

## EARTHWATCH INSTITUTE FIELD REPORT

**Project Title:** Roman Fort on Tyne

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**Affiliation:** Archaeology Tyne & Wear Museums

**Research Site:** Arbeia Roman Fort and Museum, South Shields, northeast England

**Local Management Status of Research Site:** Hadrian's Wall World Heritage Site

### **Key Research Objectives:**

- The discovery of, and information about, the earliest Roman settlement at South Shields.
- Elucidation of the plan of the first stone Roman fort to be built at South Shields in c. AD 160.
- To continue to collect data to address the questions of the nature of the transition between the Iron Age and Roman periods.
- Enhancing knowledge of the system of supply to the fort and port of South Shields.
- The recovery of the complete plan of the accommodation within the third century supply-base.

**Date Report Completed:** April 2005

### **Data Collection and Results:**

#### 1. The *via praetoria* of the third-century fort

At the end of the 2004 season an extensive spread of construction debris, associated with the building of the extended fort some time in the early 3<sup>rd</sup> century AD (c. 210 – 215), was reached. This appeared to lie upon substantial deposits of wind-blown sand, known from previous research to form the existing ground surface before the arrival of the Romans to the site.

The extension to the fort came at a time when the original area of the 2<sup>nd</sup> century stone fort was to become the site of a new supply base, possibly planned for the Scottish campaigns of the emperor Septimius Severus. The extension was to house the auxiliary cohort who had been displaced from their original part of the fort, which became filled with granaries (Fig. 1). As part of this redevelopment the new southeast gate became the main entrance to the auxiliary fort element of the site, and therefore a new *via praetoria* was constructed leading, originally, to the centre of the original stone fort, where the *principia* had been remodelled to face southeast. This new street was found to have roughly hewn stone blocks laid along each side to define its course (Fig. 2), resulting in a street approximately 3.20m wide comprised of small to medium sized stone fragments.

Within the street line were two further stone alignments (not kerbs as such) running parallel with the outer kerbs, between 0.70 -0.80m in on each side (Fig. 2). The function of these is unclear and they may just represent a constructional feature.

Further pebble metalling was laid along the northeastern side of the street, between the kerb and a barrack building (III) forming part of the garrison accommodation (Fig. 2). A drain also ran parallel with the exterior of this building, before turning to cross the street. Where this occurred the drain was more substantially constructed and had large thick slabs of hard magnesian limestone as a cover, presumably to protect against heavy wear from the traffic using the street.

In the period c. AD 215 – 225/35 the *via praetoria* appears to have been widened, with further layers of metalling added along its northeastern side, whilst along the southwestern side a deposit of green sandstone chippings was laid. The width of the street was now extended to approximately 8.50m. This was associated with the construction of a new *principia* within the extension (Fig. 3), hence the *via praetoria* of this phase was much shorter. The metalling used within the kerb lines (Fig. 4) appeared to be durable enough to survive into this period and throughout the remainder of the 3<sup>rd</sup> century (with perhaps a little repair or patching here and there). It went on to serve as a sub-base for the later surfaces laid during the 4<sup>th</sup> century.

## 2. The *via praetoria* of the fourth-century fort

Major changes occur at the fort from about AD 300 onwards (Fig. 5), most of which are associated with the arrival of the *numerus barcariorum Tigrisiensium*, a specialist maritime unit transferred from the Tigris area - modern Iraq - to patrol the shoals of the Tyne and repel attacks from the sea. The southernmost row of granaries were converted into barracks to accommodate this new unit, while in the southeast corner of the fort an elaborate courtyard style house (Fig. 6) was constructed to accommodate the new commanding officer (now reconstructed). The 3<sup>rd</sup> century *principia* was demolished and a new one re-established on the site of the original in the centre of the fort. Thus the *via praetoria* was again extended.

A curving stone-lined drain was dug across the southeast end of the street, to drain excess water from the *praefurnium* of the bath suite within the new CO's house. Immediately after this a new surface was added to the existing street consisting of small water worn pebbles.

Later, during the first half of the 4<sup>th</sup> century, more changes occurred within the CO's house, particularly to the bath suite which had three apses added various rooms. One apse, attached to the *caldarium*, projected out into the *via praetoria*, and a drain from this was dug diagonally across the street. At the same time a resurfacing across the whole street occurred using small angular thin fragments of red sandstone.

