tradition. Originally using hide-covered framed boats, they developed other structural methods including dug-out log boats. Julius Caesar was greatly impressed by the technical achievement of maritime vessels used by the Celts in the dangerous waters around Britain, noting how versatile they were compared to the builder and heavier Roman ships. The Celtic ships were designed for trade rather than warfare and were constructed around internal frames like their hide-covered predecessors, with overlapping timber planking nailed to the frame. The Roman ship on the other hand had butt-jointed planking fixed with tenons to which an internal frame was added. Celtic ships were capable of beaching without requirement of harbours or landing stages.

Moving to Northumberland, Paul Bidwell and Dr. Nick Hodgson referred to Ammianus Marcellinus' mention of a supply base at Paleas in Isuria, suggesting that Arbeia (South Shields) was probably a similar depot. The Caledonian campaigns of Septimius Severus had been the reason for the first stone-built fort and the development of the huge granaries there. These would also have supported the supplies to the garrisons along Hadrian’s Wall. Paul also indicated the existence of a probable Roman wreck, (the ship had been aiming for the fort) lying just off the foreshore at South Shields where debris has been recovered by dredging and washed ashore since the 19th century. Dr. Nick Hodgson described the changes made to the fort on the evidence of his extensive excavations, showing how, following the death of Severus, his son and successor abandoned the campaigns in Caledonia, and Arbeia reverted to an accommodation base, continuing as a supply depot into the 4th century. The size of the fort and its permanence suggest that it continued to supply the Wall garrisons. However, at the beginning of the 4th century there had been a transfer of a unit of Mesopotamian bargemen to Arbeia whose purpose was, no doubt, to defend the mouth of the Tyne. The barracks at this time would have accommodated 30 – 40 men each, the maximum crew required for an individual barge. As there were 10 barracks, perhaps a flotilla of 10 barges had been garrisoned at Arbeia in the 4th century.

Nigel Nayling, Project Manager of the Glamorgan/Gwent Archaeological Trust, then explained the implications of the Romano-Celtic boat discovered at Barlands Farm on the Severn Estuary. The ship, surviving to a length of 9.7 metres appears to have sunk beside a stone and timber revetment. It was empty of cargo but other material from the revetment included bones of sheep, cattle, and pottery, especially Dorset Black-Burnished wares. Tree ring dating has indicated that the vessel was built in the period AD 282-326. It is possible that this was a local trader operating in the tidal waters between Wales and the Gloucestershire side of the Severn Estuary.

In the unfortunate absence of Dr. Margaret Rule due to illness, Nick Fuentes stepped in with a short address on implements carried on board naval vessels. He discussed the grapnels, used to hold and draw ships together during combat, and the delabra, an axe-like tool used to sever the link made by the grapnel.

Dr. David Tomalin, Archaeological Officer for the Isle of Wight, presented a perspective view from the island of Vectis. He explained how in the past two years thought has been applied to the need for a ‘seamless approach’ enabling archaeological sites above and below the water mark to be comprehended and managed as a single resource. He quoted significant publications produced over the past 4 years, pointing out how they helped in the perception of serious flaws in procedures intended to protect sites in the off-shore and sub-tidal zones.

He quoted from other recent government publications such as ‘Guidelines on the Preparation of Shore Management, MAFF 1995; DOE Review of Licensing Marine Dredging in England and Wales 1995; and the Green Paper, Protecting our Heritage (1996). In all these the nature and vulnerability of the submerged and rich dimension of our national heritage was seen not to be fully grasped. Dr. Tomalin then reviewed the archaeological evidence itself examining the location of villas on the Channel coast, relating them with the distribution of natural harbours and off-shore anchorages. He cited villas with almost certain harbour connections at Folkestone, Eastbourne, Sidlesham, Weymouth, Southwick, Fishbourne, Emsworth and Brading.

