Worthing Archaeological Society

Journal

Volume 3 Number 8

Summer 2007

CONTENTS

EDITORIAL Summer 2007

Welcome to the summer edition of the journal, you will see for the list of contents it is diverse as ever, from Worthing to Australia to Stonehenge, and articles from our archives.
I am starting to include one or two longer articles of an historic nature, as I feel it is important to have an historic point of view, this enabling us often to understand and interpret archaeology in a more understanding way.

We are fortunate to include a very interesting article by Professor Richard Britnell of the University of Durham; this article demonstrates a really good understanding of how markets and fairs operated in Britain before 1216, a long article but a thoroughly good read.

There have been one or two rumblings about why we are no longer running summer outings. Firstly to put that into context, last years outings were cancelled for one reason, and one reason only, lack of take up of the seats, if you hire a coach you have to sell at least 40 tickets to break even, average sales last year were for only 25 seats, we cannot afford to run outings at a loss.

TUTANKHAMEN EXHIBITION

Booking now

There are advance plans to run an outing to the **Tutankhamen exhibition**, so here is your chance, the outing will be in January /February 2008,(on a Sunday) tickets will include admission, with timed entry, the tickets will cost £28.00 all in.
We will travel by coach to London for lunch first, (lunch not included) in central London, and then onto the exhibition at the Dome in Greenwich, for our timed entry at 2pm, you will have two and half hours there.

Total number of tickets will be 49, if you think you would like to come on this outing, forward your names to me now, I can then decide if it is going to be feasible to run the outing. Once numbers are confirmed I will ask for payment.

The deadline for booking will be last day of September 2006, and paid for in full by that date.
Full details will be published on our web site as soon as confirmed.

AUTUMN SOCIAL

Tickets are going on sale from now onwards for our Autumn Social, this will be held at the **Old Bishops Palace** in Tarring as per last year, but this year with heating!!.
There will be a grand supper, and a pub quiz, plus a fantastic raffle.
Date: Saturday November 17th.
The cost: £7.50 for the buffet and two glasses of wine, or other drinks.
Pub quiz: £1.00 per person. (Payable on the night)
Raffle tickets: £1.00 per strip of 5. (Payable on the night).

Tickets, from Mrs. Jo Thornton. Address back page. (Cheques made payable to W.A.S.)

FIELD UNIT

For up to date information about the Field unit, log onto the website, it's on every page.

In April the field unit ran a very successful flint knapping workshop, some 25 members of the field unit attended, the workshop was run by Will Lord who is an expert in flint tools, photos of the workshop are hosted on our photo Blog site,
http://was-photos.blogspot.com.

Don't forget to visit http://picasaweb.google.co.uk/archresearch there are many photos hosted here of interest, outings, churches, and many other subjects.

There is a full programme of field unit work being undertaken over the coming months, for access to all the information you need to log on to the field unit site at least once per week, and make sure if you are not already on the field unit email list, and want to be kept informed of activities; then forward your email address to me at arch.research@ntlworld.com

WALBERTON EXCAVATION

In late August will be undertaking a continuation of last years excavation in Walberton, this will run from the **25th August until the 9th of September**, if members who wish to take part in this excavation would like to forward their names to the field unit with which days they can attend, this would really help with forward planning.

The middle weekend 1st and 2nd September is open site weekend, your chance if not taking part in the excavation to visit the site, the weekend is also a **Public Community Archaeology** weekend on site. The site will be open for visitors from the local area, not only to view the site, but to take part in taster sessions, including excavation techniques, surveying, resitivity work, finds processing and identification.
The site will be open for visitors from 11pm to 4pm each day, with tours of the site every hour on the hour, there will also be a marquee with an exhibition of finds from the site, refreshments and toilets will be available.

There will be no charge to attend the weekend's activities, but donations will be welcome to help cover the expenses.

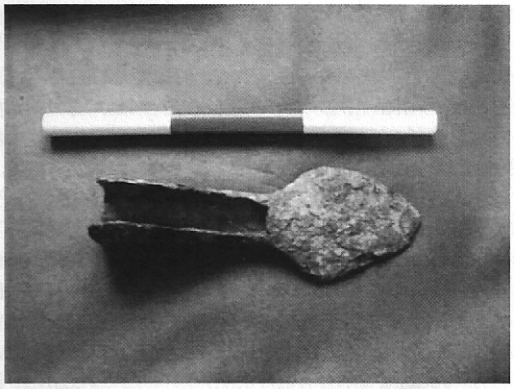
The deadline for articles for the next issue of the journal is the last day of October 2006.

Editor: Rodney Gunner
Layout: Louise Partridge

CURRENT NEWS

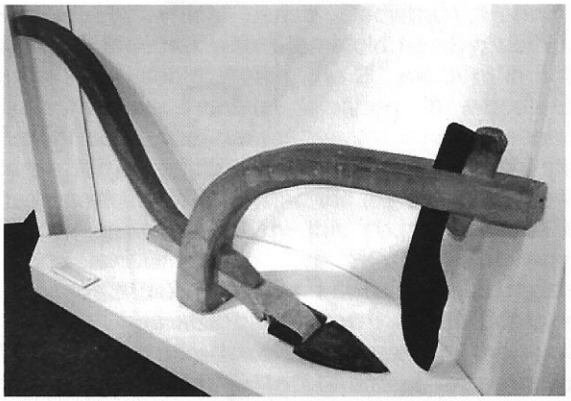
Possible ancient Plough-shoe found.

In early November 2006, whilst out fieldwalking a recently harvested field south of Dedisham Farm, Slinfold, named School Field by the owner (formerly divided into two fields and called on the 1843 Tithe apportionments map, Blacklands, and Six Acres), I picked up a very rusted iron object shaped like a very heavy spearhead. It had a hollow tang and a leaf-shaped terminal, the whole object measuring 9½ inches in length, of which the tang measured 5 inches. The width of the head was 3½ inches at its widest point. The find spot was approx TQ 1134 3252.



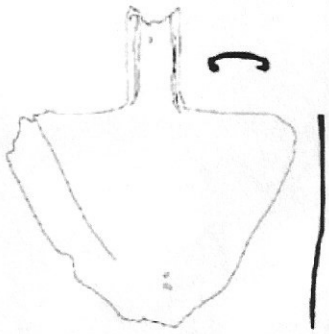
Having dried the object out, I was able to examine it more fully and attempted to identify it by perusing field reports and on the internet. The nearest identification I could ascertain was that it could be a *Vomer*, or plough-shoe. A model of a Roman plough is on display at the York Museum, and the *vomer* can be found mounted horizontally at the base of the implement.

The *vomer* (or *ard* as it is sometimes called) is the cutting part of the plough, which digs into the earth and makes furrows for sowing seeds and planting. Used by the Greeks and Romans from very early times, it was originally made entirely of wood but came to be made of metal for greater strength. where resistance to wear was required. Basically, the *vomer* was an iron point that was fitted to cut horizontally through the soil to turn the furrow over. Note that the ploughshare was mounted in front of this and cut the turf vertically like a knife blade.

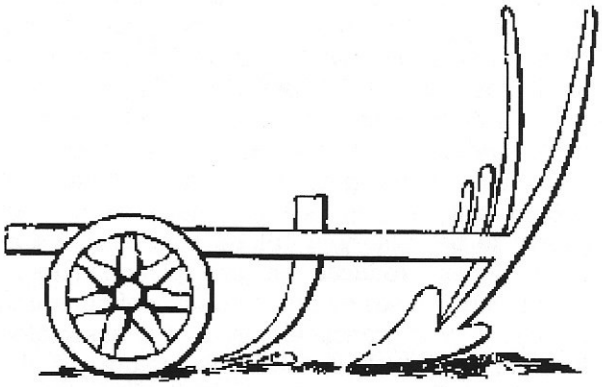


I also noted that a similar object appears in a report on the finds recovered from the ploughsoil at Coltburn, NN 8924 1766, near Strathearn. Here, an excavation and geophysical survey were conducted by the Roman Gask Project on a c.(20m)2 rectangular enclosure beside the Roman road, near the fort of Strageath. The site had been suspected of being a fortlet but, although it yielded only Roman dating material, it did not appear to be military in nature. However, one of the trenches produced an 'ard' ploughshare, a Swing plough landside and a quantity of other iron objects. It was concluded from the associated finds in the context, and the nature of the agricultural finds, that the majority dated from between the 17th and 19th centuries.

The removal of the mud and corrosion products revealed a number of features on the surface of the objects which assisted with their interpretation. The plough was of an appropriate shape for an ìardî plough which threw up soil to either side of the roughly symmetrical share. The presence of an ard share is unusual, as they were generally intended for shallow tillage, and are characteristic of semi-arid zones in the Mediterranean and Middle East where only a light, frequent stirring of the relatively dry soil is needed (White 1967). It was therefore surmised (Findlay pers com) that it could have been imported and was possibly earlier than the other pieces. A ridge along one edge of the share suggested that it had been mended along one side by attaching a new strip of metal to replace a previously blunted edge. (Woolliscroft, D.J. & Hoffman, B., *Cuiltburn*. The Roman Gask Project.
Viewed 6th December 2006
<http://www.theromangaskproject.org.uk/pages/papers/cuilt.html>)

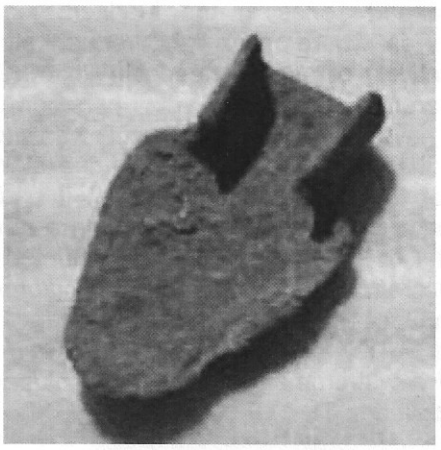


c) Ard Plough Share.



