



The Castles of Kent No. 5

Sandwich Castle:

I am the first to concede that I know very little about individual castles in East Kent or indeed outside the Medway area. Certain castle sites however, I find intriguing and although no doubt I will be taken to task by local archaeologists and historians of the Sandwich area I like to believe that the following ideas (rather than

'facts') may move our knowledge forward.

Although mentioned in *Kent Castles* (Guy 1980, p205-6) it was a brief 1983 article that really brought Sandwich Castle to my attention (Tatton Brown *et.al.* 1983, p.243-7). It was suggested that the Castle was a thirteenth century motte and bailey (mound and courtyard) fortification. At this time I was writing my dissertation (Ward 1985) and this was only the second reference to a *thirteenth* century motte and bailey castle for southern England that I had come across. The other reference being for Castle Toll near Newenden, overlooking Romney Marsh, to which I shall return below. For southern England such structures are usually regarded as being of late eleventh to mid-twelfth century date. Only in Scotland and Ireland were motte and bailey castles still commonly constructed in the thirteenth century. The latest securely dated examples being mid-thirteenth century for Scotland and c.1220 for Ireland, although in each instance others may be later, perhaps considerably so (Higham and Barker 1992, p67; McNeill 1997, p.71-3).

Sandwich Castle was apparently situated on the east side of the town on what is known as 'Castle Mead', near to the late medieval Sandown Gate. However, even its position was apparently at one time (and for all I know may still be) contested for John Guy records that there were those who believed it had been constructed in the south-west corner of the town within the area later enclosed by the town defences. Since 1983 the Canterbury Archaeological Trust have undertaken several evaluation trenches and watching briefs on the Castle Mead which is marked as being the castle site on earlier Ordnance

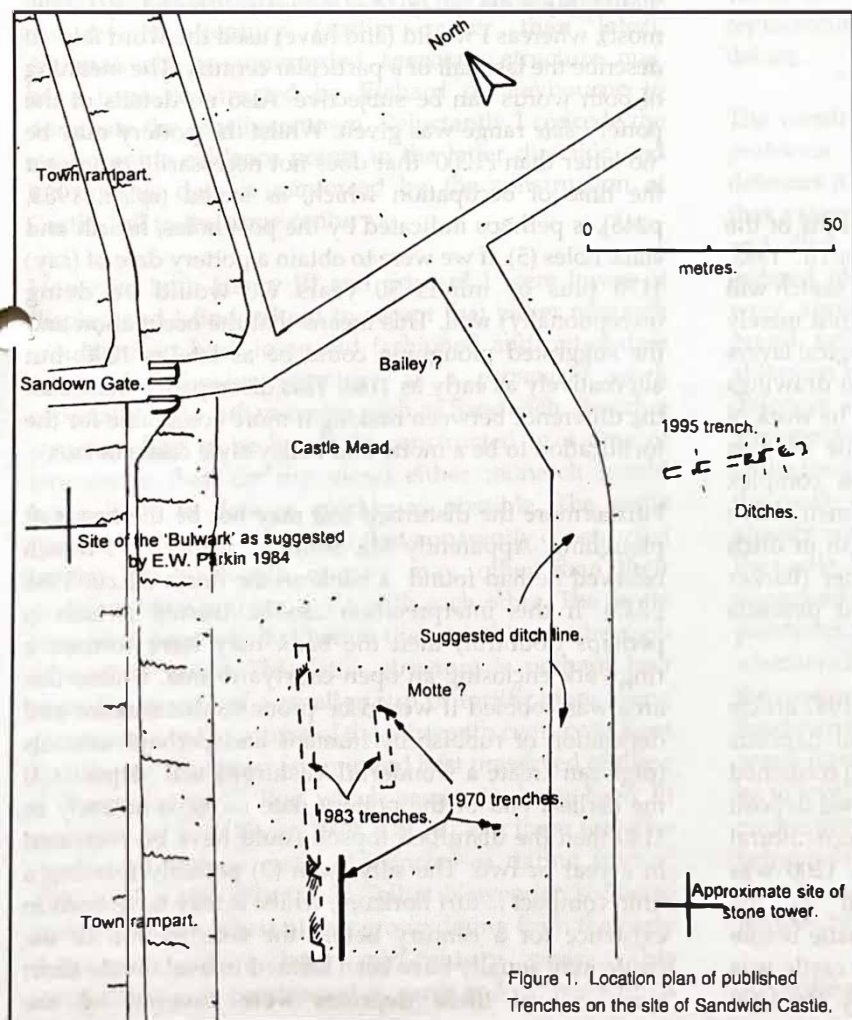
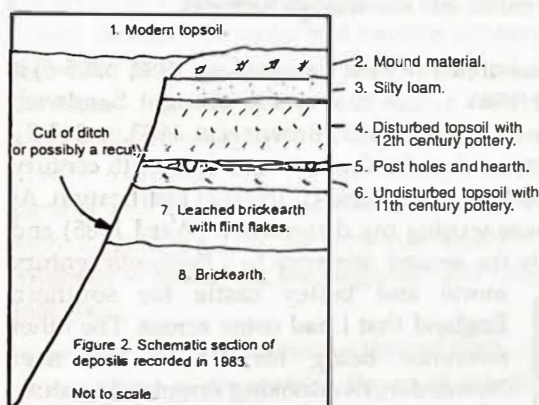


Figure 1. Location plan of published Trenches on the site of Sandwich Castle.

Survey maps. Other than the short 1983 article only one of these trial trench projects, undertaken in 1995, has to date been published (Herdman 1996, p.36).

No detailed drawings have been published of either the 1983 or 1995 trenches, there is only a location plan available for consultation which has been traced with permission of the Canterbury Archaeological Trust and amended (Fig. 1). Based on the textural description my own schematic section drawing of the 1983 excavation also appears (Fig. 2.); the numbering on the latter and referred to in the text below is my own. In 1970 a Mr. A. Southam excavated three trenches of which apparently little, other than their position, is known (*op.cit.* 1983, p.245). In the 1983 excavation two trenches were excavated. The longer one picked up evidence of a curving ditch at both its north and south end. This ditch was described as being approximately 14.25m wide and 4.5m deep. The shorter trench was within the ditched enclosure. The 1995 trench found evidence of other ditches c. 100m to the east, the largest of which was 3.2m in width.



The schematic section drawing shows the results of the 1983 excavation as described in the text (*op.cit.* 1983, p.245-6). The reader should take note that this sketch will have no similarity to what was actually drawn it merely depicts the stratigraphic order of the archaeological layers and features described. Archaeological section drawings across deep recut ditches are seldom simple. The work of Philip Barker at the motte and bailey castle of Hen Domen in Montgomeryshire has shown how complex ditch infilling and recutting can be. At Hen Domen of five archaeological trenches cut across a 20m length of ditch not one produced the same results as another (Barker 1979 p.42, Figs. 8-11) and most of the soil deposits probably produced no dating evidence.