The enigmatic site at Pudding Pan Rock, approximately five miles north-west of Reculver, Regulbium, Kent was the subject of the talk given by Kit Watson of the Trust for Wessex Archaeology. He considered its documented history and asked whether it really was a wreck site, or a dump of Samian ware thrown overboard in order to release a grounded vessel from the estuarine sands. By studying over 200 pieces of material from the site (now dispersed in many museums across Britain and abroad), Kit convincingly argued that wear on the bases of the bowls so far recovered does imply that the pieces were stacked together base up on the sea bed. He also queried the precise location of the site, pointing out the problem of fluctuating navigable channels due to the shifting sandbanks.

On Sunday Neil Holbrook, Director of the Cotswold Archaeological Trust, commenced the day with an examination of coastal trading around the south-west peninsula of Britain. He pointed out that there had already been a well-established trade across the Channel.
in pre-Roman times, with pottery being traded in both directions. In the later Roman period three distinctive types of pottery can be identified as tradable products; the ubiquitous Black-Burnished wares from Dorset, South Devon Ware, and Gabbro Ware from Cornwall. There had been an undoubted tradition of coastal trading from central and eastern Britain with the west country and likewise in the opposite direction. Cornish stone bowls, for example, have been found in London and Richborough. Neil proposed that sea-borne transport was efficient, cheap and quick. At Crandon Bridge, near Bridgewater, warehouses had been found during the construction of the M5 motorway, producing a considerable quantity of Black-Burnished wares. This implied a possible transit centre for shipment onto the River Parrett and on into the Severn Estuary. The point was also made that the Fosse Way, running south from Gloucestershire, terminates near the long-supposed "villa" at Honeyditches near Seaton. It was suggested that again this site may in fact be an important trading and shipping centre and not a villa in the normal sense. Tin was also, of course, an important trading commodity. Further trading links with south-west Britain and more southerly parts of the greater Empire have been known for some time, with pottery from the South of France and North African Red-Slip Wares and amphorae being found in Devon, Cornwall and South Wales.

The enthusiastic atmosphere of the conference increased as Dr. Peter Marsden, Director of the Shipwreck Heritage Centre at Hastings, gave a polished delivery arguing that there is as yet little evidence to suggest that the larger and heavier Mediterranean ships reached British ports. In the Mediterranean the heavy plank-and-tenon hull constructed vessels were designed to berth at deep-water harbours and were capable of carrying heavy cargoes such as blocks of marble and stone columns. However, in Britain, evidence for deep-water ports is negligible. Only one Mediterranean style ship has been found from Britain and was, on dendro-chronological evidence, constructed in Britain. The indigenous Romano-Celtic vessel with its flat bottom of thick base planks and no keel, was capable of settling onto the flats in northern tidal waters. Peter illustrated several excavated examples of British vessels, including the first ship from the Roman Empire ever to be published, found under London’s County Hall in 1912. He also noted his own excavation at Blackfriars, where in the mid 2nd century a large Romano-Celtic vessel sank following a collision. The Blackfriars ship was capable of carrying up to 50 tons of cargo. He proposed that rather than risk a long and perilous sea voyage around the Iberian peninsula, Mediterranean cargos were shipped across Gaul by the large rivers possibly using Mediterranean-style ships. Goods could then be transferred along the Rhine using Romano-Celtic vessels capable of reaching Britain.

Tim Strickland, a Director of Gifford and Partners at Chester, showed that the legionary fortress of Deva (Chester) was located, like most Roman fortresses in Britain, on or near the lowest convenient crossing point and highest navigation point of a large river. It was strongly argued that the location of Deva was not a logical site for overland communication and that its purpose from conception was a maritime one. Unlike today, in the 1st century AD there had been a deep-water channel at Chester. He also stressed the political geography at the time of the Roman invasion. The Cornovii, south of Chester, were allied to Rome, and immediately to the north, the Brigantes under Queen Cartimandua, were at least token allies. There is a strong possibility that there had been a military naval facility at Chester connected with Agricola’s campaigns with the Legio II Augusta in the 70s. The stamped lead pipes with the titles of Agricola from Chester were cited as partial evidence for this. The transit, by coastal trading in and out of the port, is also testified by the amount of Welsh slate, identified as originating at quarries near Segontium (Caernarfon), being found in stratified Roman contexts in Chester. Traffic in the opposite direction has been shown by Cheshire sandstone being found at Segontium.

