research Fellow

## Upwich Area, Vines Park, Droitwich, Herefore and Worcester. HWCM 4575 (NGR SO 89956356)

Trial excavations were carried out on behalf of Wychavon D.C. within an area which is threatened by the restoration of the Droitwich Canal, 35m S of the River Salwarpe. A machine trench 10m in length was cut along the N bank of the infilled canal, and the exposed section recorded.

The major feature encountered was the E. lip of a large timber-lined pit. This could not be fully examined because of the limited extent of the operation, and only part of the upper fill was observed which contained one sherd of unglazed medieval pottery and two sherds of Severn Valley ware. The research of 18th and 19th C leases by J.N. Crickmore has positively identified this feature to be the 'Old Brine Pit' also known as the Corporation Pit. The pit had been cut through an extensive layer of ash and charcoal, 030 m in depth which contained no dating evidence. This material sealed a possible alluvium deposit, the surface of which lay at 26.43 m 0.D. almost 3m below the present ground level. Both the pit and earlier levels to the E. were sealed by 2.5m of post-Medieval stratification including the walls and demolition rubble of 19th C. salt-working buildings.

A geophysical survey of the Upwich area has been undertaken by the Applied Geophysics Research Unit of the University of Birmingham, as a student project under the direction of Dr. R.D. Barker, and the results are awaited.

D.F. FREEZER

## Birmingham Buildings 1979

The following buildings have been recorded over the last year and typescript interim reports have been issued on each.

- 1. 57-59, Coleshill Street, Sutton Coldfield (SP 12279616)
  A 4 bay timber-framed building of c. 1500 comprising a two bay open hall to the N whose chimney retains its timber smoke hood, with a two bay floored section to the S. Externally brick cased in the 19th C.
- 2. 1-5. Coleshill Street, Sutton Coldfield (SP 12189635)
  An extensive range of early 18th C brick buildings composed the former Rectory with its barn, incorporating a stone house beneath No's 1-3, possibly built by Bishop Vesey.
- 3. Outbuilding to the Moat House, Lichfield Road, Sutton Coldfield. (SP 12159671)
  A stone and brick coach house of c. 1680-90 associated with Sir William Wilson's adjacent Moat House, incorporating conscious elements of antiquarianism. Numbers 1-3 were recorded by N.A.D. Molyneux for the City Museums.
- 4. 451, Church Road, Yardley al. Church Farm al. Tile Farm (SP 135863)
  The site was given to the Yardley Charity Trust in 1463 and still belongs to the Trust, whose accounts enable close dating of the surviving farm complex. The cowhouse, incorporating parts of a timber-framed range of 17th C date, was largely rebuilt in the 1820's. Then the barn of 3 bays and erected in 1848 with the adjacent wagon hovel of 1853. The farmhouse itself rebuilt in 1837, a stable with upper cruck hayloft above and smithy, complete the farm layout.

for City Museums & Art Gallery,
Birmingham.

## The Archaeology of Standing Buildings in Shropshire

Sept. 1979 has seen the completion of survey work under the Special Temporary Employment Scheme designed to cover those buildings in the County which needed recording because they could not, for one reason or another, be guaranteed a much longer life. The emphasis is on the word survey, as the processing of the information is still pro-

cceding. When buildings are recorded under the aegis of the County Planning Depart. for inclusion into the Sites and Monuments Record the emphasis is on the analysis of the results and not on the quantity of buildings recorded. A vast range of information is computed for each building including not only planning and administrative factors but the actual attributes of the buildings ranging from building materials and planform to those features which render it in any way unique. It is only in this way that the long term aim of assessing the way in which people from the medieval period onwards lived and worked is achieved.

IWOULD THEREFORE LIKE TO APPEAL TO ANYONE WHO IS COMPLETING FULL MEASURED SURVEYS OF BUILDINGS IN SALOP OR WHO IS DOING ANY SUBSTANTIAL WRITTEN WORK ON INDIVIDUAL BUILDINGS TO SUBMIT THEIR WORK TO THE SITES AND MONUMENTS RECORD WHERE IT WILL BE ANALYSED IN ORDER TO FULFIL THIS LONG TERM RESEARCH AIM.