Later still, further changes occurred, including the construction of an as yet unidentified building to the southwest of (and partially overlying) the street (see below). The CO's house had its bath suite reduced in size, though it still functioned. The drain from the *caldarium* had to be re-routed to avoid the new building and the existing drain backfilled. The street itself received an elaborate re-surfacing consisting of large flagstones of yellow dolorite limestone (Fig. 7), which was laid right up to entrance of the CO's house.

## 3. The possible late-Roman building

Further investigation into the partially exposed remains of a possible late-Roman building continued in the hope of establishing its form and function. It was established that the building was constructed during the mid-fourth century at about the same time as the *via praetoria* received its elaborate paving of yellow limestone flags.

Examination of the southeast edge of the area, previously exposed during work on the fort defences carried out in the late 1970s, revealed that the southwestern wall of the building

had also been robbed away some time in antiquity. A very late- or post-Roman intrusion was also noted, though what within the building had been robbed away was unclear. What was established was the internal width of the building, being approximately 5.0m.

Analysis of the records from the 1970s excavation suggests that the foundation, as revealed in the current area, may have continued right up to the northwestern wall of the southwestern guardchamber of the southeast gate. If this was the case then the length of the building can be postulated as being 18.0m (though it is unclear how the northwestern end of the building was finished off, as there was a suggestion that this end of it could have been apsidal).

No closer datable material was recovered during the examination and excavation of parts of the foundation of the building.

#### 4. The northern *via praetoria*

Earthwatch volunteers from Team VI were able to participate in the excavation of the remaining portion of the *via praetoria* street that was not exposed or examined during 2002-3.

Team VI exposed and cleaned the remains of the street immediately southeast of the entrance to the fourth-century *principia*. Also, the southeast walls of the 2<sup>nd</sup> century cavalry barracks B7 and B9 were recorded and excavated.

##### *Finds included:*

- a) A small number of bronze coins, mostly of 3<sup>rd</sup> century date
- b) A large bronze coin (found by an Earthwatch volunteer on Team IV), of Trajanic date (AD 98-117), that featured a scene of the Emperor Trajan accepting salutations from the army on the commencement of his ninth year of Emperorship (Fig. 8). The coin was found within material used to form a sub-base for the 3<sup>rd</sup> century *via praetoria*, therefore the coin would have been about 100 years old when it was either lost or deliberately placed there for good fortune. However, its near pristine condition suggested that it had not been in circulation for this amount of time but had perhaps instead been a commemorative souvenir of an individual soldier. Indeed, the emperor Trajan was a famous warrior and a particular favourite of the Roman army and his death was still celebrated hundreds of years later. Perhaps, the soldier concerned may have had a relative who was at the actual event portrayed on the coin.
- c) Two bone needles
- d) A number of broken pieces of quern stones (milling stones for making flour), reused within both the paved surface overlying the foundation and within the foundation itself
- e) Various fragments of metal, including iron, lead and copper alloy, some items identifiable as being nails
- f) A silvered earring
- g) Fragments of glass vessels

Substantial progress has been made during 2004 towards our objective of the complete excavation and recording of the Roman levels of the *via praetorian*.

The 2004 season saw a continuation of work within the area newly opened up at the beginning of the 2003 season: an area comprising some 190 square metres of the fort site

(Fig. 6). This area adjoined the southwest extent of the former research area, examined between 1984 and 1999 and now the site of two reconstructed buildings. The purpose of this was to allow further investigation of a street (the *via praetoria*) leading from the south gate to the headquarters building located in the centre of the fort. A portion of the same street had been previously investigated by EARTWATCH teams in 2002 (see below), and the current area of research is targeting the remainder.

Work in 2002 had revealed that the archaeological remains of the northern portion of this street belonged to a later phase of the site, the 4<sup>th</sup> century AD. Fig.(5) shows the plan of the fort in this phase, from about AD 300 onwards, where the southern most row of granaries were converted into barrack accommodation for a new unit that had arrived at the fort at that time, the *numerus barcariorum Tigrisiensium*, a specialist maritime unit transferred from the Tigris area – modern Iraq – to patrol the shoals of the Tyne and repel attacks from the sea. Other changes occurred, including the construction of an elaborate courtyard style house in the southeastern corner of the fort to accommodate the commanding officer (now reconstructed). The remains of this portion of the street constituted the grandest piece of Roman road construction to be found within the site.