Finally, the thorny question of the Irish connection was aired. Quoting Tacitus’ account of the restoration of an Irish prince during the Roman period, coupled with the growing...
amount of Roman material being identified in Ireland, he showed that there were maritime links between the mainland of Britannia and Hibernia and that the most likely port for any major embarkation to Ireland would be Chester.

Dr. Colin Martin of St. Andrew’s University presented a convincing argument for the transit of troops and equipment by sea during the Agricolan and Severan campaigns against Scotland. Using extensive evidence gleaned from aerial reconnaissance he proposed that there was in fact combined movement of troops by land and sea. In Tacitus’ Agricola there is reference to land-based troops and naval forces meeting up and exchanging experiences during the campaign. Under Severus the Caledonian campaigns were again supplied from the sea via Arbeia. The port supplied advance bases at Cramond and Carpo, and from there to territory beyond the Forth. The distribution map of Roman military sites in Northern Britain is essentially terrestrial, appearing to shun the coast, yet historical sources emphasise the importance of seaborne operations. It was put to conference that a maritime dimension may complete an otherwise misleading map, suggesting that, prior to campaigning, coastal data was gathered from maritime sources by the Roman army.

As the conference approached its climax, the environmental changes that affected the province of Britannia were considered, taking as a measure the earliest high sea levels at the commencement of the Roman occupation compared with a dramatic fall in the 3rd and 4th century. Gordon MacDonald, the only non-archaeological presenter at the conference used his experience as a naval reservist and chartered surveyor to consider the implications of global warming and cooling in the past. These changes resulted in a regular cycle of tidal regressions and transgressions, and in the Roman period they affected maritime trade. He compared the various methods of harbourage using tidal changes and showed how port facilities evolved with changing priorities. He argued that it is no coincidence that Rome’s waning influence over Britain at the end of the 4th century was paralleled by a slow climatic decline and falling sea levels. The larger transcontinental vessels became redundant, and gradually the shallow draught oar-driven raiding vessels became masters of the northern seas in the post-Roman Dark Ages.

The final lecture was given by Trevor Brigham of the Museum of London. He has recently been in the forefront of the study of the port and river of Roman London. Assessing his own work and that of his colleagues he was able to determine the topographic and chronological development of the London waterfront, showing that the harbour facility, as a large scale entity, had ceased to exist by the mid 3rd century.

The port probably devolved as imports were transported down-river to points of sale and ‘inland’ stores. This was shown by comparing pottery distributions within the city. In earlier times when the harbour operated, pottery concentrated near the river, but later the evidence is evenly distributed across the town implying a supply source outside. Initially a depth of 1.5 metres was required for harbourage but over the Roman period water levels fell by this amount. Excavations have shown that for a kilometre along the London waterfront the final phase timbers of the harbour had been hacked apart and removed, leaving the once well-constructed docks in a ruinous state. By AD 270, construction of the riverside wall, built with material from the demolished buildings and monuments within the town, had effectively cut London off from the river.

All the conference’s speakers presented important material and arguments for greater awareness of our off-shore heritage. There is an undoubted need for better legislation at Government level to protect this unparalleled resource. We were shown that a major reconsideration is needed in the understanding of campaigns against Scotland in the 1st and early 3rd centuries and that we need to re-evaluate the role of the British fleet and its significance to the Province. Our understanding of the types of vessels used in British waters is now becoming clearer and the study of inland water traffic, directing produce to the coast, is growing in momentum. The evidence for two-way coastal traffic is also developing with a need to reconsider the intended function of coastal sites. Undoubtedly, the evidence presented by the two final papers however, must have a profound impact on our future understanding of the end of Roman Britain. Why should Rome have eventually relinquished its hold on such a grain-rich Province? Perhaps climatic change was the major cause, by preventing her from maintaining her maritime links.

It is intended that the Association will arrange publication of these conference papers as a Research Monograph.