In order to give a brief indication of how the 50 buildings recorded during the STEP programme have been analysed according to the single aspect of planform, a brief breakdown of this aspect is included.

Buildings recorded under the STEP Programme

Rural Small Houses Two Unit and stack

The Den-Plealey, Lower Home Farm-Westley, No. 1 Coton-Whixall, Earls Hill Farm (Phase 1. Beauty Bank - Bridgenorth, 9 Coalport Road - Broseley, Workhouse Cottages - Morville. One Unit (initially)

Open to the roof

4 Station Road - Minsterley, Duffy's Cottage - Richley

Criftins - (Upton Magna) (lateral stack)

Ceiled over

Stowe House - Bomere Heath, Pound Cottage - Wollerton (Phase I) (plus pers crosswing), 1-4 Church Terrace - Oswestry, 19-27 G. Hales St. (initially Phase I) - Market Drayton. Medieval Open Hall

1 & 2 Oak Cottages - Ford, Silvington Manor, Southwall - Much Wenlock Vron Farm - Duddlestone, Aston Eyre, Upper Lake - Asterley, Walleybourne Farm, Cheyney Longville, Manor Farm - Stoney Stretton.

Sub Medieval Homes

Retain some features of med. building but are basically of a post med.format. The Bee - Stoney Stretton and 17-28 Church Road, Lilleshall.

Two unit, end lobby entrance - The Island, Lyneal, Nr. Ellesmere.

Baffle Entry

Three Unit - Middle Farm - Westley (pos. cross passage removed).

Stretton Farm, Nr. Market Drayton, No. 5 Tugford.

Two Unit - The Bee - Stoney Stretton, Bank Farm - Ford.

Large Houses

Onlbury Hall - U shape; Hinton Old Hall - H shape; Colehurst - U shape.

Plan forms destroyed

Three Unit - 25-31 Willow Street - Ellesmere, Woofferton Court Cottages,

19-27 Gt. Hales Street - Market Drayton.

Three unit non standard - 29 Whitchurch Road, Crudgington (poss. re-used crucks).
Two unit non standard - 17-19 Watergate Street, Whitchurch (poss. sep. living over shop unit), Day Home, Leebotwood, 1-2 Banton Cottages, Darliston.

Other non standard - White House, Hayton (rehash of earlier hall), 8 High Street - Ludlow, Reaside Manor - Cleobury Mortimer, 22-24 Frankwell, 4, 5, 6 Frankwell. Agricultural Buildings - Barn - Dayhouse, Leebotwood, Haughton House, Engine House, Hemp House, Walleybourne, The Stables, Rudge, Pattingham.

## Parish Survey of Westbury

In addition to the above, survey work on the above parish was conducted in order to satisfy the requirements of the Master of Arts Degree in Conservation, Vernacular Architecture and Historical Studies at the University of Manchester. In total 104 buildings were intensively studied using the system devised for the Shrops. Sites and Monuments Record. The results are too extensive and diverse to be summarised here, but it can be said that the study of planforms was particularly fruitful, revealing the two unit baffle entry as the most prominent planform for the small house in the area. The thesis was aimed in particular at establishing a vernacular threshold for this part of the County (a point in time at which the bulk of small houses were being constructed in

permanent material). It is widely accepted that this varies from region to region and is a product of location, social status and survival. Two vernacular thresholds were indicated in the results of the study, the late 16th C and the mid-late 17th C.

I would like to take this opportunity of thanking those members of the Society whom I may have visited in Westbury Parish for their kindness and co-operation in allowing their houses to be surveyed. They may be assured that they have furthered the cause of historical research by allowing the analysis of a tightly drawn area and providing results of the highest value.

A copy of the thesis may be available at the Local Studies Library in the New Year.

CAROLE RYAN

An except bouler to the defect on at the local few and there the contract of t

#### PERSONALIA

We congratulate Helen Maclagan on her promotion to the post of County Field Archaeologist to the County Museum of Warwickshire, replacing Dr. Raymond Lamb.

We are also pleased to welcome Gilles Crawford as assistant to Helen Maclagan. He is a graduate of Glasgow University and has worked in Cumbria and Cleveland. We will be sorry to lose John Ruffle but warmly congratulate him on his appointment at the Gulbenkian Museum of Oriental Art, Durham.