Roman plough, showing the vomer, from an engraving on a jasper stone.

A further specimen was offered for sale on the internet in May 2006 by a Dutch antiques dealer, and which measured 195 x 110 x 37 mmm but was described as "Celtic". I have managed to secure a photograph of the item which I illustrate below.



The Dedisham specimen differs in many respects, particularly in the length of the tang, and the width of the tongue. All illustrations above show the *vomer* to have a much wider tongue, and a shorter tang, so the specimen I found may well be a later Mediaeval relic, or is Roman, but adapted to cope with the much heavier clayey soils of the low Weald. I also suspect that such objects were the product of local blacksmiths and being hand wrought, did not conform to a rigid pattern.

The *vomer* is in the list of farm tools about which Pliny the Elder speaks in *Naturalis Historia*, in his narration of the self-defence of Gaius Furius Chresimus, a freed slave and small farm owner, who was indited by the curule aedile Spurius Albinus for casting spells on his wealthy neighbours' estates.

Juvenal lists the *vomer* in a later satire (Satura 17.167), where he again employs the metaphor of farming implements to reprise the theme of the violence of contemporary Rome.

When the Romans left Britain in the 5th C., the early Saxons settled in the coastal plain of Sussex and the South Downs, both fertile areas. These were more easily worked than the heavy tree-covered clay soils of the Low Weald. However, the Low Weald was exploited by the Saxons. The Weald provided woodland pasture and a source of wood and timber and "Wealden Outliers" were often separated from the coastal development by considerable distances.
The Saxon economy was largely based on transhumance, the seasonal movements of animals from one area to another. Animals were driven from the coastal settlements into the Weald to graze on the woodland pastures of these "outliers". Large numbers of pigs were driven north in the autumn to feed upon the acorns and beech mast. The swine pastures were named "denns" by the Saxons - two fields on Tismans Common were known as the Denns. Hoglands Farm in The Haven is another reminder of the pasturing of swine in the area.

Slowly there was a permanent settlement in places formerly only seasonally used by herdsmen and woodsmen. With the Norman Conquest, the Manorial System was introduced whereby all land in effect was held by the Crown. Clearance of woodland for agriculture, known as "assarting" continued after the Norman Conquest, peaking in the 13th C., population had grown, and the demand for land continued.

"The chief manor of Warnham parish, Denne Manor, as its name indicates, originated as detached swine pasture. Arable farming succeeded to seasonal pasturing: by 1262 there were tenants of Denne, evidently holding arable land, and the progress of assarting is presumably reflected in the farm names Kingsfold and Tickfold whose second element feld indicates a clearing in woodland." ('Warnham: Economic history', A History of the County of Sussex: Volume 6 Part 2: Bramber Rape -North-Western Part)

"Assarting in St. Leonard's Forest was being practised in the Middle Ages with the conversion of herdsmen's seasonal settlements to permanent agricultural ones. By 1326, for example, there were 100 a. of demesne arable at Bewbush; possibly most of it lay around the manor house, but fields separated by shaws in the extreme north, which nowadays give an impression of forest clearings, may represent medieval assarting. There were presumably assarts in the south too, like the one belonging to John of Ifield in Shelley bailiwick which was ratified in 1330. By 1499 there was arable land in various parts of the forest. "In the mid 16th century more deliberate efforts were made to reclaim the forest for arable." (: 'Lower Beeding: Economic history', A History of the County of Sussex: Volume 6 Part 3: Bramber Rape -North-Eastern Part pp. 21-5.)

"In Saxon and medieval times, as noted above, much of the parish was detached swine pasture for manors in the south of the county. Seasonal pannage was perhaps still taken in the mid 13th century, when tithes of pannage were mentioned at Crockhurst.

"As such seasonal settlements became permanent, each acquired its own arable land. By the mid 14th century, for instance, Nutham manor had 150 a. of demesne arable, described as unproductive, and by the end of the century Coltstaple manor had 180 a. Assarting for arable was recorded in the 13th century at Crockhurst (fn. 88) and Marlpost, both in the south of the parish. Shaws, or belts of woodland surrounding closes, which survived in many parts of the parish in 1982, may sometimes represent the original woodland from which medieval assarts were made. Medieval assarting is also reflected in the many 'clearing' names in the parish, of which Shortsfield is an example." ('Horsham: Economic history', A History of the County of Sussex: Volume 6 Part 2: Bramber Rape -North-Western Part) .

Slinfold, in which parish Dedisham Farm is situated, together with Clemsfold nearby, both lie in the Low Weald. Again, the 2nd element in both these names indicate "clearing in woodland. Furthermore, the name "weald" once meant a dense forest, especially the famous "*great wood*" once stretching far beyond the ancient counties of Sussex and Kent where this country of smaller woods is still called "the Weald", The word descends via Anglo-Saxon *weald* which means "forest". It has also been known as the Forest of Andred or Andredswald because in the early Middle Ages it was known to stretch from Andred or Anderida in East Sussex to Dorset, seventy miles long and thirty miles wide. I suspect that the only passage north-south, in the Billingshurst/Slinfold area would have been Stane Street, and that enclosures such as Alfoldean, and associated strip settlement were literally clearings in the "*great wood*".

The name Alfoldean is a corruption of Affleden, again with that "detatched swine pasture" 2nd element, and probably given in the Saxon or early Medieval times. The name, Affleden, was still used in 1630 (Indictment Sussex Assizes). The Roman name was actually Armis or Annis (Ravenna Cosmography 42). We are not sure which, as *Armis* presents difficulties both in assignment and certainty of form, as *-rmi-* is essentially a series of five minim strokes, easily misread.

If proved to be Roman, is this plough-shoe or *vomer* new evidence of early clearance of land for agriculture, or can it readily be assigned to the later Medieval assarting?

If anyone can offer any suggestions as to what its age might be, I would be very happy to hear from them.

Stonehenge a new view!

The Neolithic circle of stones of Stonehenge, a World Heritage Site, has attracted much attention from archaeologists and the public alike. Of course, the complex monument has many stories to tell, and not necessarily one is more important than the others. Archaeologists have recently looked for other ancient features on the landscape surrounding the monument with considerable success: in 1967 a circle of timbers ('woodhenge') were identified near Durrington Walls, about 2.8km from Stonehenge. The discovery of

woodhenge has increased the ritual significance of the landscape surrounding Stonehenge, but has raised more questions about the people who built such monuments. The discovery in 2006 of a Neolithic settlement very close to woodhenge will probably answer some questions. Prof. Mike Parker Pearson, leader of the **Stonehenge Riverside project**, reported that 8 dwellings have been unearthed and 30 more have been identified through geomagnetic surveys. Six dwellings built with timbers with clay floor and central fireplace measure about 4x4 m. Two larger dwellings have been found to the western end of woodhenge. Thousands of cattle and pig bones as well as potsherds have been found. According to radiocarbon dating the settlement dates to the 26th century BCE, and therefore it was contemporary to the main building phase at Stonehenge. New theories are already being debated, but the greatest news is that we finally have household contexts at Stonehenge and therefore future interpretations will not be limited to ritual life.

Andrea Vianello
University of Sheffield

Archaeological Investigations at 11- 15 Offington Lane, Worthing

In May 2006 a small Roman cremation cemetery was revealed during an excavation by Archaeology South-East at 11-15 Offington Lane, Worthing. The discovery of this site contributes towards knowledge of the Roman landscape of Worthing and in particular towards the understanding of funerary practise in the area during the mid 2nd to 3rd century.

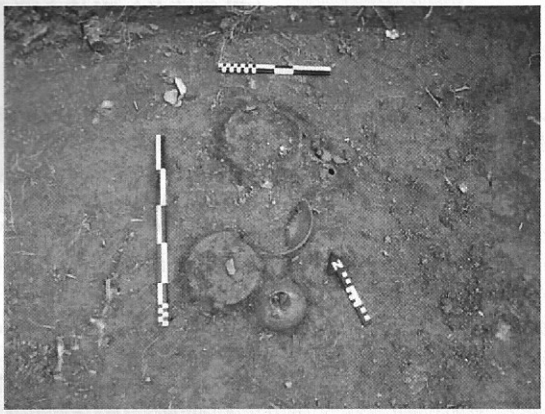
Excavation Results

Six trenches were machine excavated and in one located in the south-western corner of the garden, an irregular feature containing a few sherds of mixed Iron Age and Roman pottery was identified. This trench was extended, and five groups of Roman vessels were revealed clustered closely together within a small area of just under three square meters. These vessels comprised a small cemetery.

Six funerary urns were present, and are believed to have each held the cremated remains of one individual. 12 additional accessory vessels were also discovered in association with the urns. Unfortunately no residues had survived to indicate what the contents of these vessels were, but it is thought likely that they may have held food and drink to accompany the deceased to the afterlife.