ROMAN NEWS UPDATE

Norfolk Museum Service has reported the discovery of an extensive and well-appointed villa near Holt. The site was discovered by chance when the landowner was planting trees. Part of a wall was revealed which was uncovered further, producing painted plaster and evidence for an extensive mosaic. Well-appointed stone-built villas are rare in Norfolk so this is a major discovery for the area. No villa on this scale has been found in the territory of the Iceni since the one at Gayton Thorpe was located in the 1920s. It is not planned to excavate the site; information of its location is being restricted to protect the site from metal detectorists. However, the County Museums Service intends to undertake a geophysical survey of the area later in the autumn to identify the full extent of the site. Information from David Gurney, Norfolk Museums Service.
The Roman civitas capital of *Venta Silurum* lies in the centre of a large plain and is accessible today from the A48.

*Venta* centred around the foundation of a forum-basilica which was constructed in the reign of Hadrian (AD 117–138). *Venta* has its share of fine houses, shops, baths, and temples as well as lesser dwellings originally laid out in an unwalled town of twenty insulae, most of which had been constructed between AD 150 and AD 330.

Caerwent had been the centre of antiquarian activities for decades until excavations between 1809 and 1913 by more responsible researchers improved our academic understanding of this major Roman site. As recently as the late 1980s and early 1990s, Richard Brewer from the National Museum of Wales conducted regular training excavations on the site of the basilica and forum on a sessional basis. Today the only work being carried out is restoration work on the basilica walls by CADW, and the small excavation and survey by Archaeology Cymru, which is the subject of this report.

The project was initiated in July 1997 when a 19th-century field-boundary wall was demolished for the construction of a new dry-stone wall. A Roman wall, running north–south, was revealed 1 m above the surface just inside and to the south of the East Gate. Due to legal constraints Archaeology Cymru can only uncover the wall down to the point where the Roman stratified contexts remain undisturbed. So far we have dismantled the field boundary wall, leaving in situ a small section to help with future interpretation of the archaeology of the site. Within the unstratified contexts, Black-Burnished wares of most Gillam types of the mid-1st to later 3rd centuries were recovered. This gave some indication that the site may have been constantly disturbed in recent times.

Below the surface, the stratification seemed to indicate that there may have been some extensive disturbance in the last century by antiquarian digging. The total length of the wall, exceeding the 11.2 m excavated, indicated that we had discovered part of an extensive building, although no walls leading off in an easterly or westerly direction were located. However 2 m of the southern section of the wall belong to an early phase which had been superseded by two later phases. The later 9.2 m of wall may originally have supported a wattle and daub framed structure. The conclusion can be made that the remaining wall may be over 18 m long. The wall, together with a dry-stone capping, will be conserved and retained as a feature.

---

**VILLA GROUP DISCOVERED IN KENT**

After finishing his Ph.D. at St. Andrew's University, Paul Wilkinson was commissioned by Swale Borough Council in Kent to conduct an archaeological survey. The results have been spectacular, and that information has been rapidly shared with other researchers and specialists. Paul Wilkinson has sent us a brief report on his recent work in north Kent.

With their usual enthusiasm the national press reported a major find, just east of Faversham seven miles from Canterbury (*Guardian*, Friday, April 25th, 1997). But exciting as the find might be, the complete story promises to be even more revealing, for in the space of eighteen months field research has located no less than fifteen new Roman villa sites in North Kent. All the villas located are substantial establishments, spaced about two or three miles apart and obviously the centres of well defined estates. The boundaries of some still exist as place-names in the landscape. The villa at Faversham for instance is defined by Oare to the west (a Latin word *ora* meaning boundary), and Maere-Fleet (now Clapgate) to the east. The name Maere-Fleet is first noted in an Anglo-Saxon document of AD 699 and also means 'boundary' or border.

The sites of some of the villas are sometimes located through the study of local estate maps. For instance Blacklands villa, just to the east of
Faversham, was identified because of the name of the field where the villa is located: Blacklands. There are numerous other Roman villa sites in Britain called Blacklands or Blackfield. Another Roman villa was found close to Sharsted Court Farm, ‘shar’ being derived from the Old English word ‘sceard’, meaning broken potsherds (i.e. shards).