Ruth Taylor has also left to look after her family: she has been a good friend to the CBA Group and we are sorry to lose her but she will continue to act as Editor to the Birmingham & Warks. Trans.

We congratulate Stephen Price on his promotion to Deputy Keeper and hope he will continue his valuable work in local vernacular architecture.

#### A Request

Bob Spain, Trevarno, 45 Roseacre Lane, Bearsted, Nr. Maidstone, Kent is doing some research on R.B. millstones and querns and would be grateful for any information and drawings of unpublished examples.

#### PUBLICATIONS

## Antiquity 53 (1979)

A.R.Wilmott J.K.St. Joseph A Romano British Stone Head from Kenchester 217-218
Aerial Reconnaissance: recent results: Brandon Camp
near Leintwardine in which the author identifies Roman
military buildings 51-55

## Britannia 9 (1978)

Dr. Martin Henig

'Another Intaglio from Wroxeter (privately owned)'

#### Archaeol. J. 135 (1979)

N.W. Alcock et al

'Maxstoke Castle, Warwicks.' 195-233

#### Post-Medieval Archaeol. 12 (1978)

Hugh Tait & John Cherry H. Mytum

'Excavations at the Longton Hall Porcelain Factory, Part 1' 1-29 'A Pottery bird-whistle from Warwick' 128-129

#### The Local Historian 12 No 5 (1977)

Della Hooke

'The Reconstruction of Ancient Track Ways' 212-220

### S.Staffs Archaeol. & Hist. Soc. Trans 19 (1979)

J.W.Whiston Kevin Leahy

Colm O'Brien

P.J.Markham

'Ryknild Street from Wall to Streetley, Staffs' 1-4

'Anglian Cruciform Brooches from Wychnor and Brizlincote near

Burton on Trent' 5-10

'Excavations at the Abbey, Burton-on-Trent 11-32

John M Frew 'Cathedral Improvements: James Wyatt at Lichfield Cathedral

1787-92' 33-46

Andrew J. Wager

'Three Centuries of Death : a Study of attitudes reflected

in gravestones in Shenstone (Staffs) churchyard'

'An erratic boulder at the Junction of Old Hall Lane and

Beacon Lane, Aldridge, Staffs' 56

Ruth Taylor 'Jettons found in the Minster and Stowe Pools, Lichfield

in 1957' 57

Trans. Worcs. Archaeol. Soc. 3rd ser. 6 (1978)

R.B. Lockett 'George Gilbert Scott, the joint restoration committee and the

refurnishing of Worcester Cathedral'. 7-42

Nicholas Orme 'The Medieval Schools of Worcestershire' 43-52

Patricia M Long 'The Members of the Corporation of Worcester under the Early

Stuarts'. 53-64

Canon J.S. Leatherbarrow 'William Turbitt of Powick 1833-1867' 65-70

Augusta Paton 'The Botany of Groome Court' 71-74

Elaine Morris 'Late Saxon Pottery from Worcester' 75-82

" 'A Seventeenth Century pit deposit from Worcester' 83-88

A.G. Vince 'The Petrology of some Post-Medieval pottery from Sidbury,

Worcester '88

## Vale of Evesham Historical Society Research Papers, Vol. VII (1979)

This volume is to be published shortly and will contain the following contributions: Wild Bovidae from the Evesham area. with notes on the status of Giant Oxen (Bos Primigenius Bojanus), by P.F.Whitehead; An abandoned Flandrian river channel at Pershore: stratigraphy, pottery, and biota, by A.G.Vince and P.F.Whitehead; Neolithic axes in the south-west Midlands, by P.F.Whitehead; A currency-bar hoard from Harrow Hill, Middle Littleton, by D.C.Cox; The Digby-Gotha recension of the Life of St. Ecgwine, by M.Lapidge; A Medieval bridge on the Avon at Twyford, near Evesham, by D.C.Cox.

The volume will contain about 68 pages, printed in conventional letterpress and uniform with the Society's previous volumes, and illustrated with plans and line drawings. Price £4.00 plus postage and packing. Please order from the Publications Manager, The Almonry Museum, Evesham, Worcestershire, WRll 4BD. Do not send money with orders; purchasers will be invoiced by the Society.