The pots had survived nearly 2000 years of burial (and a deep flowerbed!) well, and it was possible to identify the full range of pottery types present. The funerary vessels were jars and a necked bowl, several of which are similar to ones found at Fishbourne Roman Palace. The accessory vessels included red Samian ware dishes, a central Gaulish Samian cup, cream coloured flagons, Romano- British reproduction Samian cups and Poppyhead beakers. In addition a metal object currently undergoing x-ray analysis was discovered with one of the urns.

There appears to be no strict pattern to how the vessels are arranged, but the burials all respect each other and are located in a close group. Although the dating of each of the groups of pottery varies slightly it is more than likely that they were deposited within a short time span at some time from the mid to late 2nd to 3rd century AD. By the fourth century inhumation had become a more popular form of burial.



Archaeological Context

No features indicating field systems, settlement or cemetery markers were identified within the excavation area. However, large numbers of native farmsteads are known from the coastal plain, many of which are believed to have originated back in the Late Iron Age or earlier (Rudling 2003, 115). There are several sites of note within the area. A possible Roman settlement site with finds dating from the 1st to the 4th centuries was excavated in the 1950's less than a km away at Half Moon Lane (SMR 3105). Just over 1 km to the south-west of the site field systems of the first to third century date have been discovered (SMR 3226 - MWS300). Within the wider area two possible villas have been identified on the corner of Grand Avenue and Lansdowne Road (3239 - MWS1289), and within the vicinity of Worthing Museum (4321 - MWS3616).

In the context of urban settlements Roman burial is known to have often occurred outside the town gates in ordered cemeteries. However, burial practise at smaller settlements, villas and individual farmsteads is not as well understood. A range of burial types is thought possible from small formal cemeteries through to isolated backland burials in field corners, boundary ditches and small enclosures (Cleary 2000, 132). In these cases there can be a blurring of distinction between the domains of the living and the dead. Cleary also suggests that burial practise in small towns and rural sites often seem to retain more of their family or individual identity than the uniform anonymity of cemeteries associated with the larger settlements (ibid, 137).

Settlement in the vicinity of the site at this time may have comprised Romano British rural farmsteads with associated fields systems. The assemblage may represent a small family cemetery associated with one of these rural farms. The lack of other indication of settlement activity perhaps suggests the cemetery may have been placed some way from the focus of settlement, possibly out in the fields. Ongoing analysis of the pottery, cremated bone and metal work aims to further clarify and contextualise the results of this project.

Alice Thorne, 2007

Cleary, S., 2000. 'Putting the dead in their place: burial location in Roman Britain' in Pearce, J., Millett, M., and Struck, M., (eds) 2000. *Burial, Society and Context in the Roman World* Oxbow books, Oxford, 127- 142

Rudling, D., 2003. 'Roman Rural Settlement in Sussex: Continuity and Change' in Rudling, D., (ed) *The Archaeology of Sussex to AD 2000*, Heritage Marketing and Publications Ltd, Norfolk, 111-127

THE STONE CIRCLE OF GLEN INNES – AUSTRALIA!

I returned from a holiday in Australia to find my latest copy of the Society's journal with its article on the archaeology of Orkney, including the Ring of Brodgar. This took me back to1969, when I was in Orkney for a few days, and so keen to see the ancient monuments of Maeshowe, Brodgar and Skara Brae, that I hired a bicycle and rode to see them all in the pouring rain!

In New South Wales, Australia, the New England Highway goes from north to south along the Great Dividing Range. It should be called the New Scotland Highway as many towns and villages along its route have Scottish names. At Glen Innes, which lies at over 1000m., we saw the Australian Standing Stones, the official National Monument to the early settlers of Celtic origin who helped build the Australian nation.

In1988, Australia's bicentennial year, the Celtic Council of Australia decided to build a stone monument to the pioneers of Celtic origin and invited submissions of interest from Australian towns and cities. The submission from Glen Innes for a stone circle, inspired by the Ring of Brodgar,

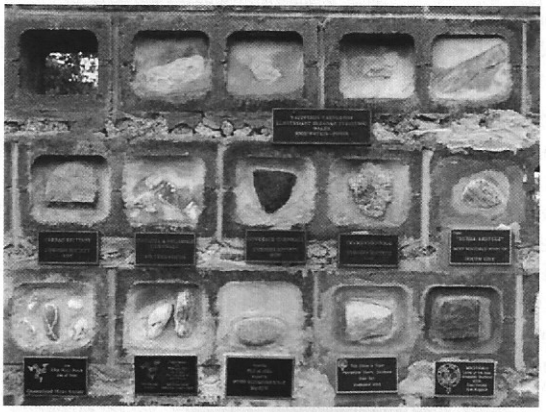
was chosen, but there was no money to carry out the project. Sponsors were invited to pay A$1000 dollars each to defray the cost of each stone. Clans, families and other groups across Australia and the world responded and within two weeks the money was pledged.


GLEN INNES STONE CIRCLE

Two local men spent three months scouring the bush within 50km of Glen Innes to find suitable stones, but found only three that could be used in their natural state. The rest had to be split from larger rocks and still bear the drill-marks of this. Not satisfied with a mere copy of the Ring of Brodgar, the designers incorporated other symbolic and more fanciful ideas. The Standing Stones comprise 40 granite monoliths. 24 of these form a circle representing the 24 hours of the day with 3 central stones, 4 cardinal stones and 7 stones marking the summer and winter solstices. The first of the three central stones is named the Australis Stone, for all Australians, and symbolises the link between the old and new worlds; the second is the Gaelic Stone, for Scotland, Ireland and the Isle of Man; the third is the Brythonic Stone for Wales, Cornwall and Brittany. The cardinal stones mark true north, south, east and west. The stone circle plus the four cardinal stones form the Celtic or Ionic Cross, the symbol of the early Christian church. The Southern Cross is formed by the 4 cardinal stones plus another stone and again symbolises the old world meeting the new.

A nearby information board tells us that in Celtic mythology, certain numbers have significance. Number 3 reflects the family unit, number 9, written as 3 x 3 indicates humanity as a whole, number 27 enhances the prosperity of a group and 33 is used to symbolise enhancement and to assert regal or esoteric connotations! It points out that there are 3 guide stones in the centre of the circle and that these plus the 24 stones of the circle make 27. The distance from the centre point of the circle to the cardinal stones is 33 metres and so on with other examples.

Outside the circle is the Irish Stone with an inscription in Ogham that translates as "Glen of the sons of Angus" or Glen Innes. Beyond this is a slight rise in the ground, named Tynwald Hill after the Manx Parliament. On here a "Wall of History" is being created with stones donated by Celtic communities around the world, such as from Carnac in Brittany, Tintagel in Cornwall and many others.



Close by is a large stone in which the sword of Excalibur is embedded.

A nearby building, built of basalt rock, is named the Crofter's Cottage and serves as a café and gift shop for Celtic souvenirs. The guide book says that it is a replica of a *Taigh Dubh,* the small stone black house of the early Celtic peoples, some of which still survive in Scotland and elsewhere. This one was inspired by a photo of a cottage that had survived the Battle of Culloden in 1746.

Though we can laugh at such muddled thinking in a country where the oldest houses are much less than 200 years old, it was still interesting to visit this modern interpretation of a 3,500 year-old idea.
The venue is now used for an annual Australian Celtic Festival, attended by people from all over the world and Australia.

Pat Nightingale Jan. 2007

References: The visitor leaflet and on site information.

Further information:
www.GlenInnesTourism.com

FROM OUR ARCHIVES

Pottery Project

This is an article about a kiln reconstruction undertaken by Con Ainsworth in 1977, on behalf of the Weald and Downland Open Air Museum.
The Museum's Pottery Research project is under way again after an absence of some two years while the scheme was re-sited in the woods above Winkhurst House.
Under the direction of Worthing archaeologist, Con Ainsworth the first kiln firing of the new project took place at the end of August and valuable information was gained.
The main aim of the pottery project is to discover more about the craft of pot manufacture in medieval times, with the aid of a re-constructed kiln based on local archaeological evidence.
The small group of pottery volunteers are based now in the Coldwaltham Sheds, re-erected by another Worthing volunteer Mike Covelo, and his team, including Roy Plummer. Here Robin Cooksey has been using a kickwheel to throw pots based closely on evidence of medieval pottery.
The kiln built in the new pottery area is a re-construction based on an excavated kiln at Binsted, near Arundel, West Sussex. A third of the size of the original kiln, it is a twin flue, updraft type built chiefly with clay from Clapham, West Sussex.
The kiln at Binsted was in operation in the first quarter of the fourteenth century - a date arrived at both by documentary and scientific evidence.
The Binsted kiln was large and tells us something of the demand for pots in medieval times. The original had space for firing 800-900 pots and would have been used over and over again many times. Con Ainsworth has now constructed an entrance to the kiln based on evidence which would have enabled the medieval potter to load and unload his kiln without disturbing the kiln structure.
Pots fired in the kiln are to be based on pottery found during the course of excavating the Binsted kiln. The principal pot discovered was "West Sussex" ware; pots glazed with lead and copper. Evidence was also found for cooking pots of various types and specialised roof furniture, such as chimney pots and finials.
The kiln reconstructed at the Museum will take about 600-700 pots, but for the first firing only 150 pots were made.
Con Ainsworth and his team began firing the kiln at 2 pm on a Saturday and by 4.30am the next morning the necessary high temperature of 1000°C had been reached. The pots were cooked! After leaving sufficient time for the kiln to cool, it was opened at about 6 pm on the Sunday evening and the pots extracted.
The success rate of the pots at this first firing was not as high as at previous firings in the original project. The answer to the problem lies in the composition of the clay used for the pots, particularly the quantities of sand added to the clay.
More pots will be thrown in preparation for the next firing. The next stage in this project will be to construct another kiln: very small and not based on any particular archaeological evidence so as to enable firings of about a dozen pots.
In the long term the aim of the pottery group is to reconstruct a rectangular tile kiln based on archaeological evidence from the one at Binsted.
At later dates there was more success in the firing of the kiln, with help from Roy Plummer, and other members of Worthing Archaeological Society.