Others were found after months of field-walking and a shrewd interpretation of the landscape.

Significantly the twelve Roman villa sites north of Watling Street are all located on, or close to springs and also have access directly by water to the Swale, that renowned waterway that connected Roman London to either Boulogne or the Rhine garrisons. All are located closer to the waterway than Watling Street, all have quay facilities and the supposition must be that agricultural goods were transported by barge, not road, to either London or the continent. Some of these villages are massive establishments: for instance the Blacklands Roman villa site is indicated by an English Heritage geophysical survey to extend over 150 metres. Blacklands has some interesting, and as yet unexplained features, for instance an artificial bowl or ‘amphitheatre’ which may indicate the site was that of a sanctuary. While fine, full-colour mosaic fragments recovered from the site have been assessed by David Rudkin of Fishbourne Roman Palace as probably being of 4th-century date and from a bath-house. The extent of the mosaic floor was some seven metres square.

Although the site has been heavily ploughed, field-walking over a two year period has collected sufficient pottery to give a lifespan from the 1st century to the late 4th century. Other artefacts, such as fine marble wall sheeting, indicate a level of opulence above the norm for such a rural site. Interpretation of the geophysical survey indicates a dual courtyard villa looking remarkably similar to North Leigh in Oxfordshire.

The Deerton Street Roman villa site was evaluated this Easter and again excavation revealed a substantial and important villa covering an area of over 50 metres across. Saxon pottery found in the later levels show the estate was occupied very early on by Saxon settlers and the occurrence of quantities of very late Roman greg-tempered ware indicate the villa operated in the very last days of Roman Britain.

Other sites, although ‘dug’ or commented on by 19th-century amateur archaeologists, have been re-evaluated and found to be Roman villas through the sheer quantity of painted plaster, hypocaust tiles, and mosaic fragments.

Of particular interest are the four ‘upland’ Roman villa sites south of Watling Street. The farming here is of a different type from the arable fields and pastures of the coastal villas, and may indicate a level of specialisation in farming not again practised until the late medieval period. Certainly the early Anglo-Saxon estates, although established on the coast, practised “transhumance” with flocks of sheep utilising the upland pastures during summer.

All the villas are spaced at equal distances, more densely packed along the coast, and the larger estates lie south of Watling Street, where no doubt poorer soil meant the estate had to be larger to be viable. It seems as if the land had been partitioned off very early on into units and the division may date back to the Roman conquest.

With fifteen Roman villa estates now located, such an extensive group may make it impossible to research the questions we need to ask about such establishments, for instance, how far do these estates encroach into the Weald, that proverbial “Rons-land” (apart from iron working). Are there more villas waiting to be discovered even further south, east and west?

All in all, these are exciting times, which will undoubtedly culminate in the re-writing of the history of this part of Roman Britain.

**ROMAN VILLAS IN NORTH KENT**
The Annual Dinner and Field Excursion was held on the Isle of Wight and based at the Cliff Tops Hotel, Shanklin, over the weekend of 10th – 11th May. Dr. David Tomalin, County Archaeologist, gave the Guest Lecture on Roman Wight, highlighting recent fieldwork and discoveries, especially on sites below sea-level off the north-east coast. The tour took members to the Roman villas at Newport and Brading, where at the latter the new layout of buried buildings and the iconography and conservation of the mosaics were studied. Also visited were the possible remains of a Roman fort at Carisbrooke Castle.

Hod Hill’s Iron Age hillfort and Claudian invasion fort was the focus for the second day. Here the party were treated to an unexpected demonstration of armour and other military equipment by John Smith, helped by Jonathan Chalmers, and a discussion of Roman artillery bombardment.

At the Cerne Abbas Giant (chalk hill figure), Bryn Walters discussed recent research on its origins and at the reconstruction of a Romano-British farmstead at Upton Heritage Park, Poole, aspects of domestic and agrarian economy were demonstrated. It was generally agreed that one of the finest pieces of Roman art exhibited in Britain must be the fragmentary wall-painting of two figures from a mythological scene, from the Tarrant Hinton villa, and on display in the Priest House Museum, Wimborne Minster. The tour ended with a half-day visit to the Rockbourne Roman villa, near Fordingbridge, Hampshire.