The sequence described within the text of the 1983 article is relatively easy to understand. Two topsoil deposits were found. The lower, undisturbed deposit (6) contained eleventh century sherds and the upper disturbed deposit (4) was regarded as being the product of agricultural activity. As no pottery datable later than c. 1200 was recovered from this upper topsoil and as the documentary evidence does not mention a castle before 1290 (*op. cit.* 1983, p.243) it was suggested the castle was not constructed until the late thirteenth century. The 1995

excavation trench produced pottery of c. 1150-1200 within the upper fill of another ditch. However, as this latter feature was excavated to a depth of no more than 30cm and as it is almost 100m to the east it may have no relevance to the ditch found in 1983. Indeed it is possible that it does not form part of the castle defences but may merely be a large drainage ditch of which, I suspect, there are many around Sandwich.

Whilst the stratigraphic evidence for a foundation date in the late thirteenth century seems outwardly secure, there is a major problem in that there is no published section drawing. The ditch apparently cut the disturbed topsoil (4), but depending how far back towards the enclosed area it began this cutting may have been the product of the observed recut or, as at Hen Domen, there may be several recuts only identifiable if enough trenches are excavated. Alternatively (and this is an archaeologist's nightmare) a recut might destroy all sign of the original ditch and the latter would not therefore appear in the archaeological record. It is stated within the text that due to waterlogging the base of the earliest ditch was not reached. Consequently the thirteenth century pottery that was found within the ditch infill might not represent silting belonging to the original ditch; it may be considerably later.

The pottery recovered from the disturbed topsoil is described as 'of *later* (my emphasis) twelfth-century' date rather than *late* (*op. cit.* 1983 p.246). There is an important chronological difference between the two words; *late* would imply the last quarter of the twelfth century (at the most), whereas I would (and have) used the word *later* to describe the last half of a particular century. The meaning of both words can be subjective. Also no details of the pottery *date* range was given. Whilst the pottery may be 'no latter than c1200' that does not necessarily represent the time of occupation which, as stated (*op.cit.* 1983, p.246), is perhaps indicated by the post holes, hearth and stake holes (5). If we were to obtain a pottery date of (say) 1170 plus or minus 30 years we would be doing (exceptionally) well. This means that the occupation and the suggested ploughing could be as late as 1200, but alternatively as early as 1140. This discrepancy makes all the difference between making it more acceptable for the fortification to be a motte and bailey style castle or not.

Furthermore the disturbed soil may not be the result of ploughing. Apparently Mr. Southam in his 1970 trench believed he had found a bank on the north (*op.cit.* 1983 p.245). If this interpretation can be trusted (which is perhaps doubtful) then the bank may have formed a ringwork enclosing an open courtyard area. Unless this area was cobbled it would be prone to disturbance and deposition of rubbish by humans and perhaps animals (pigs can create a wonderful 'disturbed soil' deposit). If the earliest end of the pottery date range is as early as 1140 then the disturbed topsoil could have been created in a year or two. The silty loam (3) possibly forming a 'thin compact ... turf horizon', whilst it may have been in existence for a century before the construction of the castle may equally have been formed in a relatively short time. All of these deposits were covered by the

(suggested) mound (2) and the whole process could easily occur within a decade. The reign of King Stephen (1135-1154) was of course regarded as 'The Anarchy' and saw the construction of many earthwork and timber castles, large numbers of which, but by no means all, were to be abandoned or demolished in the reign of Henry II (1154-1189). Whilst it is not provable that the motte and bailey castle was constructed in the mid-twelfth century rather than a century or more later this type of structure would certainly be more in keeping with the earlier period.

According to E. W. Parkin (1984, p.199) the castle was in existence by 1260 and the insertion of this date on his Figure 4 implies that he regarded this as being not too far removed from the time of actual construction. Apparently brattices (a temporary breastwork or parapet) were erected in 1266 (*op.cit.* 1983, p.243) and the first reaction is to conclude they were at the castle. However, they may equally have formed palisades across the town streets at the time of the Barons War against Henry III when Richard de Leybourne captured the town on behalf of the royalist forces (Powicke 1962, p.207). According to Tim Tatton Brown the date of construction of the castle may have been as late as 1290, or alternatively this may have been the period of rebuilding of an earlier structure (*op.cit.* 1983, p.243). Documentary records for many royal buildings of the reigns of both Henry III (1216-1272) and Edward I (1272-1307) are relatively good. Whilst it is possible that a royal castle could have been built in this period without any reference to its foundation it is far more likely that such a lack of evidence would belong to the twelfth century (earlier rather than later). Alternatively an unrecorded *temporary* structure may have been constructed by Richard de Leybourne to dominate the rebellious town. Reluctantly I concede the stratigraphic evidence points in the latter direction and indeed this date is reinforced by the construction of Castle Toll in the same century.

However, both Henry III and Edward I were lovers of display and I find it hard to accept that either monarch would revert back to an old fashioned and out-of-date form of defensive structure as a *permanent* work especially in an urban centre such as Sandwich. If such a structure had to be hurriedly constructed in a time of emergency then (in my view) either monarch would bring it up to date as quickly as possible. The castle (probably) found in 1983 and that apparently constructed in the late thirteenth century may, other than their position, have nothing to do with each other. The motte may have been levelled before the probable construction of a stone castle. This latter structure is perhaps best regarded as one of a small group of fortifications being constructed in the course of the thirteenth century in Kent and Sussex. The most famous and best preserved of these is Ypres Tower at Rye which seems to have been in existence by 1249 (Renn 1979, p.193-8), but there was also (probably) a stone castle at Winchelsea dating from c. 1290 (*ibid.* p.198-200). Castle Toll at Newenden seems to have been the earliest of this group dating from the early thirteenth with a later, mid-century, phase. This fortification was constructed in earth and timber with 'a

low motte like mound in the north-east' of the enclosed area (Davidson 1972, p.124). Both of its structural phases were short lived and that neither was of stone need come as no surprise for there was no one to impress in this rural area and it was probably only viewed as a temporary expedient in a time of emergency (1204? 1216-?? 1240's?). It is one of the few, indeed as far as I am aware the only, certain thirteenth century motte in southern Britain. On other sites earlier mottes were altered (Kenyon 1990, p.11) and, admittedly, a mound was constructed at Lydford in Devon (*ibid.* p.43-5), but this encased an earlier free standing stone tower and therefore can hardly be regarded as a true motte. That such structures could be built is obvious but I doubt if Sandwich, one of the most important and wealthiest towns in England at that time, would be the correct setting for a *permanent* structure of this type at that late date.