Discovery of Annular Lead Objects, Sompting, Sussex and Rapid Excavation of Area. Autumn 1976

Discovery
In digging foundation trenches for an extension to the rear of 5, Grassmere Avenue, Sompting, Lancing, West Sussex - (OS TQ 169046), thirty annular lead objects (Fig 1) were unearthed. All were removed without recording of their precise position and attitude. The finders (sons of the household) reported that they were closely aligned in a vertical position in several adjacent groups at a depth of about 18 inches (0.45 metres). Also found in association was a sherd of pottery.

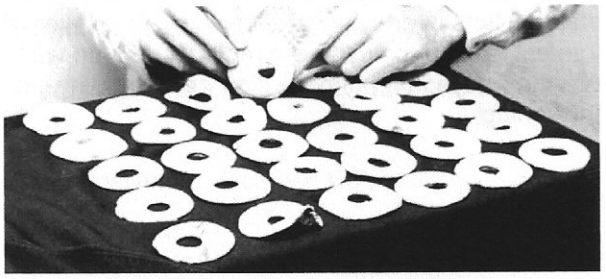


Fig 1 – Recovered Objects

Excavation

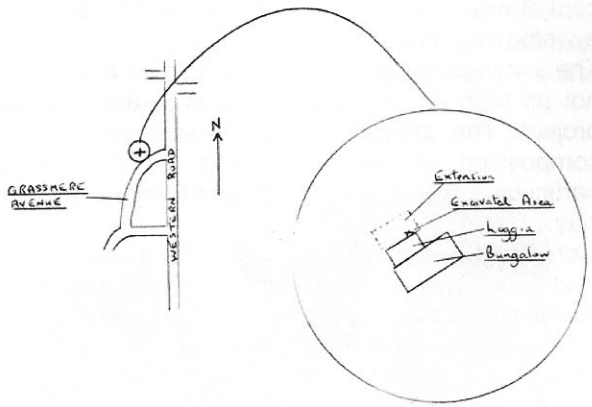


Fig 2 – Location

Before the hardcore was deposited prior to the laying of the extension floor, it was possible to excavate rapidly (in torrential rain) an area 0.5m by 1.0m. At a depth of about 0.5m after passing through a thin dispersion of chalk particles (0.5 to 2cm in diameter) with a few specks of charcoal and red flecks, a layer containing bone, charcoal and potsherd was reached.

The bone was not articulated and was spread more or less evenly across the area. Being somewhat fragile and in view of the conditions and haste of excavation, several pieces of the bone came apart on lifting. The charcoal was also spread across the area, but a localised concentration about 10cm across was noted immediately beneath one piece of bone.

Removed from this layer were three small potsherds, one nail, some charcoal, several small pieces of bone, two teeth and one small 'tusk'. Underneath this layer was a stretch of yellow-stained flints overlaying a yellow clay. The layer of interest spread in all three directions into the walls of the section without sign of thinning or thickening.

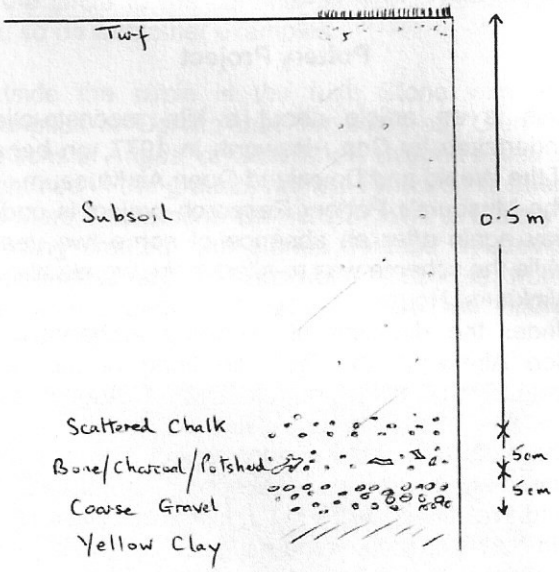


Fig 3 – Section

Examination of the other footing trenches showed little sign of life at that depth, being seemingly undisturbed with the exception of a hint of a shallow ditch or depression in the south trench walls. This would suggest that the limits of the heavy scatter were less than 4m west and 2m north and south of the area excavated.

Description of Lead Objects

Weight and dimensional data are given in Table 1. The sequence is by ascending weight.

The objects carried a heavy pale patina with some off-white encrustation being apparent. A metallic appearance was noted where damaged. One was damaged by pickaxe on discovery.

A number of the rings were notched on the inner edge as if worn by suspension.

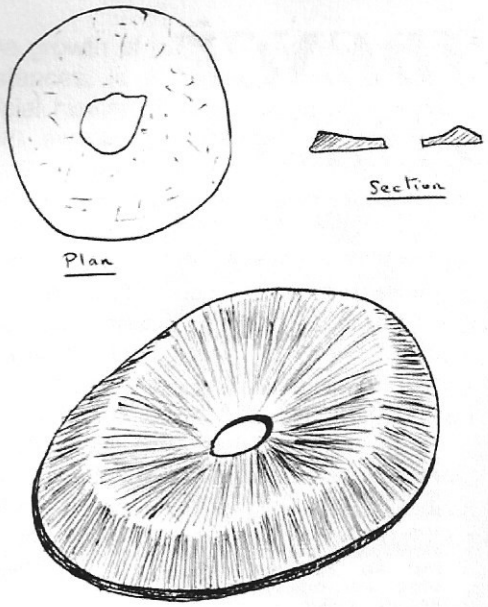


Fig 4 – Typical Lead Object

The distribution is non-normal – 21 form a fairly normal distribution peaking at about 165g, with an outlier group of 8 in the range 200 to 208g and a further individual at 107g.

No.	Weight
1	106.7
2	142.3
3	144.8
4	146.0
5	157.0
6	158.1
7	160.0
8	160.6
9	163.3
10	164.1
11	165.1
12	166.1
13	166.2
14	166.5
15	168.8
16	168.8
17	170.3
18	172.0
19	175.3
20	175.7
21	187.5
22	188.4
23	199.7
24	200.0
25	200.2
26	201.7
27	202.0
28	202.8
29	204.1
30	208.0

Table 1
Weights of the Lead Objects

Mean weight: 173.1g, (overall Standard Deviation: 23.1g)

David Shelverton, October 1976

WEIGHTY EVIDENCE OF ROMAN TIMES?

Reporter: Charmian Evans

YOU MIGHT THINK that Mr David Shelverton (pictured left) is demonstrating how not to make doughnuts. Not so. Mr Shelverton has been cooking, or rather digging up far more interesting objects — ancient weights.

Mr Shelverton, aged 34, of Barnetts Cottage, Rock Road, Washington, is a keen part-time archaeologist. During the day he works as a laboratory manager for Beechams Pharmaceuticals. A colleague invited him to dig at her home at Sompting, where ground was being dug for a house extension. It was on this site that Mr Shelverton found what are believed to be Roman weights.

Lead

'I had only two afternoons to dig,' Mr Shelverton told me. 'A lot of concrete was due to be delivered, so we didn't have much time. We found the objects, 30 in all, about 18 inches down. They're lead, which usually means they date back to medieval or Roman times, and they have a pattern on them.

'Looking at the pottery excavated with it, I would say that they're older than medieval, probably early Roman.'

The mystery will be sorted out eventually because a local archaeologist, Mr Con Ainsworth, has arranged for the British Museum to see them.

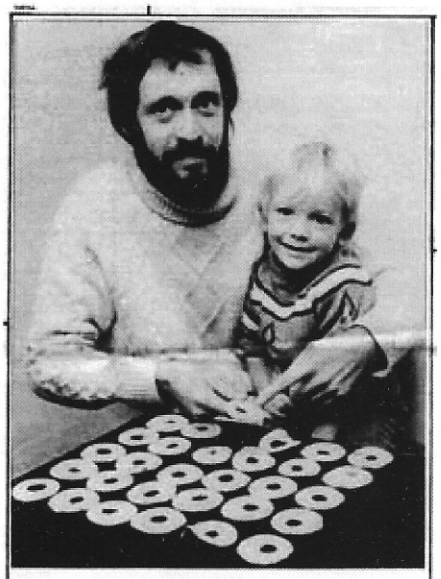
Mr Shelverton moved to Sussex from London 10 years ago. He and his wife Angela decided to take up a hobby, so joined an evening class to study archaeology. They gradually got into field work, and have 'dug' locally.

Remains

'There have been a number of interesting things found on the Lancing/Sompting border. We found a Roman cremation burial ground at the Marquis of Granby pub in Sompting. There were the remains of a mother and child there.'

What happens to all these treasures? 'Most finds are lodged with the Worthing Museum,' said Mr Shelverton. 'That's where the weights will go.'

Apart from archaeology, the Shelvertons enjoy walking, cultivating their allotment, and, for David Shelverton, judo. The couple have a small son, Dan, and are expecting another baby in March.



