

## **YORK'S BURIED PAST: 2**

### **The prehistory of York and the coming of Rome (30 January and 2 February)**

Tonight I want to give you an outline of York's prehistory from earliest times up to the late 1st century AD when one of the most important events in the city's history took place, namely the arrival of the Roman army. I will then look at how the Romans went about establishing a legionary fortress here and making *Eburacum* a permanent military base for northern England.

Although *Homo sapiens* may have first arrived in England about 30,000 years ago, there is no trace of them in immediate York area until after the last Ice Age in what we call the Mesolithic (between c 9000 and 4000 BC). Even for this long period we are talking about just a few stray finds of flint flakes. Research on palaeoenvironment of the Vale of York suggest to us that following the Ice Age climate improved and a wooded landscape developed. Human communities within this landscape survived as nomadic hunter-gatherers.

#### *Moraine map*

The first human activity to be recognised archaeologically to any great extent in the York area belongs to the Neolithic – after c 4000 BC. This is largely represented by stray finds of stone axes, mostly on and around the moraine which suggests its use as a land route across the low lying and then marshy Vale of York. There are no field monuments. In addition to stray finds there is a well-known hoard of stone axes from Holgate, but it is now thought most likely to be a 19th century collector's hoard. There is a good collection of stone axes on the Yorkshire Museum web site.

#### *Location Heslington East*

Last week I was talking about the history of antiquarian and archaeological research in York and During the 1970s and 1980s the old problems of access to sites and funding did not go away. In 1990 an important change to government policy was Planning Policy Guidance Note 16 ('PPG16') which made archaeology a material condition in the planning process.

One result has been that since 1990 archaeological investigations have taken place in areas of the city outside the historic core, often previously blank as far as early history is concerned. From 1996 the City's power to require archaeology in advance of development has extended to the Greater York area. Extending the reach of archaeology has allowed us to investigate the prehistory of York for the first time – nowhere more than at Heslington East campus.

This is a large area c. 100ha about 3km east of the city centre on the south facing slope of the moraine and on at least one spring line arising at the junction of superficial sand and gravel deposits and underlying clay. It is, in other words, an ideal location for prehistoric and Roman agriculture and settlement.

#### *Aerial view*

I was involved with the project from the beginning. When I was in charge of the field team at YAT we undertook the initial evaluation process which involved fieldwalking, geophysical survey and trial trenching which allowed us to identify areas of archaeological interest – primarily of the Iron Age and Roman period rather than anything earlier. Following evaluation I left YAT and was then appointed consultant for the project by the university.

Large areas of excavation were opened up and it soon became clear that there was a more complex picture of human presence than anticipated which went back to the Neolithic.

### *Wetlands*

At a late stage in the project work took place at the east end of the site (now the sports village) which is still low-lying and waterlogged. We found what appeared to be remains of scrubby vegetation which gave us the earliest C14 date of c 2400 BC for the whole site. In the Late Neolithic / Early Bronze Age this must have been a wetland, inundated on occasions, but a resource for humans with fish, birds, reeds etc.

Elsewhere on the site there were a few pieces of hand axe, a hint of the woodland clearance which would continue into the Bronze Age after c. 2000 BC. The view shows sandy material below the modern topsoil and we understand this is probably material which eroded down the hill slope as a result of woodland clearance for early agriculture.

### *Excavation Area Aerial*

We now look at the first stage of the excavation at the west end of the site with two large areas cleared.

### *Palaeochannel and well*

Running down the centre of the site was a wide, naturally formed palaeochannel caused by flow of water down the slope of the moraine, probably from a spring on the top. A series of deposits can be seen in its infilling. They included at the base a layer full of woody material – possibly arising from woodland clearance. A C14 date of c. 1000 BC takes us to the Bronze Age (2400 – 750BC). Later light-coloured deposits are sandy material washing off the slope probably as a result of early arable agriculture. Elsewhere on the site, taking advantage of the springs, there were several small timber-lined wells, also Bronze Age. In picture the well has a C14 date of c. 1600 BC

### *Hammer and urn*

Characteristic Bronze Age artefacts from the site included part of a stone hammer and fragments of a cremation urn from a burial.

### *Field system*

After a wet and cold period Britain is thought to have become warmer and drier in the middle of the 1st millennium - perhaps creating a climate not unlike today - which encouraged expansion of agriculture and a rise of population. A related phenomenon was the emergence of enclosed landscapes usually known as 'field systems', i.e. they appear in plan as a lattice of small fields and trackways defined by ditches - or by stoney banks in upland areas. These field systems occur all over England on land suitable for agriculture from the Late Bronze Age onwards. At Heslington East we found a very extensive lattice pattern of fields. In amongst the fields there had been roundhouses, the typical multi-purpose building of the prehistoric and Roman periods.