The 1983 excavation produced no evidence of the small central keep, by implication a stone tower, mentioned by Parkin in his text (1984, p.199) and shown on his Figure 4. Identifiable structures on both stone and timber are notable by their absence in the published excavation trenches. However, apparently Edward Hasted did report seeing 'foundations' on Castle Mead in the late eighteenth century (Guy 1980, p.205; I have been unable to find the relevant passage within Hasted's work). The position of a stone structure very similar in plan to Ypres Tower is shown on maps of Sandwich and would be in keeping for a mid to late thirteenth century date. However, whether this shape has been based upon Ypres Tower and therefore *created* by antiquaries rather than representing what *actually existed* is of course open to debate.

The construction of the town defences creates further problems. Although there appear to have been earlier defences (Gardiner 1954, p.35, 102) it was not until 1385 that a stone wall along the river frontage with a rampart and ditch on the remaining sides of the town were ordered to be constructed. The ramparts on the west were apparently not completed until 1436 when the grand total of six labourers supervised by all the aldermen and constables were to complete the earthen defences without delay (*ibid.* p. 135). The ditch alignment shown on Figure 1 shows that part of the slope of the town rampart would have been constructed within the castle ditch, in other words the latter would be (or already was) infilled. It is perhaps rather surprising that the castle, whether we are writing about the motte or the suggested stone tower was left outside of this defensive perimeter. To leave a fortification of any strength, whether clay mound or stone tower (or both) overlooking the new rampart and (presumably) an early version of the Sandown Gate would mean the new defensive perimeter was a fiasco even before completed. The solution would be to level the castle. However, a problem with this latter suggestion is that at this date the castle was apparently being repaired and strengthened with turrets, gates and a drawbridge (*op.cit.* 1983, p.243) both carpenters and masons being present (Gardiner 1954, p. 121).

According to Parkin (1984, p. 201) in 1383 the ships of the

Cinque Ports captured a French floating wall supposedly 3000ft long and 20ft high and having integral turrets. If this monstrosity actually existed, of which I am doubtful, it was apparently brought ashore and its timbers used to construct a two-storied gun platform known as the 'Bulwark' erected next to the Sandown Gate. It seems far more plausible that the traditional (albeit not so exciting) interpretation offered by Dorothy Gardiner is the correct one (1954, p.120). According to her this wall was in prefabricated sections being carried on two French ships and was intended to act as a protection for an army once it had landed. When first mentioned the Bulwark, Parkin states that it was erected 'subsequently' i.e. after 1383 (1984, p.201) and later (p.211) that the Bulwark was built six years before the great French raid of 1451. Dorothy Gardiner states that the wood was used in the late fourteenth century defences but she makes no mention of the Bulwark in the context.

The date of 1451 seems to be the accepted date for the construction of the Bulwark (Guy 1980, p.205; Kenyon 1994, p.149) and it appears to have been a purpose built two-storey artillery platform. In the early fifteenth century (c. 1417) a (still standing) stone two-storied gun platform with three storey tower had been constructed at Southampton as the first (known) purpose built artillery fortification in the country (Platt and Coleman-Smith 1975 p.62-7). There has to be the suspicion (but as far as I am aware there is no evidence) that the Sandwich structure may also have been of the same type. However, there is apparently some debate as to whether the Bulwark and the castle are in fact different structures, the latter may have been updated (Guy 1980, p.206). To date I have come across no details as to what this debate entails other than the statement that the Bulwark was constructed in the south-east corner of the town (Gardiner 1954 p.136). This could mean within the perimeter of the town walls or it could mean the area marked on early Ordnance Survey maps as being the site of the stone castle. The latter is certainly the simplest interpretation.

Let us assume for the moment that this artillery platform was a new tower rather than merely an updating of the castle, and was in the position shown by Parkin on his Figure's 4 and 9. This may have been an attempt to create a more up-to-date defence system within the defensive perimeter on the most vulnerable side of the town. However, we enter into a 'catch 22' situation. Such a tower would only be secure if the castle tower (and/or the mound if it still survived) were themselves strongly defended, but if the castle was updated and cannon inserted the construction of the Bulwark becomes superfluous. If the castle (whether mound or tower or both) was *not* strongly defended it would have given cover to an enemy advance and when captured it would have provided a fighting platform from which to enfilade the town rampart and the roof of the Bulwark and Sandown Gate. At the time of the raid of 1457 the dangers from French missile weaponry were well known. It is unlikely that the French army (one can hardly call 4000 men a raiding party) had heavy cannon (although Gardiner does mention artillery; 1954, p.137), with them,

but they would undoubtedly have handguns, crossbows and longbows. The latter would have an effective range of 250-300 yards (Hardy 1994, p.180) and, by this date the French were probably as proficient in their use as English armies; crossbows by this time had an even greater range (*ibid.* p.162), although the range of the handguns would be considerably less. If the stone castle shown on maps of Sandwich was at the position indicated its capture and/or that of the mound (if the latter still existed) would provide superb positions for the French to sweep the ramparts with their missile fire. Not to have captured the castle first would mean they themselves could be bombarded in flank and rear.

As the castle dominated the town rampart the military solution in 1385 would be to demolish the stone tower, level the mound and infill the ditches. It is noticeable that Parkin does not show the castle on his Figure 9 portraying the town at the time of the French raid, which might imply this is what had happened, but unfortunately he does not discuss the point. Not to undertake this destruction would be (and probably was) military suicide.

The fourteenth century pottery found within the infill of the recut ditch excavated in 1983 might indicate that the mound was indeed levelled at the time of the construction of the town defences. The rampart and ditch around the town may have been ahead of their time for relatively low earthen defences protected by wide ditches were to provide a far better defence against cannon fire than stone walls. The failure to hold this defensive perimeter in 1457 may have been due to lack of manpower or surprise. However, if the castle (updated and perhaps renamed the Bulwark) was still standing its capture would have put the defenders at a distinct disadvantage. Withdrawal into the town would be the only tenable military option.