This will be the last volume of Research Papers, at least in the foreseeable future, and the Society would like to thank all those who have given their support to its volumes. A limited stock of back numbers (except Vol.IV) is available from the above address, price £3.00 a copy plus postage and packing.

D.C.COX

Vale of Evesham Historical Society

#### City of Hereford Archaeology Committee

The Unit has been engaged throughout 1979 on finalising the report on Hereford City Excavations. The report, which includes the important sites, Victoria St, Cantilupe St, Berrington St, Bewell House, the Brewery and Castle Green, will be published by the Council for British Archaeology as three volumes in the Research Report Series

Vol 1: The defences and the city Vol 2: Excavations at Castle Green

Vol 3: The finds

It is hoped that all three volumes will be published during 1980.

The unit has organised a small excavation in the grounds of Bishop's Palace (p.61) and has surveyed the remains of Urishay Chapel near Peterchurch (p.62)

RON SHOESMITH Bewell House, Hereford

It is always a pleasure to receive local Newsletters: they often contain useful and interesting items, but we would especially like to commend the Autumn edition of the Worcestershire Archaeology & Local History Newsletter No.23, published by the Worcester City Museum. It is well arranged and produced and contained a remarkable range of subjects and is a model of its kind.

R.A. Meeson 'Madeley Court, Telford, Interim Report 1978-79'

#### A Review

Fisherwick, B.A.R. British Series 61, 1979, ed. Christopher Smith, 211 pages, 4 plates, £4.50.

This report by 12 individuals arises from rescue excavations conducted between 1973 and 1976 on four different cropmark sites on the low terrace of the R.Tame at Fisherwick, Staffs. The sites were threatened with destruction by gravel-working and part I is devoted to accounts of the consequent archaeological investigations. Part II is a series of specialist reports arising from part I; part III deals with 'Chronology and Dating' whilst part IV attempts the reconstructions of the Iron Age landscape for the area investigated. There follows a long series of appendices listing the features and finds from post-holes to V.C.P. and from slags to insect remains.

It follows that part I - the dirt archaeology - is fundamental to the validity of the remainder. The first site examined was of four enclosures with adjoining parallel lines as seen on aerial photographs. The site was being quarried by the time the immediacy of the threat was realised and as a result it was only possible to record sections through some of the features identified on the quarry face. A difficult situation, but since deductions are made from this work, the sections must be considered. The boundary ditches are said to have been filled with alternating zones of grey humic sand and coarser yellow-orange sand; the former being considered to be various soil horizons over collapse represented by the latter. Such a description arouses disquiet in one accustomed to straight forward primary silting followed by secondary silting (terms never used in the report) followed by either deliberate or some form of unplanned later filling. This is especially so when the first section examined (No.1 on fig.22) appears to be straight forward with two shoulders of the ditch having collapsed to form primary silt in the ditch bottom. One is further disturbed to find these collapsed shoulders explained by the statement that the profile and sediments suggest that it may be of two periods 'the earlier deeper than the later'. This and the other boundary ditches are assigned to the Iron Age on the strength of one sherd of Iron Age pottery and 18 grammes of V.C.P. from the upper filling of one ditch and three sherds of pottery from another. The exact findspots within the ditches is not indicated but all appear to be from the upper filling. Dating ditches by their filling is always chancy but it is more so in this case since there is nearby a Neolithic settlement, a Romano-British settlement, A D.M.V., a trackway said in the report to have been in use several centuries after 1st C. B.C. to say nothing of two lots of extensive landscaping in the 18th century. Later in the report one learns that a sherd of Romano-British pottery came from this site but its stratification (or lack of it) is nowhere indicated. The work done here was on a small scale but the results are very difficult to follow in detail since details of the recording of the site with a plan are on p.5-8, the ditch sections on p.114, a description of the stratification on p.113 (not facing p.114), the chronology and dating are dealt with on p.90, the Iron Age sherds are described on p.157, the Romano-British sherd on p.166, a drawing of the Iron Age sherds is on p.46, their fabrics are dealt with on p.51, details of the associated V.C.P. is on p.164 with details of the fabric and discussion on p.52-57. This arises from the wish to include separate specialist reports but the readers exasperation is accentuated by the failure to give page references in the text though fig. references are given. There is a similar difficulty in following details of the other three sites.