Work in 2003 on the remaining, southern, portion of the street showed that the morphology of its construction was very different to the northern, in that the earlier streets had not been terraced away by the 4<sup>th</sup> century construction. There had been a relaying of the street surface in that period, but without the elaborate kerb lines, suggesting that this southern portion of the street did not have the special, possibly ceremonial, role of the northern.

#### **Significance/Benefits of Research:**

- *Local*

The 2004 work adds considerably to the ever-growing data set of the Hadrian's Wall corridor.

- *National*

The work adds greatly to our understanding of Roman Britain as a whole.

- *International*

The work in 2004 further advances our understanding of this internationally unique type-site (a stone military supply base).

As well as achieving research objectives, the work carried out in 2004 was part of a long-term project to conserve these internationally important Roman remains in a sustainable way for the foreseeable future.

#### **Dissemination of Results:**

Work with Earthwatch teams since 1994 is summarised in:

- N. Hodgson, 'The Origins and Development of the Roman military supply-base at South Shields: an interim report on the results of the excavations in the Eastern Quadrant and Central Area 1999-2000', in *Arbeia Journal* 6-7 for 1997-8 (2001), 25-36.
- Paul Bidwell, Hadrian's Wall 1989-99: a summary of recent excavations and research (Carlisle 1999). (This contains quite detailed interim reports on recent work at South Shields and Wallsend).

An interim report on the cavalry barracks excavated in 2000-2001 appeared in:

- N. Hodgson, "Where did they put the horses?" revisited: the recent discovery of cavalry barracks in the Roman forts at Wallsend and South Shields on Hadrian's Wall' in Roman Frontier Studies 2000 (Proceedings of the XVIII International Congress of Roman Frontier Studies) (Oxford; British Archaeological Reports, 2002).

Whilst a fuller discussion of auxiliary barracks, based heavily upon evidence recovered over years of research work at South Shields, has recently appeared in:

- N. Hodgson and P. T. Bidwell, 'Auxiliary Barracks in a New Light: Recent Discoveries on Hadrian's Wall' in *Britannia* xxxv (2004).

Interim reports on the work at South Shields have also appeared annually in the journal Britannia since 1984.

See also:

- A Croom, 'Spectacular find of a Roman iron ring-mail suit at Arbeia Roman Fort', in Minerva vol. 9 no. 2 (1998) 7.

Finally, the excavation of the Iron Age and earlier prehistoric remains underlying part of the Roman fort which was tackled by EARTHWATCH teams in 1993-4 has been definitively published:

- N. Hodgson, G.C. Stobbs and M. van der Veen, 'An Iron Age settlement and remains of earlier prehistoric date beneath South Shields Roman Fort, Tyne & Wear', in The Archaeological Journal 158 (2002).

All of the above are probably difficult to obtain outside Britain, but if Earthwatch members signed up for the project contact us we will do our best to sent photocopies of a t least some of these publications. The Arbeia Journal is published by the Arbeia Society: for more information about the Society or the journal contact Elizabeth Elliott at Arbeia.

A new corporate plan for the site for 2005-10 is in preparation, replacing the existing plan.

The site is considered within English Heritage's Management Plan for Hadrian's Wall 2002-2007.

Lectures on the results of the research project have been presented internationally to both academic and popular audiences ranging from the prestigious International Congress of Frontier Studies (at meeting in Romania, Jordan and Hungary), to the National Roman Archaeology Conference in Britain, the Society of Antiquaries of Newcastle, and to the Massachusetts Classical Association. The Arbeia Society holds an annual conference in which specialists and members of the public participate, and at least one paper is given based upon results from the site. Numerous presentations are also given throughout the year to interested local groups.

Results of recent work also appear in articles on South Shields in Current Archaeology 133 (March 1993) and on Wallsend and South Shields in Current Archaeology 164 (August 1999).

The background to research on site is given in chapters 1 and 2 of the most recent monograph excavation report:

- Paul Bidwell and Stephen Speak, Excavations at South Shields Roman Fort, volume I (Society of Antiquaries of Newcastle-upon-Tyne Monograph 4) (Newcastle-upon-Tyne 1994).