As far as I can see the published evidence does not allow us to advance much further and the following phasing of the castle site is put forward more as a series of ideas for discussion rather than statements of fact:

a. c.1100. Area unoccupied.

b. A motte and bailey castle was probably constructed in the mid-twelfth century (before 1150). The pottery evidence within the disturbed topsoil may represent the first phase of this fortification (perhaps a ringwork) and the ditch cutting this deposit is a recut. The lack of evidence for the existence of a castle in the twelfth and much of the thirteenth century is explained by its almost total destruction, as well as the very limited amount of excavation and the comparative rarity of documents for the earlier part of this period. The castle may have gone out of use, which would explain the earlier infilling of the Castle Mead ditch. This ditch was perhaps recut in the time of the Barons War when Richard de Leybourne refortified the site as a temporary fortification. Alternatively (and supported by stratigraphic evidence)

a motte and bailey may have been constructed in the last half of the thirteenth century perhaps by Richard de Leybourne as a *temporary* structure. The mound being levelled and the ditch infilled soon after, or in c. 1385.

c. In the late thirteenth century a stone tower, perhaps in the same style as that at Rye was probably constructed. Apparently Hasted (quoted by Guy-see above) records the presence of stone foundations but as far as I am aware no excavation has yet taken place on the traditional site of these remains. As both Henry III and Edward I were known for prestige building projects, it would be surprising if any castle at Sandwich remained an earth and timber structure at this late date, especially as the town was one of the wealthiest in the kingdom.

d. c. 1385 the town defences were constructed and (if not before this date) the mound pushed into its ditch. The stone tower and presumably its outer defences were retained outside the new defensive perimeter.

e. 1451 'The Bulwark' constructed. In all the readily available publications no evidence has been produced for the bulwark having been constructed within the town defensive perimeter adjacent to the Sandown Gate. The simplest (but not necessarily correct) scenario is to regard this structure as the stone tower of the castle, which has been updated for the deployment of cannon. If this latter idea were correct then, when captured by the French in 1457 its fall would automatically lead to the sacking of the town.

f. The Bulwark was repaired and another brick defensive structure built near the Fishergate (Gardiner 1954, p.140). In 1471 Thomas Nevill The Bastard of Fauconberg held the town and castle against Edward IV. This seems to be the last reliable reference to the structure.

g. Presumably Henry VIII demolished the Bulwark and/or the castle. As stone is in short supply in the area the masonry and even eventually the foundations were taken away. It seems likely that all that will remain of the structure(s) will be 'robber' trenches filled with soil and rubble.

As stated in my opening paragraph this scenario will probably be torn to shreds by those with more local knowledge than myself, but I think all would agree there are serious problems in understanding the chronology and typology of this interesting site. I would be surprised (and delighted) if documentary studies advanced our knowledge. It seems probable that only large scale, unhurried archaeological excavations undertaken in summer may solve the problems. Such work would ideally take place not only outside the town defences, but

also within their perimeter in the area immediately adjacent to the castle site.

Alan Ward

Part-time lecturer in archaeology at Christ Church University College.

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SOCIETY EXCURSIONS FOR THE MILLENNIUM, SUMMER 2000.

The week-long summer excursion will be to Alsace, From June 24th to July 1st inclusive. We shall be based in the Hotel Bristol, Colmar and will have the usual daily visits to historic and archaeological sites. As single rooms, as always, are at a premium, an early application, enclosing a S.A.E, to the Excursion Secretary is advisable. The three short visits within the county will, it is hoped, include a return to Mereworth Castle, and examinations of sites of particular interest in the industrial archaeology and pure archaeology fields. For details please send a S.A.E. to: Excursion Secretary: Joy Saynor, Friars, 28 High Street, Shoreham, Sevenoaks, Kent, TN14 7TD.

LIBRARY NEWS

Many members will be aware that Dr P Draper resigned the post of Hon.Librarian at the last A.G.M. He gave freely of his time and expertise to the Society for some 25 years in the exercise of this office. The Society will be indebted to him for many years for his foresight in starting the conversion of the Library catalogue to a computer database, the decision to create a Visual Records database and the programme of rebinding and conservation of the Library stock which is now almost complete. Following Dr Draper's resignation, Dr F H Panton has been appointed Hon.Librarian and Mr L E Ilott was elected Chairman of the Library and Muniments Committee.

The Editors

K.A.S. LIBRARY - A REVITALIZATION PROGRAMME

The Society's Library in the Maidstone Museum is acknowledged to be a superb resource of books, records, journals, collections, photographs, drawings, prints and other materials relating to the history and archaeology of the historic county. It also contains publications and transactions of other historical and archaeological societies in the United Kingdom and overseas. It is a pity therefore, but it is unfortunately true, that the library is not used as much as it possibly should be. Accordingly, as part of the general reappraisal of the purpose and role of the Society in the 21st century, a Working Party of the Library Committee is examining ways in which its use may be enhanced, both as an important specialist reference centre and as a desirable educational resource. The overall aim is to make the library more accessible and attractive to potential users, and to seek out and attempt to satisfy areas of interest to Members which may not be currently catered for. In pursuance of these objectives, the Working Party has identified an action programme for consideration, approval by K.A.S. Council. Of primary importance is the transfer of the library catalogue into a computer database. This has been in progress for some time now, but it is necessary to speed up the process. It is the intention of the Working Party to have the task completed as soon as possible in the year 2000. It is then intended to put the catalogue onto a website for the convenience of Members. Progress on computer updating, particularly to store images is also under way. Attention must also be given to making it easier to locate items on the shelves. The layout of the library is a cause of some concern. The room at Maidstone Museum is overfilled with stock and furniture. However, we are unlikely to find a better and affordable location and in any event we would not wish to break the Society's long and happy association with the Museum. Reorganisation of the contents of the library should ease the problems and provide more user-friendly facilities. The Working party is proposing to move a substantial part of the stock (principally foreign language collections) to other locations for storage where it will be available on request for research. This should free enough shelf space to eliminate the present double banking of books on the shelves. It is then planned to create secure storage for the more valuable material, which will be available on demand.

While the Society is justly proud of its antique furniture, the Working Party believes it takes up too much space and should be replaced by modern office furniture and equipment. A plan for this is being drawn up which will provide for computer and office space, for individual study and the flexibility to accommodate committee meetings.

We believe that Members will appreciate assistance when visiting the library. However, it is impossible to man the library at all times. We plan initially to provide coverage on Wednesday mornings, Saturday afternoons and one other half day. To achieve this we need at least six volunteers willing to work a half day on regular rota. We should welcome volunteers and any suggestions as to which other day the library should be manned.

The actions proposed above were submitted to Council at its December 1999 meeting with a request for the necessary expenditure. Council approved the action plan which will be implemented as quickly as is practicable.

F H Panton

NOTES FOR INFORMATION

1. The Library is a Reference collection and no book or other material may be removed from the room. 'Borrowing' causes severe inconvenience to other Members who may have travelled a considerable distance to consult a particular item.
2. Maidstone Museum opening hours
Monday-Saturday 10 - 5.15
Sunday 11 - 4
3. Members wishing to use the Library should show their Membership card to the Museum attendant and sign themselves in and out of the Library. The Museum staff hold the keys to the Library and will open it for any Member who signs in. Members not currently in possession of a Membership card should obtain one from the Hon. Secretary. Members not known to the Museum staff may be asked to provide additional identification.
4. The Maidstone Museum Operations Manager asks that Members be reminded that there is no car parking available at the Museum unless you are collecting or delivering bulky items.
5. Useful contacts for further information about the Library are: F. H. Panton - L Ilott
- D Anstey - M Pering

MEPAGE

UR SOCIETY

ANNUAL GENERAL MEETING

Last year Deal celebrated the tercentenary of receiving its charter so our Annual General Meeting in May was held there, in the Astor Theatre, and public lectures in the afternoon formed part of the Deal 300 programme. Keith Parfitt spoke on the excavations at Mill Hill and John Iveson on the history of the defences of Dover to a large audience which included many who were not members of the Society. The meeting in the morning marked the retirement of Dr Alec Detsicas as Hon. Editor. His achievements during his 30 years in this office were described by Dr John Whyman. During this time Dr Detsicas was responsible for some 33 volumes of *Archaeologia Cantiana* as well as other publications. Unfortunately his health prevented him from being present so the gift subscribed by members was presented to him on a subsequent occasion.

