Oxfordshire

construction could be found on record and despite being looked at by an authority on water supply its ultimate use remained a mystery.

Much has been learned by the group in the past year; not least that money availability, expertise in given specific areas, and access to sophisticated technical equipment can hamper the attempts of a well organised amateur group to thoroughly achieve its objectives.

UNIVERSITIES OF EDINBURGH, LEICESTER AND OXFORD

Wendlebury (Alchester fortress): the 2003 season
(SP 570 203)

Eberhard Sauer

Confirmation of the main fortress-annexe theory

The main aim of the 2003 season had been to prove or disprove the theory that the western military compound, built in autumn AD 44, was an annexe to an (earlier?) main fortress underneath the later town. Three separate indications confirmed the correctness of this hypothesis. They are discussed in the first three sections.

Indication 1: ditches of the western compound do not continue in the area of the later town (Trenches 42 and 41)

Excavations in Trench 42 established that the southern ditches of the western compound do not continue underneath the later town. Furthermore, there is a strong probability that sections of a ditch of similar dimensions encountered in Trenches 32 and 42 are part of the same early Roman drainage ditch. Pottery from its bottom fill in Trench 32 suggests that it dates to the military or early civilian period in the first century (Nick Cooper, pers. commun; Berrington 2003). That this ditch would be parallel to other Roman north-south running features adds strength to the attribution of both segments to the same ditch. If so, level values prove that the water flowed, as one would expect, from the north to the south, following the natural gradient. Since it would make little sense to dig a drainage ditch across much deeper fortress ditches, it indicates that no fortress ditches crossed the line between Trenches 32 and 42.

This suggests that our theory that the western compound with its tree-ring-dated gate of AD 44 formed an annexe to the main fortress underneath the town is correct. While we established that there is no military gate underneath the west gate of the town, it seems likely that it is slightly further to the west in the area of the gap in the town wall ditch. The fact that the annexe ditches do not continue leaves little doubt that there was a main fortress whose western defences roughly coincide with those of the later town. It is unimaginable that such a fortress was not protected by ditches, rampart and gates. The fact that there were military-period west-east-running gullies in Trench 41 proves decisively that the west-east road also in this section of the town goes back to the mid 1st century. Three or four gullies appear to belong to this phase while a fifth stone-lined gully is likely to be later. The outer edges of the southern and northern drainage gullies are 6m apart (as in Trench 20N). The absence of any traces of early timber buildings from Trench 41, encountered the year before just slightly further to the east in Trench 32, suggests that we have reached the intervalum, the unoccupied space just inside the defences. Two possibilities emerge:

1. the 14.5m wide town ditch explored in Trench 28 in 2001 incorporated not only the ditches (normally some nine metres wide including the space between them) of the earlier main fortress, but also the area of the earlier rampart (perhaps as a convenient source of gravel if still existent in the late second century).

2. The town ditch incorporates the inner ditch and the rampart of the main fortress. The outer ditch might have been formed by a c 3m wide ditch, 4m outside the town wall ditch, equally explored in Trench 28 in 2001. The function of this sterile ditch had never been clarified, but because of its U-shaped profile and the irregular uneven base it has previously been considered not to be military. With hindsight the question arises whether the uneven base could have been the result of the bottom of the ditch being deliberately filled with sterile gravel.

Option 1 seems more likely than 2 because of what would be an unusually wide gap (of 4m) between the two ditches in the latter case. The outer ditch is likely to be associated with the town wall. Further fieldwork is required for ultimate clarification and it still seems possible that gate timbers survive which could clarify whether the main fortress dates to AD 43 or AD 44.

Indication 2: the water supply (Trench 41)

Five gullies were found in Trench 41 (as stated above). The middle gully was comparable in section to the flat-bottomed gully with slanting sides thought to be originally timber-lined and interpreted as a water supply gully in Trench 20N (Sauer 2001: 15). While the base in Trench 20N had been encountered at 62.6m above sea level, it was at 62.775m at the west (east-facing) profile in Trench 41 and at 62.8m at the east (west-facing) profile. With a difference of no less than 200mm from east to west there is no longer any doubt that water was channelled from east to west, ie, presumably, from the earlier main fortress to the later annexe. This also explains why the gullies in Trenches 40, 29 and 26 (whose bottom reached a greater depth than the water supply gully in both, Trench 41 and 20N), which predates the earliest military buildings in this area, is curving from the southeast to the northwest. This is a further argument for the correctness of the theory that there was an earlier fortress (of AD 43?) with an annexe of AD 44.

Indication 3: a double granary in the main fortress (Trenches 49 and 48)

We established that the military timber granary explored in 2001 and 2002 is part of a double granary, the western building measuring 13.7m by at least 16.9m and its eastern counterpart probably being of similar size. The north-south extent of the pair of buildings depends on how much, if anything, has been destroyed by the later town ditch or still awaits discovery on the other side of the Gagle Brook. There
Alchester in the prehistoric and early Roman military period


No. refer to trenches (20-49, 20N & E4). Only those trenches have been plotted where military, prehistoric or natural deposits have been reached. The limits of trenches equate exclude areas where excavations stopped at a higher level. Larger areas with straight edges are those where the results of geophysical surveys have been included in the plot.

Fig 14. Alchester.
The double granary and other features in trenches E4, 33, 34, 35, 48 and 49

Please note that more precise dating of the features will be possible after full analysis of the pottery.

Area of deep ploughing in the post-Roman period resulting in the destruction of any shallow features.
can no longer be any doubt about the interpretation of the parallel timber foundation trenches as being part of military structures and their location in the south of the town thus strongly suggests that all of the 10.5 ha large Roman town was built over an earlier fortress. Together with its c 4 ha large annex the Alchester base is almost as large as the legionary fortress at Exeter (and may have been of similar size if it extended further south).