The second site reported on was subjected to a detailed contour and phosphate survey before excavation which revealed the foundations of circular structures within a ditched enclosure that had an E. entrance. Six sections were cut across the enclosure ditch and drawings of the sections are on p.117, 121 and 127 but again there is difficulty. It is claimed that all sections show the ditch to have been recut twice each recutting being successively more shallow. To the reviewer, only one of the drawn sections indicates a possible recutting whilst the other four sections do not suggest any recutting at all. This is important since the two recuttings are used to suggest three phases for the site, since on p.62 there is reference to two sherds of Romano-British pottery from this ditch whilst twigs from the ditch were used to secure four different C14 dates which range from 2130 ± 100 bp to 1930 ± 80 bp uncorrected. Further seeds of hemlock and bur-marigold were found in the ditch, plants that had not previously been recorded from a pre-Roman site. Fortunately details of the excavation of circular features (huts) within the enclosure are much more convincing than the ditch

sections though it is a pity that the whole of the enclosed area could not have been excavated. Above the foundations of a round hut was a feature interpreted as a sunken hut 3.5m x 3m. On p.33 suggested parallels include the grubenhauser from the Saxon site at Catholme but that at Fisherwick is dated to the early 13th C. This dating rests on one rim sherd from within the feature and two sherds from the topsoil above. The exact position of the former is not indicated nor are any of the medieval sherds adequately discussed within the report. Instead reference is to a Ph.D thesis at Nottingham University. The sections across the 'hut' on p.137 show a most uneven floor and it is difficult to make sense of the seven postholes within the 'hut'.

The third site reported on was another cropmark site from which the topsoil had been removed mechanically and where strips were cleared to identify features (boundary ditches) before their intersections were excavated. The fourth site, similarly examined was an enclosure possibly converted for stock coralling.

Although the medieval sherds are dealt with summarily, there is a full report and discussion of the Iron Age sherds and of the V.C.P. Discussion of the latter is one of the most interesting parts of the report. Petrological analyses suggest the possibility of local manufacture and hence the possibility of a local salt manufacturing industry. This is fully and commendably dealt with. One small blemish is the reference to medieval salt working at Salters Bridge, three miles N of Fisherwick on the sole strength of a personal communication. If such is to be referred to in print (and possibly subsequently quoted) surely more detail and a grid reference should be given. This is especially so since the only site known to this reviewer at Salters Bridge consists of large rectangular depressions in a field of pasture, the depressions being linked to the Tame. Local people refer to the depressions as old sewage filter beds. If this is indeed the site referred to surely something should have been said to refute the local belief. Nevertheless the case for possible salt-making at Fisherwick at an earlier date is admirably made and expressed with due caution.

Querns, flints, water-logged wood remains, animal bones, seeds, pollen and insect remains are all fully reported on. The specialist reports and the results of the dirt archaeology are drawn together in part IV with the fine intention of drawing a picture of the landscape and its ecology during the Iron Age in the small area examined on the river terrace. Whilst the intention is excellent it is regrettable that one is not fully convinced that all the ditches from which evidence was taken are certainly of Iron Age date, and not Roman, medieval or even Bronze Age as was postulated for a further cropmark site also excavated by Smith on the river terrace at Fisherwick but which has been the subject of a separate report (Trans. South Staffs. A.& H. Soc., xvi (1976), 1-17.

The report includes a few errors of fact, for example on p.63 the nearby village of Tymore is referred to as having been completely depopulated by the end of the 14th C. yet the Muster Rolls of 1539 give the names of 5 able men at Tymore and the Stafford-shire Quarter Session Rolls record that on the 13th June 1587 Christopher Field was appointed constable for Tymore. We are also told on p.63 that late medieval pottery is rare in the Tame valley as a whole yet a very little further upstream from Fisherwick is Tamworth, whilst at the head of the river Anker, a tributary of the Tame, lies the extensive kiln site at Nuneaton.