Terry Lawson was welcomed as the new Hon. Editor but otherwise all the serving Officers and Council members were re-elected. The rules were changed to reduce the number of Vice Presidents by two and the result of the ballot was that the serving Vice Presidents were re-elected.

The Hon. Treasurer, Robin Thomas, explained the need for an increase in the subscription rates and the following rates were agreed to take effect on the 1st January next year.

Individual member: £20 Husband and wife: £25 Junior member (not over 21): £10 Over 65 and a member for 5/10 years: £15

Husband and wife both over 65 years and members for 5/10 years: £23 Affiliated Society: £20 Institutional Subscriber: £35

Another change to the subscriptions was an alteration to the rule allowing members over 65 to pay a reduced subscription if they have been members for 5 years or more. The qualifying period was increased to 10 years. If you qualified for this concession before the 1st January 1999 you will have to apply (to the Hon. Membership Secretary) before the 31st March.

HELP NEEDED

The more members who are involved in running the Society the stronger it will be and the more it will be able to achieve. It is obvious when you think about it, but the number of us that take an active part is very small. Can you help to change this and spare some time to promote the work you joined the Society to support? Our Library is still an under-used resource despite the work that Dr Draper did as Hon. Librarian over the last 25 years. Sadly he resigned last year. We want to build on his achievements so the Library is used by more members. This means that more members are needed to help with organising our books and collections, helping other members use them, introducing new technology and other tasks. The Membership and Publicity Committee is responsible for services and activities for members that are not provided by the specialist committees as well as for recruiting new members; these include the lectures programme, social events and the Newsletter. It also has the task of publicising our activities. With more helpers this committee could do more. Also, our Hon. Membership Secretary, Margaret Lawrence, has announced that she wishes to retire at the next A.G.M. so we need to prepare for that. The Churches Committee is reviewing its work. It does not intend to limit its attention to Church of England parish churches but to include historic places of worship of all denominations, and all religions. It also wants to look at how these buildings have been used and the communities and denominations that use them. If you are interested in helping with this research, please let us know. If you are interested in helping in some way, please contact the Hon. General Secretary, Andrew Moffat.

KAS COMPUTERS USERS BRANCH

In the course of your archaeological and local history research do you use a computer in which to store and manipulate your information? Do you often feel that you are re-inventing the wheel? Do you find yourself grappling with the complexities of different software programmes?

Why be alone, why not join with others of like mind to share common experiences in taming your computer to perform the task that you want to carry out and perhaps to learn of additional methods that would benefit your research.

The KAS Computer Users Branch will have as its prime objective "the desire to enable all members to study and promote the use of computers and information technology in archaeology and local history."

Members would mostly communicate by e-mail, with occasional meetings to discuss and experience the use of various programmes and hardware such as the use of "scanners" and "digital cameras". A pool of information about useful web sites that assist with "online" research could be built up.

The Society's Library Committee is at present looking into ways of making some of its vast amount of information available in digital form. There may be opportunities for members to participate in this important work.

If you are interested in hearing more about the KAS Computer Users Branch please e-mail Ted Connell at ted.connell@btinternet.com, or by snail mail enclosing a stamped and self addressed envelope to Ted Connell.

WE'RE ON THE WEB

The Society has its own website which you can 'visit' by using the following U.R.L. (Address):

http://ourworld.compuserve.com/homepages/ai_moffat. Note that it does not contain the usual 'www', there is an underline character between 'ai' and 'moffat' and the full stop at the end is not part of the URL, just the full stop at the end of the sentence. The website is still experimental and does not contain any of the fancy graphics etc that many sites have. This is because it is run by the Hon. General Secretary in the few spare moments when there are no more pressing K.A.S. affairs to be dealt with. When we have more experience we hope to develop a website with a more professional appearance. It contains information about the Society's officers, committees etc., a diary of forthcoming events and a news page as well as information about the Society for non-members. We have already had some enquiries from non-members. Development of the site will rely on contributions from members. The Hon. General Secretary would welcome dates for events and news items as well as suggestions for improvement, preferably by e-mail (so he does not have to type them out) or otherwise by post. They cannot be accepted by telephone.

Courses, Events, Teaching Aids

2000 YEARS OF ARCHAEOLOGY IN KENT SATURDAY, 8th APRIL 2000 (11.00 am - 5.30 pm) QUEEN ELIZABETH'S SCHOOL, FAVERSHAM *An all-day conference to celebrate the Millennium* *Illustrated lectures, bookstalls and displays*

Morning session 11.00 am to 1.00 pm

Leading archaeologists in Kent in the last two centuries of the Millennium Dr Thomas Blagg, Roman Kent Brian Philp

Afternoon session 2.15 pm - 5.30 pm

Anglo Saxon Kent AD 449-1066

Tim Tatton-Brown

Fortifications in Kent AD 1066-1550

Andrew Saunders

Industrial Archaeology in Kent

Jim Preston

TICKETS: £6.00 (all day); £3.00 (morning or afternoon sessions) **FROM:** C.K.A., 7 Sandy Ridge, Borough Green, Kent, TN15 8HP (sae, please)

IFA CONFERENCE 2000

The Institute of Field Archaeologists in association with the CCE will be holding its annual conference at the University of Sussex, 4-6 April. This will be the largest and most important archaeological gathering ever held in Sussex, and attendance is open to all. Provisional session topics include: 'For Love or money: professionals and amateurs' (session organiser: John Manley, Sussex Archaeological Society); 'Fashion, form and function: readings in socio-economic archaeology'; 'A theory for archaeological evaluations?' 'Landscapes from the air - a European perspective'; 'Why study buildings?' (session organiser: Richard Harris, Weald and Downland Open Air Museum); 'Archaeologists or artists?'; 'The publication of archaeological reports'; 'Linguistic indicators of archaeological and historical significance'

(session organiser: Richard Coates, University of Sussex). There will also be a forum on 'Stratification in archaeology: listening to the profession', workshops on 'Health and Safety' and 'SMRs', visits to sites in Sussex, and a Conference Dinner at The Old Ship, Brighton.