Roman finds mystery

Archeologist David Shelverton, of Barnetts Cottage, Rock Road, Washington, shows his 2½-year-old son, Daniel, the 30 lead weights which are believed to be Roman.

They were found on a building site at Sompting, Worthing.

The weights are baffling local experts, and they are to be sent to the British Museum for further identification.

Worthing Promoter, 4th November 1976

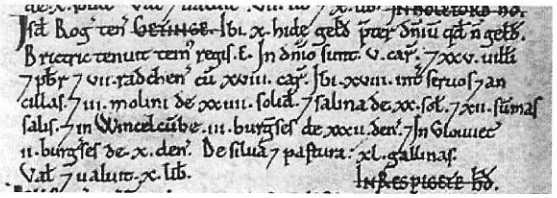
Worthing Herald, 5th November 1976

Markets and Fairs in Britain and Ireland before 1216

The growth of trade, both over longer and shorter distances, is a central theme of studies in the social history of early medieval Europe, in which both archaeological and documentary evidence have come together. So far, however, little opportunity has been taken of the fact that Britain and Ireland present some fine opportunities for comparative study because of their diversity of experience.(1) The two most reliable criteria for such comparison, given the sparse documentation available for most of the territory under consideration, are both archaeological, namely the distribution of urban settlements and the extent to which money was in circulation. But the interpretation of this evidence is, of course, greatly helped by documentary evidence, particularly that of Domesday Book and a large number of extant charters.

Penny of King Harold, 1066

At the time when Domesday Book was compiled in 1086, the regional differences were striking. Southern England (meaning here, and subsequently, England south of the Humber) was one of the most heavily monetised regions of western Europe. (2) There were 46 English mints in operation on the eve of the Norman Conquest during King Harold's short reign, all of which were south of the Humber except for the one at York.(3) The regularity of some monetary circulation, even for small households, is confirmed by what we know of English institutions. From 1021 onwards English kings levied geld, a national tax paid in coin through most of the kingdom and assessed on free peasant households as well as on those of their lords. In addition, money was frequently owed from ordinary peasant householders in rent and other dues payable to landlords. The numbers of such tenants owing cash rents, often called *censarii*, were greater than the Domesday text would imply.(4) By implication money was circulating into ordinary village households throughout the part of the kingdom assessed in 1086.



The Domesday Book entry for Roger Lacy's manor at (Temple) Guiting (Gloucestershire) recording money rents from burgesses in Winchcombe and Gloucester

This southern part of England was also a region of boroughs and markets, and it is reasonable to guess at some functional relationship here. Domesday Book records 112 boroughs and a further 39 places with markets.(5) Many of these were very small communities in which rural characteristics outweighed urban ones, but some of them, at least, had markets that operated much like markets known to thirteenth-century lawyers. They had a definite location, a definite time in the week, and a definite attachment to some territorial lordship. For example, the bishop of Thetford (Norfolk) complained that before the Norman Conquest he had had a market that was held each Saturday. But since then a powerful local Norman lord, William Malet, had built a castle at Eye (Suffolk) and had set up another Saturday market there. The bishop had tried to cut his losses by moving his market to a Friday, but it had suffered from the competition of William Malet's market and was now worth little.(6) Such markets are of particular interest because of their implications for the frequency and regularity of exchanges. We know from later legislation, and from other records, that weekly markets, were chiefly important for supplying small households with their common necessities.(7)

Penny of Sihtric Anlafsson, Dublin, c.997-c.1020

The information in Domesday Book is coherent in representing the world of southern England as one where both money and trading institutions were numerous. But this complex of monetary and trading institutions

was in fact characteristic of only a small part of Britain and Ireland. Many parts of Britain and Ireland were also without money. Neither Scotland nor Wales had native currencies, and even English coins were not extensively used.(8) Silver was used for some transactions of major importance. Though the use of silver increased in south-eastern Wales in the tenth and eleventh centuries, it was not a regular feature of local transactions, and was predominantly measured by weight rather than by accounting values.(9) The development of trade had encouraged a localised minting of silver in the Irish Sea region. There was a mint in Dublin from about 997, and another on the Isle of Man from the 1030s. However, local life had not been commercialised as much as in southern England. Monetary circulation was restricted to the eastern Ireland and other parts of the Irish Sea area. Even in Dublin archaeologists report that coin finds are uncommon, and very few Irish coins reached Scotland or Wales.**(10)** Parts of Scotland, notably in the north and west which had been drawn into the Viking trading world, retained silver in the form of arm-rings, known as ring money. But such a currency was more a store of value than a means of exchange. It seems that ring money was used as a currency, and it is probably for this reason that Scottish silver arm rings occur in hoards from the Isle of Man. Nevertheless the large amount of silver contained in a single arm-ring clearly made this form of currency quite unsuitable for everyday household requirements.(11) The Scottish economy managed with very little money until the 1140s.(12)

Without markets or money, taxation and the levying of money rent were alike impossible, and the dues owed to superior lordship had to be paid in service or in goods. The king of Scotland received the income from his estates chiefly in the form of conveth and cain, which were traditional rents in kind.(13) The tributes due to the Gaelic lords of Ireland were similar, and remained so all through the Middle Ages.(14) In the shires of Scotland and northern England, which were the characteristic units of lordship, the peasants owed light labour services and more substantial renders of grain, malt, poultry and cattle.(15) Seigniorial institutions in Wales were essentially similar. The countryside was divided into rural districts each of which owed food tributes to its lord, called *gwestfau*. The native princes toured round the countryside collecting dues owed to them in food, and exacting the right to be billeted by their subjects.(16)

The same contrast between southern England and the rest of the Britain and Ireland is to be observed when we turn to examine commercial institutions. Both historians and archaeologists of regions beyond the reach of the Domesday Survey are unanimous that town life barely existed in the eleventh century.(17) In northern England we can mention York, the only significant centre of urban life. A market may have existed at Durham in 1040, but the only reference to its existence as early as this comes from Symeon of Durham writing in the early twelfth century.(18) Elsewhere, though archaeologists may risk speaking of proto-urban points of trade there is nothing that rates being described as urban, even by the very generous standards of medievalists.(19) In Wales there may have been some urban development at Monmouth.**(20)** In Ireland town life was confined to the old Viking ports and some minor monastic centres. The Vikings had established the ports of Dublin, Wexford, Waterford, Cork and Limerick on the Irish coast, and these were later developed as urban settlements on the pattern of the early tenth-century towns of Wessex and Mercia in England.(21) In all these non-monetised regions only a few peddlars were wholly dependent upon trade for their livelihood.(22) Such occupational specialisation as can be identified was almost entirely in agriculture.(23)

Over a century later, in 1200, many areas of Britain and Ireland were still without institutions of regular trade. In Wales urban developments were restricted to the border with England and to the southern coastal plain.(24) In Scotland the area of commercial growth was the lower-lying territory of the south and the east coast.(25) The few Irish boroughs were, not surprisingly, restricted to the area of Anglo-Norman control between Cork and Limerick in the south, Drogheda and Kells in the north. There was no urban development in the west or in what is now Northern Ireland. The more urbanised area probably mark the limits of the monetisation of local economies in the twelfth century. However between 1066 and 1200 there had been a considerable spacial expansion in the area of Britain and Ireland in which money and formal market centres were to be found, most strikingly in northern England, though Wales, Scotland and Ireland were all affected too.

II

The kingdom of England enjoyed commercial expansion through much of the twelfth century, as the growing volume of currency suggests. The coinage in circulation is estimated at £25,000 on average in the eleventh century, at £125,000 in 1180 and at £300,000 or more in 1218.(26) This development was accompanied by a marked expansion of the monetised zone of Britain and Ireland. King William II was able to take £300 a year from the bishopric of Durham when it was in his hands in the years 1096-9. By 1128-9, when the bishopric was again in the king's hands, the income was about £640 a year.(27) Similar development was evident in varying degrees in Scotland, Wales and Ireland. In the south-east of Scotland that money rents first started to replace rents in labour and kind after 1140. By the end of the twelfth century money was used for a wide range of rural transactions, including the renting of mills, fisheries and saltings and the leasing of ecclesiastical tithes, though this was chiefly south of the River Tay.(28) By 1178 King William the Lion was claiming the right to levy geld on land throughout Scotland, and the expansion of royal cash income justified the institution of an annual exchequer audit soon after this.(29) David I of Scotland started to mint coins about 1136, following his annexation of Cumberland at the height of the first great northern boom in silver-mining.**(30)** In much of Wales cattle and the products of pasture farming were characteristically used instead of coin.(31) In some regions the monetisation of rents is in evidence, probably in exchange for cattle, hides and wool.(32) Rents formerly paid in flour and cheese on the estates of the bishopric of St David's in south-eastern Wales had been converted to cash by the early thirteenth century.(33) There was little coinage struck in Wales before 1200, though English coins were at Cardiff, St David's and Rhuddlan in Wales during the reign of William II.(34) We are inadequately informed about the use of money in Ireland at the end of the twelfth century, but there was an Irish exchequer in 1200, and King John was able to draw money revenues from the boroughs, from his demesne lands and from feudal dues.(35) Anglo-Norman mints were established at Dublin about 1185 and at Waterford and Limerick after 1195, though none of these mints struck anything larger than a halfpenny.(36)