### *Elite enclosure*

In one location there was a possible elite residence – a ditched enclosure with a large central round house and two subsidiary roundhouses.

### *Naburn and Rawcliffe*

These field systems and associated roundhouses are also known elsewhere in the immediate York area, although not quite on same scale. For example, at Naburn to the south on a sand island – here revealed by aerial photography, later excavated by Bradford University. Another example, surprisingly on clay, lay at Rawcliffe Moor to the north of the city, the view shows how roundhouses appear in excavation. So our impression largely from aerial photography, but increasingly from excavation as well, is that York was a well populated area in the Late Iron Age when the Roman army arrived.

### The Late Iron Age

What was life like in York in the 1st century AD just before the Romans came? What can we say about the economy and society? This is too big a subject for much discussion tonight but see my *Roman Yorkshire* book. First of all, in both respects the communities in our area were rather less sophisticated / developed than those in the south –east of England in terms of social organisation, technology, economic organisation.

### *Cattle*

Everywhere in pre-Roman Britain the vast majority of people engaged in subsistence agriculture based on arable and stock rearing, a regime little changed since the Bronze Age and one which would change little during the Roman period. The principal crops were spelt wheat and barley. The animals, cattle, sheep/goat and pig, were very different from those we are familiar with, being small gracile creatures which in the case of cattle and sheep fulfilled many different purposes.

The Iron Age economy also involved manufacturing e.g. of pottery, largely hand-made cooking pots in our area. Iron Age people were skilled metalworkers in iron making weapons and tools, and in non-ferrous metals. Evidence for other materials less good because they do survive in the ground.

As far as social organisation is concerned, it is usually thought that this was based on small scattered communities held together by kinship ties. In the north, amongst the Brigantes or Parisi, there is little evidence for a complex hierarchy with powerful overlords, ruling dynasts, as in the south-east – ‘kings’ as they describe themselves on their coins. We have no Iron Age coinage. In the north it is only at Stanwick near Richmond that there is anywhere approaching the sort of *oppidum* – to use Caesar’s word – or power centre known at Colchester or St Albans. Stanwick was, perhaps, the base of a native ruler such as Cartimandua who was a client queen.

Locally there is what was probably a bank and ditch which, although over much shorter distance than the Stanwick earthworks, probably had a similar character: this what is now known as the Green Dykes, the name can be found in the modern street. Thought to be Iron Age, the dykes lay across the moraine on the east side of the city and were probably intended to define a boundary or control movement along the moraine.

## ROMAN BRITAIN

### *Map of Roman Britain*

The Emperor Claudius conquered Britain in AD 43 with an army of 40,000 men. By about AD 60 most of England south of the Humber / Mersey line and Wales had been absorbed into the Roman Empire as the province of *Britannia*. In the reign of Nero progress was held up by the revolt of Boudicca – another native queen - who led a native army which burnt Colchester and London.

The Romans resumed their interest in further conquest in Britain in AD 69 with the accession of Emperor Vespasian. He was a military commander in the east – the first emperor not made in Rome - and was looking for an easy conquest to bolster his legitimacy. Britain was the obvious place (he had been a general in Britain) and so the Ninth Legion was marched north from Lincoln probably in 71 to York. There can be little doubt that Rome always intended to take the whole of Britain, but the pretext for invasion, according to Tacitus, was a quarrel in the ruling elite of the Brigantes between Cartimandua and her consort Venutius. The Romans, we are told, felt they had to move in to rescue their client.

### *Vespasian and conquest map*

### *Rufinus and map*

There may have been a Roman base at York in the late 60s but probably in 71 the Ninth legion, commanded by Petilius Cerialis, established a fortress on slightly elevated land on the north-east bank of the River Ouse with the Foss on its south-east side. The fortress covers c 25ha and has the standard playing-card shaped plan – in our case with the corners at the cardinal points.

Before looking at the fortress in more detail we should consider the character of the Roman army and how it was organised because this is directly related to the fortress plan which we see on the ground.

In the late 1st century, at the time of the invasion of the north, the Roman army consisted of two types of soldiers: legionaries and auxiliaries.

### *Roman soldiers*

A Roman legion consisted, for the most part, of c. 5000 infantry who were based in fortresses. The basic unit was the 8 men who shared a pair of barrack rooms or a tent on campaign – the *contubernium*. 10 of these made a century, commanded by a centurion. Six centuries made a cohort of 480 men and there were 10 in a legion.