Contact: IFA - 0118 9316446

At Horsham in partnership with Forest School

Bookings: Adult Education, Forest School - 01430 261088

Saturday 29th January, 10 am - 4 pm £15.85

1 The Wealden Iron Industry

Jeremy Hodgkinson

The Weald was the location for an iron smelting industry which, in two periods within the last 2,000 years (in the early part of the Roman occupation and during the sixteenth and seventeenth centuries) was the paramount iron producing region in the British Isles. We look at the technology, products, location and people associated with the industry.

Saturday 19th February, 10 am - 4 pm £15.85

2 Archaeological Reconstruction

Casper Johnson

The history of reconstruction, its use as entertainment and education, and the reconstruction of sites and landscapes. We review studies of gender and race, and the use of computers and virtual reality.

Sussex Archaeology Symposium

At the University of Sussex

Saturday 11th March

This event, which is run in conjunction with the Sussex Archaeological Society, will provide accounts of recent archaeological fieldwork and research in Sussex. Contributions this year will include reports on the Society's research projects at Fishbourne and Clay Hill. For further details see separate leaflet. Contact: 01273 678040)

Mainland Greece Tour

Sunday 9 - Sunday 16 April

This study tour will explore some of the material remains of Ancient Greece and combine such evidence with historical/mythological sources to reconstruct and explain aspects of this important episode in the development of European culture. The provisional list of sites to be visited on the multi-centre tour includes: Athens, Corinth, Delphi, Epidauros, Mycenae, Olympia, Marathon, Laurion, Sounion, Thorikos and Brauron. Tour Leaders: Gillian Partington and David Rudling
Fee: approximately £500 (Half-Board). Single room supplement: approx. £70,
For further details contact.

Southern Cyprus Tour

Wednesday 10th - Wednesday 17th May

A third (and final!) attempt to run this study tour. Based in Paphos and Limassol the tour will explore the major sites and monuments of Southern Cyprus. The sites range in date from the spectacular Neolithic village of Khirokitia to the medieval castle of Kolossi and the painted churches of the High Troodos. Visits will also be made to the reconstructed prehistoric settlement of Lemba, the newly displayed Late Bronze Age site of Maa, the classical site of Kourion, the monastery of Neofytes and the splendid National Museum in Nicosia. No visit to Cyprus would be complete without seeing both old and new Paphos, the latter incorporating the celebrated mosaics.
Tour Leader: David Rudling. Services of a local guide.

Fee: £649 (B&B) or £688 (half board) with a £15 reduction for Sussex Archaeological Society members. Single room supplement: £40.
For further details contact.

Southern Ireland Tour

Provisional dates: 16-23 September

CANTERBURY ARCHAEOLOGICAL SOCIETY - RESEARCH AND PUBLICATION GRANTS

The Society has limited funds available with which to support individuals researching the archaeology and early history of the Canterbury district. It is envisaged that grants would not normally exceed £500 each and would be awarded annually. Preference would be given to work resulting in publication.

ALLEN GROVE MEMORIAL FUND

Please apply in writing to the Honorary Secretary by 30 June 2000. Your letter should mention your qualifications, the nature and length of your research, the amount you are asking for, any other funding anticipated and the end product (e.g. article, pamphlet). You should name a referee whom the sub-Committee making the grants could consult. If successful you would be expected to account for the money spent and a copy of any article or pamphlet etc. to the Society's Library.

For further details, please contact the Honorary Secretary, Mrs Jean Crane.

WESTHAWK FARM EXCAVATIONS

Kent archaeologists have made a major step forward in the involvement of volunteer archaeologists in PPG16 excavations. These are excavations required by the planning process before development of land. Most work has usually been done by professional archaeological contractors with little or no involvement of volunteers.

Last year KCC agreed that volunteers should be invited to help where possible. As a result we compiled a list of volunteer archaeologists willing to help (anyone who would like to join the list should contact us), after making an appeal in the Newsletter. It was not long before it was needed. We were asked to provide volunteers for the excavations by the Oxford Archaeological Unit at Westhawk Farm near Ashford where an important Roman settlement had been discovered on land being developed for housing. As a result a significant number of volunteer archaeologists took part in the excavations.

In some ways the most significant development was the provision of probably the first training excavation in the country as part of a PPG16 excavation. The society made a grant of £2,500 towards the cost of this, which lasted for three weeks, and it was soon followed by one from English Heritage.

The public was not forgotten. A leaflet was produced for public distribution explaining the significance of the site and advertising five days when the excavations were open to viewing and guided tours. The KCC also sent a circular about the opportunity to take part in the excavations and the open days to K.A.S. members in and around Kent.

We pay tribute to the KCC and County Archaeologist Dr John Williams, Ashford Borough Council, the Oxford Archaeological Unit and the developers, Wilcon Homes for promoting public interest in archaeology.

THE ALLEN GROVE LOCAL HISTORY FUND

Nine grants totalling £2,350 were awarded last year. Six of these (for sums ranging from £200 to £400) were for producing publications and included research or production costs, or both. Another three were for costs involved in mounting exhibitions, or displays in museums, and these ranged from £200 to £300.

Applications are invited for grants. They are usually around £200 to £400 each but the trustees would consider a larger grant for a particularly imaginative or innovative project which might not be able to proceed without the grant.

The late Allen Grove left a legacy to the Kent Archaeological Society to establish this fund to be used for the purposes of research, preservation and enjoyment of local history.

The trustees will consider applications for grants for any project with one or more of these purposes. Projects may be practical ones such as presentation, publication and

education as well as research. Grants may be made to societies and groups as well as to individuals and are not restricted to members of the Kent Archaeological Society. Awards may not be announced until the summer or autumn of 2000.

Applications must be submitted, on the official application form, by the 31st March 2000. Application forms and further information may be obtained from the Hon. Secretary: Mr A I Moffat.

REMEMBERING THE ROSE AND ITS KENTISH CONNECTION

The Society has visited, as part of last summer's programme, the excellent sound and light presentation on the site of London's first Elizabethan Bankside theatre

- The Rose. It was built in 1587, the year before the Armada sailed, some years earlier than the three other Southwark playhouses - The Globe, The Swan and The Bear Garden.

The presentation, which only opened this spring, recounts the huge importance of the archaeological discovery made in 1989 and now preserved under a protective layer of sand and concrete, itself covered with a pool of water. Above it has been constructed the office block whose foundation work revealed the lost site. This is the beginning of presenting the site publicly and the beginning of a great fund-raising campaign by the Rose Theatre Trust to enable a full scale excavation to take place. For the 1989 excavation revealed a portion of the only Tudor playhouse to have been thoroughly investigated and it is the only site where eventually a complete excavation can take place.