Halfpenny, second coinage, Dublin, c.1190-1199

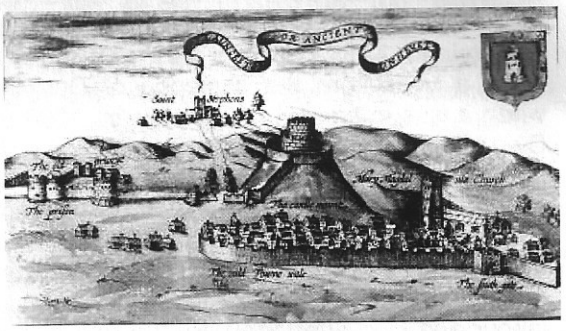
Increasing monetised trade was closely associated with the multiplication of trading institutions, boroughs and markets, of a sort hitherto associated with southern England. Professor Beresford, in particular, has compiled the evidence for urban development in England and Wales, and conjectures that between 1066 and 1200 there were 91 new towns in England and 29 in Wales.(37) In Scotland there were about 32 boroughs by 1216.(38) In Ireland we know of 14 new boroughs before 1200 of which 12 occur with urban features in later records.(39) In the four most northern counties of England about 50 new markets and boroughs transformed the commercial economy between 1066 and 1216.**(40)** It is characteristic of twelfth-century expansion that 'boroughs' are very much more in evidence than 'markets'; the relative preponderance in the records does not shift before the earliest charter rolls in 1199. We cannot be sure that in every case a new borough was envisaged as a centre of trade or that it had a market. In a colonial context *burgus* could simply mean a settlement of colonists holding land on favourable terms. Some early Irish boroughs, like Killaloe and Swords, never acquired urban features, and we cannot be sure that their foundation was intended to have any implications for the organisation of trade.(41) However, the layout of many of the new centres implies the existence of a central market place. And there are numerous instances in these areas of new development where the existence of a market place can be verified from the eleventh or twelfth centuries. In the case of Newport (Monmouthshire) and Newport (Pembrokeshire) the very name implies a new trading centre. (42) The new borough of Cardiff had a market, and we have some unusually detailed information about the tolls taken in cash there in the twelfth century.(43) It was at Cardiff in 1172 that King Henry II was subjected to a tirade from a rustic prophet against buying and selling on Sundays.(44) We hear of the borough and market of Oswestry together in the final decade of the twelfth century, when William FitzAlan gave

special protection to burgesses who had taken up messuages for the improvement of the market there.(45) In northern England every single borough known from this period is known to have had a markets place by the fourteenth century, and in this period boroughs seem universally to have been market towns.(46) In the case of Scotland's twelfth-century boroughs, which were not primarily designed to attract settlers, a market was essential to their very existence.(47)

Whether these new markets were invariably held weekly, or more or less frequently, is more than we can say in most cases, but there are a number of examples that were and it is likely that this was a normal part of the recurrent pattern of expanding local trade. Markets were usually associated with resident communities, whose residents would need to buy regular supplies of food and raw materials. In northern England we know of Norton market licensed in 1109 to be held on a Sunday.(48) In Scotland, at least, borough markets were held weekly from early in their history. There was an appointed market day at the king's market of Roxburgh about the year 1171, and we know of a Thursday market at Glasgow, a Saturday market at Arbroath, and a Sunday market at Brechin.(49) There seems to be no clear evidence from Wales or Ireland as early as this, but it may be of significance that borough courts of law in Ireland seem to have met weekly in many of the early Irish boroughs.**(50)** The market at Cardigan was confirmed as a weekly Saturday event in 1227 by Henry III, and that probably means that its weekly character was well established.(51)

III

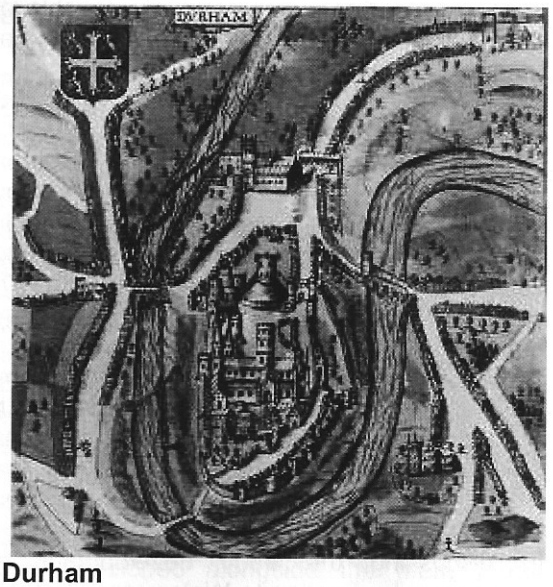
To judge from its institutional forms, the commercialisation of society in this period, Marc Bloch's 'second feudal age', was inseparable from developments in the exercise of power. Kings of England had long shown an interest in the formation of boroughs, and to some extent in their commercial regulation. The greater boroughs were mostly royal. Some new boroughs were deliberately developed by the crown for financial or strategic reasons. On the eastern Scottish march the borough of Newcastle upon Tyne was built up from about 1080 following the construction of the castle from which it took its name.(52) It rapidly became one of the biggest trading towns in northern England. On the western march, Carlisle was captured from its independent ruler by William II in 1092 and developed as a frontier stronghold against the Scots. Burgesses were recorded there in 1130.(53) In Scotland the enterprise of the Scottish crown was an important component of the scene. As in England, the main urban centres developed as royal boroughs.(54) Indeed, most of the boroughs recorded before 1200 were in the royal demesne.(55) Many of the lesser boroughs were the product of baronial enterprise, such as those of Warkworth, Kendal and Richmond.(56)



Launceston (Cornwall). The Count of Mortain's castle is noted in Domesday Book
(from John Speed's *Theatrum Imperii Magnæ Britanniæ*, 1616)

The association of trading communities with royal or seigniorial head manors, often beside castles, was a common feature of Norman colonisation in northern England, Wales and Ireland. Indeed, so common is the combination of Anglo-Norman castle and borough that it should surely be considered a cultural formula. This does not mean by any means that every baronial castle had an attached borough or that every borough had an attached castle, because there were many circumstances which dictated the one without the other. But, especially in regions of colonisation the combination was so common that the sight of the one prompts a search for the other. Of the 29 boroughs in the four northern counties probably founded by 1200, 17 were by castles, of which two were royal castles,(57) two were castles of the bishop of Durham,(58) and thirteen others were the castles of secular lords.(59) A similar pattern may be observed in south-western England in the same period.**(60)** In areas of more violent colonisation the link between boroughs and castles was stronger; of the 29 new Welsh towns of the late eleventh and twelfth centuries listed by Professor Beresford, 24 were associated with new castles.(61) The feudal nature of trading institutions in much of the newly developing parts of British Isles meant that new markets and boroughs were often related more to the feudal geography of baronial honours than to any existing interests

of traders. In southern Ireland Theobald Walter, the founder of the Butler family (d. 1205), chose to divide his enormous lordship into four administrative regions each with a manor at its centre, and he planned an urban settlement at each of these centres. One of these was the land-locked manor of Nenagh, which had clearly not been selected for any particular excellence of communications.(62)



Durham
(from John Speed's *Theatrum Imperii Magnæ Britanniæ*, 1616)

There were several reasons for the recurrent association of new trading communities with castles, particularly in a colonial context. Markets required protection, regulation and supervision if they were to attract trade and render tolls to a lord. It was as well to have them at the castle gate, where estate officers could exercise the necessary vigilance over them and ensure that any market tolls due to the lord were collected. In regions where money was relatively scarce, estate officers liked to be able to intercept tenants at the point where they made their sales in order to ensure that the payment of rent had first call on any cash they managed to collect together. In addition, castles were collecting places for produce from their lord's estate, and if there was a surplus it might be desirable to sell some of it. A market community close at hand was advantageous in this respect too.

The colonial nature of market communities was another reason for the need for royal or seigniorial protection. Outside England, lords often depended upon immigrants to colonise their new foundations. The foundation of the Welsh boroughs was a principal aspect of the westwards migration that Prof Davies describes as 'the second tidal wave of Anglo-Saxon or English colonization' from the late eleventh century.(63) It was perhaps this association of borough life with immigrants that prompted Gerald of Wales to report in the 1190s that 'the Welsh do not live in towns, villages or castles ... they pay no attention to commerce, shipping or industry'.(64) In Ireland the populations of the new boroughs were almost entirely immigrants from England and Wales.(65) A similar colonial significance is to be found even in Scotland. William of Newburgh said that 'the towns and boroughs of the Scottish realm are known to be inhabited by English', and he was right in implying that the new boroughs of the twelfth century were exceptionally dependent upon foreign immigrants to Scotland.(66) New boroughs throughout Britain and Ireland also attracted a number of Flemish immigrants.(67)

The common pattern of castles, borough and immigrants that we have been observing is attributable to an aggressive Anglo-Norman culture, which was extending into new territory partly by violent means. The new nobility had particular reasons for wanting its revenues in the form of cash, since unless it was to be resident in the areas of new colonisation there was little chance of turning its new gained wealth to any account. It must surely be supposed that one of the first questions that a Norman landlord asked himself on acquiring land in a non-monetised region was how to monetise it. This conclusion raises some questions interesting for the interpretation of medieval commercial growth. The expansion of urban life looks very much like the application of a formula by a new ruling class. So it comes naturally to ask whether in some sense, or to some extent, the application of this formula under Norman rule *caused* the expansion of trade. Usually the growth of trade is treated as something governed by general economic causes, and not requiring to be referred to particular types of decision or to particular cultural traditions. The foundation of markets and fairs by landlords is treated as a response to the growth of trade rather than as a cause. In the developments we have been discussing, however, this idea is called into question. Is it likely that local commerce was developing in so many different parts of Britain and Ireland just in time for the expansion of Anglo-Norman lordship to reap the benefits? Was it just good luck that a more urbanised economy was developing in northern England as the region was absorbed effectively under Norman rule?