A self-drive visit to the Roman civitas capital of Calleva Atrebatum, Silchester, Hampshire took place on August 10th. Before a tour of the walls and amphitheatre led by Grahame Sofe, the acting director Amanda Clarke stood in for Professor Fulford and gave an extensive commentary on the current re-excavation of Insula IX for the County Council and English Heritage by Reading University. This part of the site, like the whole area
within the walls, was originally examined between 1890 and 1909, and the current work showed clearly the limited techniques employed by the Victorian excavators. This ongoing research will advance understanding of the plan of the most completely excavated Roman town in Europe, and reveal for the first time a scheme for its chronological development.

Organised by John Hyams and led by conservation officer Euan Afflick, the afternoon was spent in viewing the new Silchester galleries at The Museum of Reading and examining the mosaics still in storage awaiting the re-display they so obviously deserve.

---

**SWINDON VILLA – AN UPDATE**

Work on the huge villa discovered last year in the North Swindon Expansion Area has been ‘on hold’ since Swindon became a Unitary Authority last April (see ARA III p. 12). Negotiations with Wiltshire County Council have enabled Swindon Borough to contract the services of the County Archaeologist, Roy Canham, to advise on archaeological matters in the Swindon area. One of the first tasks undertaken was a renewed investigation of the remarkable villa site on Blunsdon Ridge.

Bryn Walters and Bernard Phillips are to excavate evaluation trenches on key areas of the buildings. This work is to be implemented as soon as possible to enable Swindon Corporation and English Heritage to assess the quality of the site. Team members from the DART project in the Og Valley (see pages 4 and 5 this issue) and local ARA members, have been called in to assist. It is planned to examine buildings on three of the five terraces forming the south facing site. One in the lower courtyard on the second terrace, another on the third terrace and two trenches are planned in the area of the suspected main house on the fourth terrace. It is also intended that a complete land contour survey of the field should be undertaken by Mark Corney.
As with last autumn's special offer on the Chariot race beakers, Taylor and Hill glass makers are generously donating £2.00 to ARA funds for every beaker sold. This season's offer is for three new designs. These beautiful lightweight beakers are based on original pieces in museums in Britain and on the continent. They are made entirely by hand at all stages of manufacture and blown into three piece moulds. When illuminated as shown in our illustration they make a most attractive and at the same time informative ornament. At this time of the year they would make an excellent and unusual gift for Christmas, as well as providing the Association with additional revenue. Usually selling between £12.00 - £15.00 they are offered to Association members for only £10.00 (incl. p and p).

Send your orders, with cheque for £10.00 for each item required (inclusive of post and packing) to:
Taylor and Hill, Glassmakers, Unit 11, Project Workshops, Lains Farm, Querley, Andover, Hampshire, SP11 8PX.
Orders will be dispatched directly from the workshop.

---

As part of our awareness of Britain’s maritime links we have arranged a special discount offer on Tim Strickland’s popular edition of the research and interpretation of Wilderspool on the Mersey.

Wilderspool at the southern end of Warrington, was, in the Roman period, an estuarine river port, with direct overland connection with Deva (Chester), Cocciium (Wigan) and Mamucium (Manchester).

The 63-page volume is packed with colour illustrations, superb photographs of artefacts recovered from the excavations and vivid reconstruction paintings by Graham Sumner, Clive Constable and Gordon Lawrence. Tim Strickland’s flowing style makes the text an easily understood narrative for all age groups and the book is an absolute must for teachers, particularly in schools located where there is a Roman past, especially those near a river or the sea.

First published in 1995 at £9.00 this 240 x 250 mm square format paperback is offered to ARA members at £4.95 (plus £0.75p post paid post and packaging). Please send your order, with name, address and cheque for £5.70 per book, to:
Wilderspool Special Offer, Bookland and Co. Ltd., 12 Bridge Street, CHESTER, CH1 1NQ.
Available whilst stocks last. All cheques payable to ‘Bookland and Co. Ltd.’