Not only were Shakespeare's early plays performed on its stage, but Christopher Marlowe's masterpieces - Tamburlaine the Great, Dr Faustus and The Jew of Malta received their first performances there. The first was written when Marlowe was only 23; he was murdered at Deptford before he was 30. Marlowe, the son of an aspiring Canterbury craftsman, was one of the earliest of the city's children to benefit from Archbishop Cranmer's scholarships to the King's School and later to Corpus Christi, Cambridge. Cranmer firmly believed: 'Let the ploughman's son enter the room'. The events leading to Marlowe's untimely death took place in the original County of Kent, now the outer London boroughs - arrest at Scadbury in Chislehurst, trial within the royal precincts of Greenwich Palace, and death in an unsavoury tavern in Deptford.

But The Rose keeps not only the memory of Marlowe's triumphs but has also access to the substantial amount of documentary evidence concerning the theatre's design and use. Its leading actor, Edward Alleyn, invested his wealth in land, including the manor of Dulwich situated in Surrey, very close to the Kent boundary. His aim was

to fund his charity - the College of God's Gift. In the fullness of time, this became the modern Dulwich College and in the school's archive is preserved much of the theatre's history. For Edward Alleyn's step father-in-law was the Southwark entrepreneur Philip Henslowe who built The Rose.

The presentation, at 56 Park Street, Southward, SE1 9AR, is open 7 days a week, from 10 a.m. to 5 p.m. and is highly recommended to Society members.

Joy Saynor

KAS BROOCH TRAVELS THE NORTH SEA

A request was recently made through Maidstone Museum for the loan of one of the Anglo-Saxon broaches in the Society's collection from November 1999 until December 2001. The brooch in question is of a type known as square-headed and is made of gilt and silvered bronze, 133mm in length. It is said to date from the middle or second half of the sixth century. The head and foot have an elaborate chip-carved design including human and animal heads while the bow is decorated with a large human head. It was discovered in Grave 41 of the cemetery at Bifrons and was published in *Archaeologia Cantiana* X (1876), p.313 with a detailed engraving. The brooch is also discussed in detail in *Anglo-Saxon Jewellery* by Ronald Jessup (1950, pp.108-9 & pl.xviii) where it is accompanied by a photograph which reveals some inaccuracies in the 1876 engraving. Incidentally Ronald Jessup, who died in 1991, was Hon. Editor of *Archaeologia Cantiana* at the time of writing his above-mentioned book.

The request has come from the Fries Museum in Leeuwarden, the Netherlands, who wish to use the brooch in their exhibition *Kings of the North Sea, AD250 to 850* which opens on 18 December 1999. The exhibition will then travel to the Nordfriesische Museum, Husum (Federal Republic of Germany); Museum Het Valkhof, Nijmegen (Netherlands); Tyne and Wear Museums; Esbjerg Museum (Denmark); Archeologisk Museum, Stavanger (Norway) and finally back to the Netherlands for the Rijksplanologische Dienst, The Hague.

Throughout its travels the brooch will be labelled clearly as the property of the KAS and will thus serve to introduce the Society and its collection to a wider audience.

Dr Michael Still
Hon. Curator, KAS

LETTERS

Dear Sir,

TEBBUTT RESEARCH FUND

This fund was established as a tribute to the life and work of the late C. F. Tebbutt, OBE., FSA., and applications are invited, from individuals and groups, for grants towards research, including associated expenses, into any aspect of the Wealden Iron Industry.

It is anticipated that approximately £100 plus will be available from the fund and any interested person should write a suitable letter of application giving details of themselves together with relevant information concerning the research envisaged. please bring this fund to the notice of your tutors and lecturers concerned with archaeology/history as we are anxious that the money available should be used fully.

WIRG has recently acquired a section of railings from St Paul's Cathedral and research into the construction etc. is an example of a subject that is eligible for a grant. Applications should be sent to me not later than 31st March 2000 so that I can pass them to the Panel for consideration.

Sheila Broomfield

From: dixon, stephen <stephen.dixon@medway.gov.uk> To: <lawrence.ilott@cobnar.demon.co.uk>
Sent: 30 September 1999 15.35
Subject: Newsletter

Dear Larry

Please could I notify your readership of the recent publication on the world wide web of "CityArk", Medway Council's archives home page and database? The address of City Ark is:

<http://cityark.medway.gov.uk> (NB noWWW)
(panoramic version)
or

<http://www.medway.gov.uk>

The database comprises piece-level descriptions of the archives collections held by Medway Archives. The service comprises an explanatory front-end and three query tools: a simple query tool, advanced query tool and a map graphical query tool.

It is hoped CityArk will aid all potential historical researchers into Medway and Kent history.

Stephen M Dixon
Borough Archivist

Members may like to read Dr Ashbee's letter in conjunction with his article on 'Coldrum Revisited and Reviewed' in the latest volume of *Archaeologia Cantiana*.

Dear Editor

Long Barrows and Sarsen Stones

Kent's Medway megaliths, the stone-chambered, stone-surrounded, long barrows, slighted during the Middle Ages, are a concentration of the most grandiose of their kind. Their lofty chambers and considerable long mounds are almost unmatched in Britain. Their affinities are with the mainland European series which fringes the vast LBK (Linear Pottery) territory. They can be seen as surrogate long houses designed for rites involving human remains and are associated with the emergence of Neolithic subsistence agriculture.

Until about 1950, they were much as they had been seen by William Stukeley in the eighteenth century. The long barrow appended to Kit's Coty House stood about 3ft in height, with its ditches clearly defined, although the stone chamber remnant was protected by the nineteenth century iron railings. Despite trees, sense could be made of the Lower Kit's Coty House chamber and the great Coffin Stone was the remains of the principal of the series. At Great Tottington the spread of sarsen stones was perhaps an ingathering for an industry that failed. Various stones, such as around the spring, may be from the Coffin Stone long barrow.

Ronald Jessup's list of Ancient Monuments in Kent (*Arch.Cant.*, 61(1948), 122-5) specified only Kit's Coty House, the Lower Kit's Coty House and the White Horse Stone on the eastern side of the Medway, as have subsequent lists. The Kit's Coty House long barrow, the Coffin Stone and the remarkable Great Tottington sarsen stone spread were excluded. Down the years the Kit's Coty House long barrow has been all but obliterated and recently the railings and stones vandalised. Another large sarsen stone, dragged out by modern agricultural machinery, now lies on the Coffin Stone and all trace of the erstwhile long barrow has been removed by deep ploughing. Parts of Tottington's sarsen stone spread, I have been told, are being moved.