There was, of course, nothing distinctively Norman about the development of local trade. England was at least as commercially developed as Normandy at the time of the Norman Conquest, and the monetary system under the Anglo-Saxon kings was as sophisticated as any in Europe. But if the expansion of trade depended upon very distinctive institutions, then there may be more to be said in favour of a distinctively Norman impact. The twelfth-century colonial world we have been describing was in two, respects very Norman. Firstly, the expansive drive that took castles to Wales, Ireland and the North was much more striking a characteristic of Norman culture than of English. Since it just this capacity of Anglo-Norman culture to expand that concerns us, there is no good reason to abandon the idea that this culture was a significant element in the picture. Secondly, the castles we have been discussing were themselves a characteristic of Norman rather than Anglo-Saxon society. The few castles that already existed in England in 1066 had been founded by Norman or French lords favoured by King Edward the Confessor.(68) These two arguments are by themselves enough to suggest that trade followed the banner.

IV

Before going further with this positive assessment of landlord enterprise there is a major obstacle to be cleared, and I shall try to clear it as expeditiously as possible. It arises from the fact that in southern England, too, there was such major institutional development between 1086 and 1200 both in the economy and in legal institutions that it would be misleading to think of British development in this period as a simple diffusion of institutions from a heartland to a periphery. The 151 places recorded in Domesday Book to have had boroughs and markets are distributed very oddly, with a heavy bias to the relatively less populous western counties, suggesting that current marketing institutions are very imperfectly represented by the boroughs and markets of Domesday Book and that eastern England, at least, had a structure of local trade that does not meet the eye and that did not depend upon institutions call boroughs and markets at the time.

In studying the regions of Anglo-Norman colonisation, we cannot assuming that the new trading institutions that we actually know about in Scotland, northern England, Wales and Ireland were the sum total of what existed and developed in the period before 1200. If there were less formal institutions in England itself they probably existed elsewhere. Individually they were less impressive than the recorded boroughs, with their settlements of peasants and traders. Cumulatively their importance is something we cannot estimate. These considerations inevitably complicate any discussion of the growth of trade because they suggest that informal and barely observable institutions of trade are potentially capable of sabotaging any argument from historical evidence.

There were, for example, coastal sites that acted as trading stations of some sort for trade over longer distances. In northern England Wearmouth, the later Sunderland, and Whitby may have had this character.(69) By the early twelfth century there was a small trading settlement on the waterfront at Perth.**(70)** Kirkwall and Pierowall in the Orkneys may have functioned in this way in the eleventh century, though neither place was in any sense urban.(71) There were Welsh ports with no associated urban development, such as Portskewett near Chepstow, and some of the little ports recorded in saints' lives do not even have a name.(72)

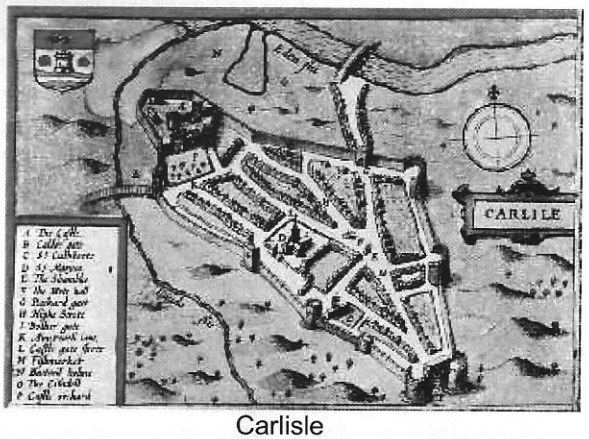
In discussing the early development of commerce in Scotland, Wales and Ireland historians have usefully studied the contexts in which commerce developed informally even before the establishment of an organised trading community, and often before the establishment of seigniorial rights. Important churches have been singled out for special attention because they often acted as the focus of settlement and exchange.(73) The earliest recorded trading institutions of Ireland come from a period long before the Anglo-Norman invasion of 1169, and are associated with monastic foundations. We know of a *margad* at Limerick in 1108, of one at Cashel (Tipperary), in 1134 and of another of the early twelfth century at Kells (Meath).(74) A number of monastic centres that became Anglo-Norman boroughs, such as Kells, Kildare and Trim may have had earlier trading functions.(75) Some Anglo-Norman boroughs in Scotland, such as St. Andrews, Brechin, Peebles and Jedburgh are also believed to have had earlier significance as proto-urban trading centres attached to important churches.(76) Caerwent in Wales was another possible monastic trading point of this kind.(77)

Another context where people assembled for trade were centres of secular administration, where justice was administered or where the dues owed to a superior lord were collected.

Many later markets were attached to manors of exceptional importance in local government, such as hundredal manors - manors, that is, to which jurisdiction over a neighbouring hundred was attached.(78) Similar administrative centres existed in other parts of Britain and Ireland, probably with the same potential for early commercial development. In Scotland the old centres of royal demesne administration, which seem to have been described in Latin as *civitates* or *urbes*, had many of the same features as English hundredal manors. The fact that they are described in such grandiloquent terminology does not mean they were recognizably urban, though some of them, like Berwick, Brechin and Crail, were made early royal boroughs in the twelfth century.(79) These centres probably acted as trading centres only on particular occasions when public business took place. The Anglo-Saxon laws imply that trading took place at the headquarters of English hundreds, but if this trading was associated with meeting of the hundred court then it occurred only once a month.**(80)** We have no grounds for supposing the laws are referring to weekly markets.

Quite apart from any more public institutions that developed alongside the more formal boroughs and markets, twelfth-century local trade was not confined to public institutions, and as town life developed townsmen built up informal patterns of supply that by-passed public markets. In the absence of financial accounts of any sort it is impossible to assess the importance of such trade, but its existence has to be assumed on the strength of thirteenth-century evidence.

All these arguments make the undoubtedly true point that trade can take place without the existence of towns and formal markets. However, the fact remains that monetary economies developed only in association with the new developments of the period after the Norman Conquest, and that creates a *prima facie* suspicion that earlier informal institutions cannot have accounted for a very great or flexible pattern of trade. Whatever the patterns of institutional trade in Scotland or Wales before the mid twelfth century, they was not like that of East Anglia, because the latter had a developed circulation of currency and regular payments of taxes and rents in money that Scotland and Wales lacked. The fact that we do not know much about trading institutions in either region is far from implying that they were likely to be the same.



Carlisle
(from John Speed's *Theatrum Imperii Magnæ Britanniæ*, 1616)

Moreover, the chief argument for the importance of boroughs and markets does not depend on their precise legal status as formal market places or boroughs. It has rather to do with their importance as centres of consumption and commercial enterprise. The creation of more formal marketing institutions was contingent on the creation of population centres, not the other way round. The deliberate build up of new centres of population was everywhere a feature of borough foundation, and it was particularly deliberate in colonial contexts. Townsmen were of critical importance for the development of a monetary economy. They drew money into a region from outside by entering into commerce with outsiders, and they put money into circulation by purchasing foodstuffs and raw materials. Doubt is sometimes cast on the capacity of small towns such as those of the twelfth century periphery to generate enough demand to make much difference to rural economies, but this is probably mistaken caution. There is no documentary basis for assessing the population of the four northern counties of England in this period. Darby guessed at 25,000 in 1086.(81) By 1200 there were several substantial towns in the region - Newcastle, Durham, Carlisle, whose combined population is unlikely to have been less than 3,000 - as well as 26 smaller borough whose population is unlikely to have been less than another 3,000. So a low guess of the borough population of these counties in 1216 is 6,000, which is 24 per cent of Darby's guess for the population in 1086. This is not science, and the ratio cannot be a true urban ratio since the population in the region had undoubtedly increased between the two dates, but it serves to counteract the suggestion that the local importance of these boroughs can be

assumed away. Concentrations of population such as these rarely came into existence without some definite entrepreneurial activity on the part of a landlord to provide building land and other amenities. It seems likely that the impact of lordship enterprise of this kind was most important in those areas where there was least monetary trade in the eleventh century. A few baronial castle-borough complexes in Essex, such as those at Pleshey or High Ongar, probably did not greatly affect the propensity of local people to trade. In the north of England, however, it is more reasonable to think that local economies began to be transformed by the coming of these institutions, and their effect on Wales and Scotland was probably even greater.

This stress on the entrepreneurial activity of landlords in creating new *foci* of market demand does not mean that they could summon increasing incomes out of the blue by a mere fiat, and my final point is to suggest that landlords could only create successful new boroughs and markets in distinctive sets of circumstances. Two circumstances seem particularly appropriate her. One is the growing demand for food and raw materials in existing urbanised regions, especially southern England. This represents a sort of core-periphery interpretation of twelfth-century development. The increasing flow of money in new areas was in part stimulated by increasing long-distance trade, and especially trade with England. Wales exported livestock, wool, dairy produce skins, furs and fish as well as some construction materials, both stone and timber.(82) The external trade of Wales and Ireland is attested by William of Malmesbury and Gerald of Wales, who both asserted that both depended upon trade with England.(83) Its expansion is suggested by the development of new ports, notably in Ireland at Drogheda, Dundalk, New Ross and Carrickfergus,(84) and in South Wales at Cardiff, Swansea, Kidwelly, Carmarthen, Tenby and Haverford West.(85) Expansion of these trades cannot be measured, but it is in part indicated by the prosperity of Bristol and Chester as ports on the western side of England, since much of their trade was with Wales and Ireland. It is indicated too by the fact that the most monetised parts of Scotland and Wales around 1200 were those nearest to England and most in contact with English traders.