A legion was commanded by a man – the legate - of very high social status who would usually be in his 30s and on his way to more senior posts – even emperor. We know the names of some of the legates who served at York, including Petilius Cerialis, and also Carastanius Fronto sent to York in 73-4 whose CV survives on a monument at Antioch. He was married to a daughter or sister of a man whose father had met St Paul in Cyprus as told in the Acts of the Apostles.

Auxiliary regiments could be 500 or 1000 men and either infantry or mounted; they were based in forts. Socially, auxiliaries were distinct because the legionaries were Roman citizens whereas, except for their officers, the auxiliaries were not. They were recruited in the conquered provinces, but when discharged they were given citizenship.

### *Roman citizens*

You can tell a Roman citizen by the name. In the late 1st and 2nd century men had three names – e.g. Lucius Baebius Crescens – *praenomen*, *nomen* / family name and *cognomen*, familiar name. In due course the *praenomen* died out. Women always had two names e.g. Julia Velva. Non-citizens had one name, sometimes appearing on inscriptions with a patronymic.

### *Vindolanda tablet with address*

The sources of evidence for Roman York are primarily archaeological, but there is a little documentary evidence and some epigraphy – i.e. inscriptions, largely on stone.

Of the 30 or so written references to York, the earliest occurs on one of the 'writing tablets' from the fort at Vindolanda in the form *Eburacum*, although *Eboracum* is rather more common. The Vindolanda tablet dates to c. 100. The meaning of the Roman name is uncertain, but one suggestion is 'the place of the yew trees', perhaps an adaptation of a native name.

The archaeology of Roman York includes parts of the fortress wall still standing above ground, but mostly it lies buried below ground level.

### *Roman fortress plan*

We do not know a lot in detail of the Roman fortress at York because of the later city lying on top of it. Opportunities for excavation are usually small scale – as we see at Davygate, a barrack wall in a lift shaft. However, fortresses are fairly standardised and so once a little of the plan is apparent then, by analogy with others, it is possible to reconstruct the whole thing at least in outline. Another thing we know is that fortresses were carefully surveyed using units of the Roman foot – *pes monetalis* (0.296m) – so by carefully piecing the archaeological evidence together I have generated the plan of the fortress as it was originally set out.

### *Headquarters basilica column and sketch reconstruction*

Buildings in the York fortress that we know about include the legionary headquarters in the centre of the site. As seen last week, in the excavations at York Minster part of the main hall or basilica was found. One of the aisle columns was found collapsed where it had fallen, probably in the 9th century. The base of another remains in situ in the undercroft.

### *Baths*

The site of the legionary baths is known, although not its exact extent. Remember Roman bathing was not just a question of getting clean but a whole experience beginning with working up a sweat with exercise through to a massage with perfumed oils. A bath house would in present parlance be a 'leisure centre'. An apse from a hot room excavated in 1930-1 can still be seen under the Roman Bath pub. Also still extant is the great sewer found in 1972 under Church Street. A length of about 50m was found with a number of side channels. This took away waste water and latrine material, although where to is not certain, presumably the river.

### *Finds in sewer*

When found the sewer was full of silt and in this were some artefacts, presumably dropped by the bathers. Also found were preserved seeds which suggest where the water originally came from, probably limestone country, either to the SW or NE. The Romans used gravity to move water around and so an aqueduct must have been built over some distance.

Other buildings seem to have been in timber in the early fortress.

### *First defences*

Around the perimeter of the fortress ran the defences and we know quite a lot about them from excavations by Miller in the 1920s and since then. The earliest defences consisted of a fairly standard ditch and bank reinforced with turf and timber. There were timber interval towers and presumably timber gates, although none has been seen.

### *Multangular Tower and St Leonard's Hospital excavations*

Reconstruction of the defences in stone appears to have begun within about 30 years or so of the fortress foundation. The context for this is the conclusion of a period of continual reorganisation of military dispositions in Britain. The governor Agricola (78 – 84) had taken the Roman army to the north-east of Scotland. However, after Emperor Domitian had withdrawn one of the four Roman legions from Britain in 87, it became clear that the whole island could not be garrisoned and by c. 105 the frontier line lay between the Rivers Tyne and Solway, the line which would become that of Hadrian's Wall. At this point it was probably decided to make York a permanent legionary base.

The sequence of defences has been understood for some time, but dating the various elements in that sequence has proved problematic.

I think we can now say, contrary to previous ideas, that the reconstruction in stone began on the SW front with a very ambitious piece of military architecture with great multangular towers projecting from the W and S corners and interval towers in between. This work was previously thought to be late Roman based on the style of the structures compared to others of demonstrably late date elsewhere. However, excavations within the tower during the St Leonards training dig (2003-5) behind the library gave us a new and different story. Two timber piles – made of alder - were recovered from the foundations of the tower and C14 dated to c 100 - 120.