It is manifest, as fieldwork a few years ago revealed, that the situation regarding the various sites on the lower slopes of Blue Bell Hill is far from satisfactory. With this in mind, a correspondence was initiated with English Heritage, the successor body to the scholarly Ancient Monuments Inspectorate of the Ministry of Works. In the event, and only after an overture to the principal, an answer emerged. At Kit's Coty House, despite the near-obliterated long barrow, the damaged railings and vandalised stones, they see no significant problems. The Coffin Stone, despite the accumulated, if tenuous, evidence, to which they come rather late in the day, is thought of as a doubtful site and thus not worthy of

protection. As to Tottington's sarsen stones, it is claimed that they do not meet the criteria for classification as ancient monuments, for they might have resulted from natural processes! These English Heritage arguments are, if anything, a justification for inaction. In substance they are distant from the tenets of prehistory which, from time to time, must accept, provisionally, circumstantial evidence. Indeed, were the apparent irrefutability, required by English Heritage, to be everywhere applied, England would be bereft of almost all of its prehistory.

With the matters outlined in this letter in mind, and being aware that modern agricultural machinery can efface even substantial stone monuments and spreads within hours, our Society and Kent at large, should make positive overtures to English Heritage for the protection of our Medway's prehistoric monuments. Fastidious bureaucratic debate has little purpose when, in our dangerous times, ancient monument protection for key elements of Kent's prehistoric past is lacking though clearly necessary.

Paul Ashbee

Centuriation? On the Hoo Peninsular

Although I agree with Alan Ward's general conclusions in his paper, as published in KAS Newsletter, No 44, I feel obliged to sound a few notes of caution on the relationship of Roman field boundaries to systems of mensuration.

Hoskins, in 'English Landscapes', makes a telling comment, "(When) new men took over as landlords farming still had to go on". Paths and small ditches are easily ploughed out but dry stone walls have to be dismantled first and an impressive earthwork will survive for centuries. Prior to the Norman Conquest, Danish and Saxon immigrants would have taken over Romano-Celtic estates, farms and fields and adapted their farming techniques to fit. Subsequent clearance of wood and waste would have allowed them to return to more familiar procedures.

In the twelfth century, an acre was defined as that area of land that could be ploughed by an 8-ox team in a day. Dependent on soil type and topography, this inevitably made the acre a variable unit of mensuration. Furthermore, it was not a square measure; the turning circle of the plough team, with a large and cumbersome plough, probably determined its width. Most likely, this also determined the length of the pole. For a statutory acre, as defined by an Act of 1305, "5½ ulne make 1 perch", 4 perch = 1 chain and 1 acre = 1 furlong x 1 chain = 4840 sq statute yds. The headlands, where the plough was turned, were lost as arable land, so the longer the

furrow, the more effective the ploughing. Apparently, the optimum ratio of length to width was 10:1. This was no problem in the relatively flat land of the Midland Plain and in East Anglia, but how was the ploughland accommodated in more hilly country? Where the soil was lighter - chalky or sandy loam - the depth of soil may also be reduced and, together, would demand a smaller plough drawn by fewer draught animals. Staying with the 10:1 ratio may be sensible but it could be of a smaller area.

The Welsh acre was of 180 X 18 statute yards; the Leicestershire acre was 2308.75 sq. yards as opposed to the Westmorland acre of 6760 sq. yards and the Cheshire acre of 10240 sq. yards. These all persisted into the nineteenth century. Furthermore, with the exception of the Leicestershire acre, all are, clearly, based on the 10:1 configuration. If the Leicestershire acre was also configured to the 10:1 ploughland what was the unit of length?

Flinders-Petrie has identified an early Anglo-Saxon system of mensuration based on the German or Drusian foot of 0.3353m, compared with the Imperial foot of 0.3048m. It is somewhat confusing to observe that the Drusian and Imperial chains are of equal length until it is recalled that: 60 Drusian feet = 1 chain = 66 Imperial feet. The Drusian rod is then equal to 15 Drusian feet, a more logical number than 16.5 Imperial feet, since it is also equal to 2½ Drusian fathoms. The fathom is a 'natural' unit like the digit, foot and cubit. Together with the palm they are all based on dimensions of the human body and formed the somewhat imprecise systems of antiquity. This does not get over the difficulty with the Leicestershire acre, but another foot, equal to 0.3308m, which may be of Norman French provenance, makes the Leicestershire acre = 1960 sq. 'Norman' yards. This, in turn, makes the perch equal 10.5 'Norman' feet or 2 'Norman' cubits. Obviously, this requires independent confirmation since East Leicestershire was within the Danelagh. However, the Danish *fod* equals 0.3137m and does not make the acre a whole number of Danish square yards; but note that the Danish *rode* + 12 *fod* or 2 Danish fathoms. I used the 'Norman' foot solely to illustrate what might have been the original, practical value of the rod (Old Norse), pole (Old English) or perch (Norman French) and was the best I could do to fit in the Sumerian cubit of 0.495m (reference Alan Ward's paper).

Now the *iugerum* is 2517.66m² and the nearest ploughland to this in area is the Leicestershire acre at 1930.4m². They are, however, of different configuration, being 2 X 1 *acti* and 140 X 14 'Norman' yards, respectively: the short side is 35.48m and 13.894m, respectively. The *actus* is approximately 2½ times the Leicestershire chain. If I am right in saying that the perch, of whatever size in English terms, is the shortest turning radius of the appropriate plough team, ploughing a *iugerum* with a Leicestershire team would present no difficulty if the (measuring) rod

was adjusted to be 8 rods to the *actus*. True, the furrows would have been rather short - 5 chains instead of 10 - but that hardly constitutes a difficulty.

A more obvious way of marking off large areas of land would be by the stride or pace (= 2 strides). Although constant to one person, legs do vary in length. There were 5 Roman feet to the Roman pace, hence the *actus* = 24 paces. The Roman measuring rod, as used by the Roman army, was 10 Roman feet (see Roy Davis, 'Roman military practice camps', *Archaeologia Cambrensis*, 117, (1968), 103-20). Army surveyors (*mensori*) would almost certainly have marked out *Centuriae* and the ½ *actus* may have been the length of a Roman surveying chain at 17.74m (*cp* English chain at 22 yards or 20.117m). I have found no confirmation of this but the Egyptians were known to have used them.

In the above discussion, the pole and, by implication, the chain performed a dual role; as measuring devices and as units of length - simultaneously at times. It is not surprising, therefore, that, through the centuries attempts by administrators to standardise these units were met, by the practical agrarian population, with indifference; particularly as the administrative objective was fiscal rather than commercial.

Peter Ovenden

Newsletter Copy Deadlines

Spring issue - copy deadline is 1st March.

Summer issue - copy deadline is 1st July.

Winter issue - copy deadline is 1st November.

Editors Announcement

The Editors of the Newsletter welcome all letters, articles and communications, especially requests for research information, finds, books and other related topics. The Editors wish to draw the reader's attention to the fact that neither the Council of the KAS, nor the Editors are answerable for opinions which contributors may express in the course of their signed articles. Each author is alone responsible for the contents and substance of their letters, items or papers. Material for the next Newsletter should be sent by 1st March 2000 to Newsletter Editors, Mr & Mrs L. E. Ilott.

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