However, an expansion of long-distance trade alone would not have generated the pattern of new boroughs and the growth of local trade that is so striking a feature of northern England and, to a lesser extent, Wales, Scotland and Ireland. Another condition for the successful establishment of boroughs must be the existence of families looking for opportunities to work in such an environment. There must be accessible surplus labour, even if it has to be brought from a distance. This is not the same thing as saying that there must be population growth; it may be that the latent opportunities for borough building had been around for some time but that earlier landholding traditions had not included developments of this sort. In Wales, as in eastern Germany, Poland and Austria at the same period, the creation of new settlements created new population growth because of the nature of the colonising process, though much of this was associated with the accommodation of immigrants from outside Wales rather than the natural increase of the native Welsh population.(86)

As a final speculation, then, I shall suggest that the process of colonisation and institutional change that I have been describing may reasonably held to account for more than simply an increasing use of money, and that it is likely to have had a much more fundamental effect on regional economies. The undoubted increase in population and economic output between 1066 and 1300 is often, and very variously estimated, but it very rarely explained. Often it is attributed to the establishment of peaceful government, though I suspect that this would not have convinced the twelfth-century Welsh, or indeed their thirteenth-century descendants. Monocausal explanations in economic and social history rarely carry conviction. However, if the castle-borough formula had the effect of jump-starting monetisation and commercial development in much of Britain and Ireland, then it is likely to have a profound effect to on the course of economic development and population growth.

Professor Richard Britnell
University of Durham

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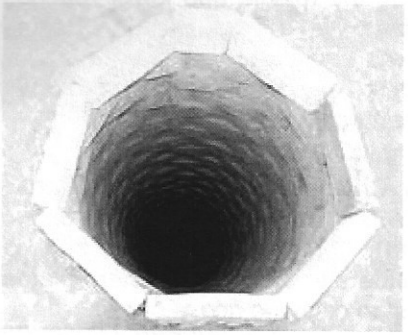
Rodney Gunner W.A.S.

NEWS FROM CHINA

PRESS RELEASE: Remains of Han Dynasty Courtyards at Sanyangzhuang, Henan Province

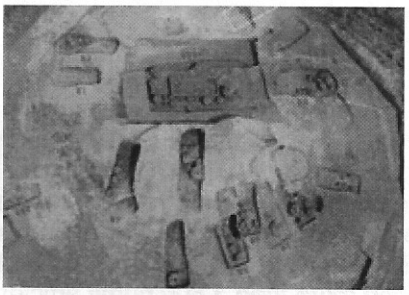


The remains of a total nine courtyards of the late West Han Dynasty (206 BC-AD 25) were first found in June 2003 along the ancient course of the Yellow River in Sanyangzhuang Village of Neihuang County, Henan Province.

Referred to as the "oriental Pompeii" when discovered, archaeologists say the village was submerged more than 2,000 years ago when the Yellow River burst its banks in a flood.

"The Sanyangzhuang site presents us with a vivid picture of Han Dynasty society, especially of its vast countryside, which has not been well recorded in literature," said Xu Pingfang, chairman of the Chinese Society of Archaeology and an expert in the Han (206 BC-AD 220) and Tang Dynasty (618-907) archaeology.

Excavation work on four of the courtyards, starting from July 2003, has so far unearthed a wealth of relics including tiled roofs, walls, wells, toilets, croplands and trees along with a large number of artifacts that provide insights into social and economic life of the time.



Like Pompeii the Sanyangzhuang Village was preserved intact. Life, as it was, stood still and frozen in time. Round and flat tiles were found in what is believed to be their original positions on the roofs after walls had partially collapsed. So, too, were articles for daily use such as stone and metal items and pottery apparently abandoned by families trying desperately to escape the flood.

In one courtyard excavation work revealed that the master room was actually undergoing maintenance when the flood water arrived. Unused flat tiles lay in heaps along with abandoned construction materials.

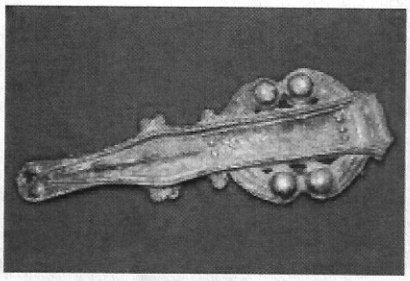
Also excavated were areas of farmland on which crops had grown. Experts say this provided first-hand material evidence for research into agricultural systems and the economy of the Han Dynasty. Farming methods adopted in the Western Han Dynasty greatly influenced China's agricultural development of later ages.

Some experts went as far as to suggest that the discovery of ridged farmland at Sanyangzhuang could correct past assumptions on farming culture in ancient China and even rewrite the country's farming history.

They said the distribution of courtyards and the croplands themselves have provided valuable evidence for studying the structure of organizations and relationships between different households in the Western Han Dynasty.

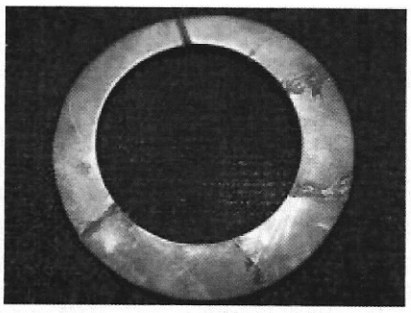
Flooding of the Yellow River has been regarded as one of the major dangers throughout Chinese history. Discoveries at the Sanyangzhuang ruins provided new information for studying the hydrological history of the Yellow River basin, they said.

3. Prehistoric Zhongshui Relics Providing Proof of Rice Farming



Rice grains were found in a number of sacrificial pits at Zhongshui of Weining County, southwest China's Guizhou Province. The prehistoric site covers a total area of nearly 3,000 square meters.

"The rice was found in numerous pits and is believed to be upland variety as the grains are much smaller and the shoots are shorter than those of paddy rice," said Dr. Zhao Zhijun, a researcher with the Archaeology Institute of Chinese Academy of Social Sciences (CASS).



The discovery shows that rice was being systematically cultivated more than 3,000 years ago, said a source with Guizhou's bureau of cultural heritage.

Experts believe the rice, the oldest ever excavated in southwest China, will provide valuable insights into the evolution of rice strains.

According to Dr. Zhao, the discovery of the ancient rice along with ideal climate and soil conditions gives evidence of an advanced culture of agricultural production in the Zhongshui area. It provides important proof of rice farming, a subject that has been popular yet controversial among archaeologists, agriculturists and historians for the past three decades.

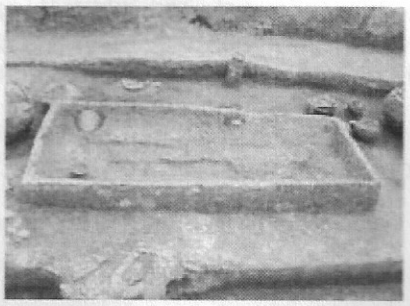
Yet Dr. Zhao said scientists still need to determine whether the finds are paddy rice or dry rice and whether it was native to the Yunnan-Guizhou Plateau or had been introduced from other known rice production areas in the middle and lower reaches of the Yangtze River or the Sichuan Basin on the north of the plateau. "These are crucial in our research on highland rice farming," he commented.

South China with plenty rainfall and a mild climate is widely believed to be origin of rice farming. Many scientists believe that highlanders in the south-western plateau were the first to cultivate rice.

Excavation of Neolithic stone implements including farm tools appears to support their view, said Zhang Herong, a research fellow with the Guizhou Provincial Institute of Archaeology.

Besides the rice finds, archaeologists also unearthed from the site a large quantity of stone implements, pottery, jade and bronze pieces, Zhang said. It's inferred that ancient inhabitants had used surplus rice as a sacrificial offering for the dead.

8. Mound Tombs in Jurong and Jintan, Jiangsu Province



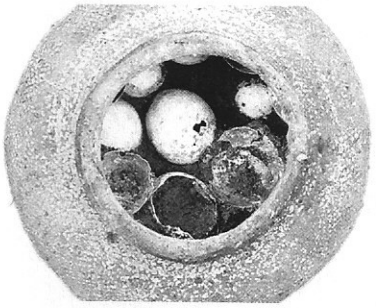
In Jurong and Jintan counties of Jiangsu Province, from April to September 2005 archaeologists excavated 40 mounds, 233 tombs and 229 sacrificial pits dating back to the Zhou Dynasty (c.1100-256 BC), and produced more than 3,800 burial articles.

"Mound tombs" have been largely found in southern Jiangsu, southern Anhui, Zhejiang

and Shanghai, all in the lower reaches of the Yangtze River. They were so named after their first discovery in Jurong in 1974. However, there has long been disagreement among archaeologists about their structure.

The new discoveries show that under a mound there is either only one or multiple tombs, and in most cases a burial pit was dug, which is different from previous assumptions.

Another interesting finding was a pot of duck eggs pickled more than 2,500 years ago. The pot was covered with a lid and sealed with mud. So the eggs remained well preserved until they were discovered!



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