### *SW front*

Work in the same style has been recorded all along the SW front and in a few other parts of the circuit although reconstruction of the defences in stone was not completed in this episode. Anyhow we can now say that the defences of York, like those of the fortresses at Chester and Caerleon, was being reconstructed in the early 2nd century; what is different is the style of architecture.

### *East corner*

Meanwhile at the rear of the fortress a slightly different approach was taken to altering the defences with introduction of stone towers to the earlier earthen rampart but no stone wall

linking them as yet. This may have been the work of Legion IX as well and construction of a wall was suspended because the legion left York sometime before 120.

### *Leg IX inscription*

The fortress gates may have been rebuilt in stone in the early 2nd century. The SE gate was perhaps commemorated with an inscribed tablet found in King's Square. Dated 107-8, the reign of the Emperor Trajan, it is the last dated inscription of Legion IX which was once thought to disappear from history thereafter giving rise to all sorts of speculation. However some part seems to have gone to Nijmegen in the Netherlands.

### *Road network*

What were the Roman legionaries doing in York when they were not engaged in fighting or construction of buildings? One important task was the laying out and construction of roads. York was the centre of network of main roads extending all over the north of England most of which, we think, were set out, if not constructed, soon after the conquest with the initial intention of moving the army around quickly.

### *Wellington Row*

We have a good understanding of the courses of the Roman roads around York in outline if not always in detail, the evidence usually comes from chance sightings supplemented by topographical study. However, when we are able to do archaeological excavation of these roads, we find they are often complex structures with a varied history. For example, we saw this at Wellington Row in 1989 where we encountered the main Roman road from the south-west as it approached the river crossing.

### *Road sections*

The first surface – 10m wide - was fairly modest, composed of hard-packed gravel layers, cambered for drainage. Over this surface was a thick silt layer which we believe was the result of a flood which was probably late 1st century – dated by archaeomagnetism. This is the only occasion when we have found a Roman flood deposit. It was suggested to me that it was caused by climatic perturbation following the eruption of Vesuvius in AD79. After the flood the road was reconstructed and raised by c 1m with an agger of large cobbles and layers of fine gravel over them– this would have lessened the risk of floods. The later history of the road will come next week.

### *Warehouse and spelt*

The soldiers would also have given their attention to supplying themselves with food and other commodities. There were basically **three options** one was to source things locally, second was to bring in from elsewhere and thirdly to produce it themselves.

As far as food was concerned, vast quantities for men and beasts were required. It has been calculated that a soldier needed a minimum of 0.9kg of grain per day for bread, porridge etc and so a cohort of 480 men needed 432kg per day. In addition, for each horse in a cavalry unit 1.5kg dry weight of barley was needed per day and in winter also 4.5kg of hay. Clearly local sourcing would be preferable and settlements like that Heslington East would presumably have been

called upon. However, we do not know how the army went about it, but whatever deal was done seems not to have involved money as there no early Roman coins from rural sites around York.

Evidence from the site of WH Smiths in Coney Street suggests that some of the grain in the early years of the York fortress was brought from further afield. On the site were found the remains of a timber grain warehouse – like the reconstructed building in the image - which had originally stood on the bank of the River Ouse just outside the fortress. In the course of a fire a consignment of grain had been burnt which had the effect of preserving it in charred form. The principal component was spelt wheat (c.61%), followed by barley (c.25%) and rye. The weed seeds were critical to understanding source because they included larkspur, yellow vetchling and hairy tare, not thought to have grown locally, but may indicate import either from southern England or even the Continent.

### *Ebor Ware*

As far as manufactured goods are concerned, we know most about pottery. The locals only made simple cooking pottery, but sophisticated Roman cooking and dining customs demanded a great range of vessels – bowls, jars, flagons, storage jars. As at other fortresses in Britain, the legion had potters on the strength who made pottery and tiles. The kilns seem to have been immediately east of the fortress where kiln waste and dumps of waste pots have been found. This was an area upwind of the fortress and close to the River Foss where there was probably suitable clay.

### *Hadrian*

So that is a quick review of the evidence for the early years of the legionary fortress and the occupations of its men. I have now reached the reign of Hadrian (117-38) who came to Britain in 120 as part of a tour of the empire to supervise strengthening of its defences. He recognised that the great era of Roman imperial expansion was now over and resources did not permit acquisition of new territory. In Britain Hadrian initiated the construction of the frontier works which bear his name. He may or may not have visited York on his way north, but we do know that he brought a new garrison for York the Sixth Legion Victrix. Initially most of the men were stationed on the frontier before they returned in force in the 160s. What they did when they returned is a subject for next week.

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