#### CBA Publications

The CBA has recently produced a catalogue of its publications and a useful little pamphlet on how the CBA works: both are free and worth having from 112, Kennington Rd.London SE11 9RE

Among the recent handbooks is Archaeological Resources Handbook for Teachers, 136pp £2.50. The CBA is also sponsoring a series of maps of Britain showing sites and monuments of various periods. The first is Saxon & Viking Britain, £1.25 (£1. to subscribers). An important report for all RB pottery buffs is The Alice Holt-Farrham Roman Pottery Industry by M.A.B. Lyne, ed. R.S.Jefferies. Rescue Report No.30. £8.50.

The CBA and British Universities Film Council are trying to compile a list of films on archaeological topics which might be of use to teachers and which although not on general release might be borrowed from television companies. These include some of the BBC Chronicle Series and Anglia Television programmes of archaeological interest include "Digging for Yesterday" with Neil Cossons, Frank Atkinson etc. "Frontiers of Discovery - History from the Air" - the work of Cambridge's Committee for Aerial Photography. "2000 Years" - Documentary on prehistory and History of Colchester. Details from CBA, Mike Corbishley.

#### USEFUL ADDRESSES

A Baker 48 Ashley Road Salisbury Wilts

N Baker 276 Rotton Park Road Edgbaston Birmingham 16

Mr and Mrs F Ball 12 Whetstone Close Farquhar Road Edgbaston Birmingham B15

D Barker City of Stoke-on-Trent Museum Hanley Stoke-on-Trent

P A Barker 4 St Georges Square Worcester WR1 1HX

Dr L H Barfield Dept of Anc Hist & Arch University of Birmingham B15 2TT

S R Bassett School of History The University Birmingham

J Bateman 40 Banks Road Coventry CV6 1JT

P Booth 52 Stratford Road Alcester

A Carter 10 School Road Eccleshall Staffs

M O H Carver Birmingham Univ Field Arch Unit Dept Anc Hist & Arch University of Birmingham

Nigel A Chapman 230 Selsey Road Edgbaston Birmingham B17 8TN D C Cox V C H Shirehall Shrewsbury SY2 6ND

J.N. Crickmore School of History University of Birmingham

J G Dutton
'Whitesmore'
Chapelhouse Road
Chelmsley Wood
Birmingham 37

Dr C Dyer School of History The University Birmingham

J Fisher 3 Hampton Court High Chase Rise Little Haywood Staffs

D Freezer
Droitwich Arch Committee
Covercroft
Droitwich
Worcestershire WR9 8DD

L Fretwell 22 Simon Close Attleborough Nuneaton

J Gould 307 Erdington Road Aldridge Walsall Staffs WS9 OSB

Miss S J Greaves Keeper of Archaeology City Museum & Art Gallery Broad Street Hanley Stoke-on-Trent ST1 4HS

Miss S Hirst Lower Linceter Badley Wood Common Whitbourne Herefords

M Hodder 12 Rosslyn Road Walmley Sutton Coldfield B76 8HE D Hooke 91 Oakfield Road Selly Park Birmingham 29

B F Hopkinson 12018 Sarah St Studio City Ca 91607 U S A

Dr A W J Houghton Oak Wood Pulverbatch Nr Shrewsbury

B Hutty 54 Lyndon Road Olton Solihull

W E Jenks Trevarrin 18 Langford Avenue Bayston Hill Shrewsbury

Mrs L King Rockmount Kinver Nr Stourbridge DY7 6JA

Miss S Laflin Computer Centre University of Birmingham Birmingham B15 2TT

Helen Maclagan Warks County Museum Market Place Warwick

J R Magilton Council Offices High Street Coleshill Birmingham 46

R A Meeson 16 Falna Crescent Coton Green Tamworth Staffs

J E L Metcalfe 85 Boney Hay Road Burntwood Walsall West Midlands

N A D Molyneux Flat 5 4 Selbourne Road Worcester D Pannet 53 The Oval Bicton Shrewsbury

J G Perry 66 Purnell's Way Knowle Solihull West Midlands

J Pickering Elmtree Drive The Outwoods Hinckley Leics LE10 2TX

E A Price Shenstone Winchcombe Road, Sedgeberrow Nr Evesham Worcs

S Price Dept of Arch City Museum & Art Gallery Congreve Street Birmingham B3 3DH

Rev Fabian Radcliffe Trinity School Guy's Cliffe Avenue Leamington Spa Warks CV6 NB

Professor P A Rahtz The University Kings Manor York

W P Richards 3 Chester Crescent Westlands Newcastle Staffs

Carole Ryan County Planning Office Shirehall, Abbey Foregate Shrewsbury

M Rylatt Herbert Museum & Art Gallery Jordans Well, Coventry CV1 5RG

J Sawle Hereford & Worcester Co Museum Hartlebury Castle Nr Kidderminster

K Scott
39 Nursery Road
Atherstone
Warks.

R Shoesmith City of Hereford Arch Unit Bewell House Hereford

Dr Lance Smith 41 Villa Court Madeley Telford Salop

Dr S C Stanford Ashfield Cottage Luston Leominster Herefords

H Sunley 57 Highland Road Kenilworth Warks

S J Taylor Hinton Manor Woodford Halse Daventry Northants

E W Tipler Hollybank Cottage Romsley Nr. Bridgnorth Salop

H Toller Institute of Archaeology 31 Gordon Square London WC1

J W Tonkin Chy an Whyloryon Wigmore Leominster Herefords HR 6 9UD

Alan Tyler c/o Planning Dept Shirehall Abbey Foregate Shrewsbury

P L Waters 2 Westwood Road Malvern Link Worcs

A Wharton Rowleys Mansion Hills Lane Shrewsbury Dr G Webster The Old School House Chesterton Harbury Nr Leamington Spa Warks CV33 9LF

D Whitehouse Hereford Sixth Form College Folly Lane Hereford HR1 1LS

J Wills Hereford and Worcester Museum Hartlebury Castle Nr. Kidderminster

T Wilmott 78 Millside Rd Great Barr Birmingham B43

P R Wilson 1 Staunton Road Leamington Spa CV31 2PN

M Wise 13 Brand Lane Ludlow Salop

S M Wright County Museum Market Place Warwick AIR PHOTO UNIT ( J. Hampton)
National Monuments Record
Fortress House
23 Savile Row
London W1

ALCESTER EXCAVATION
Unit 1
The Old Fire Station
Stratford Road
Alcester
Warks

BIRMINGHAM CITY MUSEUM & ART GALLERY Mr J Ruffle (Keeper of Arch) Congreve Street Birmingham B3 3DH

BIRMINGHAM UNIV FIELD ARCH UNIT Selly Wick House Selly Wick Road Birmingham

BIRMINGHAM & WARKS ARCH SOC Miss J Pierson-Jones (sec) Birmingham City Museum & Art Gallery Congreve Street Birmingham B3 3DH

BORDESLEY SOCIETY
Miss D M Arnold (Sec)
29 Salop Road
Redditch
Worcs

BURTON-ON-TRENT NAT HIST & ARCH SOC K L Neal (Sec) 53 Belvedere Road Burton-on-Trent Staffs

CAMBRIDGE UNIVERSITY
COMMITTEE FOR AERIAL PHOTOGRAPHY
The Mond Building
Free School Lane
Cambridge CB2 3RF

CHEADLE HIST SOC Mr. H A Chester (Sec) 71 Froghall Road Cheadle Stoke-on-Trent

CHELMSLEY LOCAL HISTORY SOCIETY
J G Dutton (Survey Director)
Whitesmore
Chapelhouse Road
Chelmsley Wood
Birmingham 37

COUNCIL FOR BRITISH ARCHAEOLOGY 112 Kennington Road London SE11 6RE

COVENTRY & DIST ARCH SOC D L Wilson (Sec) 126 Woodside Avenue Coventry CV3 6BG

COVENTRY MUSEUM
Mr A Davis (Director)
Herbert Museum & Art Gallery
Bayley Lane
Coventry CV1 RG

HEREFORD CITY MUSEUM Mr N Dove (Curator) Broad Street Hereford

HEREFORD & WORCESTER ARCHIT RECORD GROUP
Mr S Davies (Sec)
c/o The County Museum
Hartlebury Castle
Nr Kidderminster
Worcs

HEREFORD & WORCESTER COUNTY MUSEUM
Mr. G L Shearer (County Museum Officer)
Hartlebury Castle
Nr. Kidderminster
Worcester

KEELE & NEWCASTLE ARCH SOC Mr. D Cliffe (Sec) 6 Pear Tree Road Bignall End Stoke-on-Trent Staffs

KENILWORTH ARCH SOC Mrs. I Potter (Sec) 11 Hawkesworth Drive Kenilworth Warks

KIDDERMINSTER ARCH SOC Mrs J Hockin (Sec) 26 Belbroughton Road Blakedown Kidderminster Worcs

LANDOR SOC (RUGELEY) A W Neal (Sec) 38 Fortescue Lane Rugeley Staffs LEAMINGTON ARCHAEOLOGY GROUP Miss G Sutherland 28 Heath Terrace Leamington Spa Warks

LEEK & DIST FIELD CLUB Miss D Hill (Sec) 10 Newcastle Road Leek Staffs

MEDIEVAL RESEARCH GROUP Rowley's Mansion Hills Lane Shrewsbury

N STAFFS FIELD CLUB R H Tribbeck (sec) Dept of Chemistry N Staffs College of Technology Colle Road Stoke-on-Trent

ORDNANCE SURVEY
Romsey Road
Maybush
Southampton SO9 4DH

OFFA'S DYKE ASSOC Miss M Cadwallader (Sec) Bryn Rhosyn Offa's Road Knighton

RESCUE 15a Bull Plain Hertford Herts

RUGBY ARCH SOC A Barnett (Sec) 82 Clifton Road Rugby Warks CV21 3QX

SHAKESPEARE BIRTHPLACE TRUST Dr Levi Fox (Director) SBT Shakespeare Centre Henley Street Stratford-on-Avon

SHREWSBURY MUSEUM Clive House Museum Shrewsbury

SHROPSHIRE ARCH SOC A Tyler (sec) County Planning Office Shirehall Shrewsbury SOLIHULL ARCH GROUP
Mrs M Dunlevy (sec)
1 Shaw Drive
Yardley
Birmingham 33

SOUTH STAFFS ARCH SOC Dr J. G Cole (Sec) 11 Bracebridge Road Four Oaks Sutton Coldfield West Midlands

STAFFORD CIVIC SOCIETY H Dyson (Sec) 7 Richmond Close Stafford

STAFFORD & MID-STAFFS ARCH SOC M J Berry (sec) Longfield Wetwood Eccleshall Staffs

STOKE-ON-TRENT MUSEUMS DEPARTMENT A R Mountford (Director) Unity House Hanley Stoke-on-Trent ST1 4HY

STOKE-ON-TRENT MUSEUM ARCH SOCIETY Miss S J Greaves Broad Street Hanley Stoke-on-Trent

STOUR & SMESTOW ARCH RESEARCH GROUP c/o Mr. E. Worton 52 Belmont Road Wollescote Stourbridge West Midlands

SUTTON COLDFTELD ARCH GROUP Mrs M J Brown (sec) 3 St James Road Sutton Coldfield

TAMWORTH MUSEUM
Miss C Tarjan (Curator)
Castle Museum
Tamworth
Staffs

TRENT VALLEY ARCH RESEARCH COMMITTEE c/o Miss H Wheeler
The University
Nottingham NG7 2RG

VALE OF EVESHAM HIST SOC Mrs S Barr (Soc) The Almonry Museum Evesham Worcs WR1 4DB WARWICK COUNTY MUSEUM
County Museum
Market Place
Warwick

WOOLHOPE NAT F C ARCH RESEARCH SECTION
Miss M Thomas (Sec)
Hillside
Abbey Dore
Herefords

WOOLHOPE NAT FIELD CLUB
Mrs M Tonkin (Sec)
Chy an Whyloryon
Wigmore
Herefords

WORCESTER CITY MUSEUM
Mrs G Owne (Curator)
City Museum & Art Gallery
Foregate Street
Worcester

WORCS ARCH SOC
Mr R F Panton (Sec)
Birchdale
4 Orchard Road
Great Malvern
Worcs