The spacing between the timber foundation trenches for the raised floor (c 1.3m centre to centre) of the eastern granary is about twice as great as in the western, but they are in a similar alignment. The spacing in case of the eastern building are normal for a Roman granary while it is only half of what one would have expected in case of the western. This suggests that the western granary was rebuilt, but not its eastern counterpart. A possible explanation is that the garrison was reduced at some stage. The question arises whether this was when the garrison was withdrawn, presumably in the late AD 50s or early AD 60s. It seems odd that it should have been necessary to entirely demolish and rebuild a timber granary within less than 20 years rather than just re-using one in case of a reduction in the garrison. However, it has to be borne in mind that the timber buildings in the annexes also saw substantial alterations; we know that the annexes was abandoned by the mid AD 60s at the latest, thus indicating that the maximum period of occupation cannot have lasted much longer than 20 years at most. It seems unlikely that we are dealing with a complete abandonment of the site to be re-occupied later by a different garrison during the period of consolidation of Roman power in the Southeast. There is in any case no evidence for any change in the defensive perimeter after AD 44 or for the complete levelling of any part of the site. Furthermore, no single structure encountered so far has been destroyed by fire. There is no space here discuss the question as to whether or not Alchester might have been partially re-occupied in the Flavian period (cf. Howgego 2003). Alternatively, there may simply have been some structural reason why one granary had to be demolished and rebuilt, but not the other.

Revision of the interpretation of the timber buildings in the annexe (Trenches 44 and 45)

The total length (west-east extent) of the rows of rooms north of the west-east road in the annexes of AD 44 amounts now to as much as 67.3m while still no edge could be found in the west. (It is possible, but not certain, that the easternmost north-running beamslot in Trench 45 marks the eastern limit of the complex.) This renders it increasingly unlikely that they formed part of a courtyard building, especially considering that the north-south extent of 45m (or up to 48m at most allowing for a section next to the road to have been destroyed by later road-side ditches) would render this an unusually oblong ground plan for which no parallel could be found. It seems now much more likely that we are dealing with parallel barrack blocks. The width of the contubernia (double rooms for the accommodation for eight soldiers each) of c 3.5 to 5.4m is within the range known for early imperial barracks as is the total length of 9 to 10m with frequent internal subdivision (and a few hearths located in interior rooms). They are somewhat irregular in size and subdivision, but, in contrast to the contemporary barracks at Longithorpe (Frere and St. Joseph 1974: 28-33 with fig 17), their alignment is very regular. It seems possible that the centurions' quarters were located to the west of the buildings. The question why there is a rectangular pit in place of an earlier water basin, the latter with its supply channel pre-dating the military buildings, in the area of one of the contubernia is still unresolved. What had previously been interpreted as an aisle between two parallel ranges of rooms poses a second problem with the interpretation as barrack blocks. If this was in fact the empty space between the backs of two barrack blocks, then the beamslot subdividing it in Phase 3 must have been the new back of either block or part of a new building. Yet, in this case one would have expected more room partitions to branch off from it. Notwithstanding these problems in the proposed interpretation as barracks, the overall dimensions of the complex render it increasingly unlikely that it could have been a separate annexe headquarters or another building where a large rectangular pit would be easier to explain, such as the military workshops. It is in any case clear that the area was densely occupied in the military period and that the annexes served to house troops rather than for storage purposes.

Discovery of a military-period well or other waterlogged feature (Trench 42)

We found parts of what appeared to be a circular feature within the main fortress whose upper fill was very rich in waterlogged wooden artefacts while the lower fill remains as yet unexcavated. Because of its depth below the surface and because our Trench (No 42) encompassed only parts of it, it has not been possible to excavate more than necessary to verify that it is indeed a feature with waterlogged fill with mid 1st century material from the very top. It is worth bearing in mind that latrines are frequently located in the intervallum. In the case of the equally partially waterlogged fortress of Bergkamen-Oberaden a series of rectangular basins in the intervallum have been interpreted as latrines (Kuehlborn 1992: 76-8). The circular shape is, however, more likely to point towards a well. If so, this would be the first of military date from Alchester. Whatever the correct interpretation, well or latrine, this early waterlogged feature has a high potential to give unique insights into military diet in the invasion period and other aspects of the occupation of the main fortress.

Archaeological evidence for additional defences next to the gate of AD 44 (Trench 43)

We established that the area between the ditch terminals and the south tower of the western gate of the annexes retained exceptionally well-preserved traces of sophisticated defences. A small ditch lined the south side of the road. Waterlogged remains of the bottom of vertical stakes in situ indicate almost certainly that it served as an 'ancient equivalent to a mine field'. Their function was, presumably, similar to the lilia described by Caesar (BG 7,73). The perished upper portions of the stakes would almost certainly have been sharp and pointed, so that enemies trying to gain access to the berm between the inner ditch and the rampart or to escape from it would have been at risk of impaling their feet. This is, to my knowledge, the first such feature with surviving waterlogged remains of the stakes to be found in Oxfordshire.
The defences at the annexe gate of AD 44

Location of rampart

N tower of the gate

Road leading

Into the annexe

Double

Military-period gully

Forecourt where enemies could have been

bombarded with missiles from three directions

Military-period gully

Undatable oak post squared (to facilitate closing mechanism of gate?)

Two postholes whose posts have been removed in antiquity

Lilia ditch with the bases of three vertical stakes still preserved and a series of voids for other stakes

Two oak gate posts felled

Oct. AD 44/ Mar. AD 45

Forecourt where enemies could have been

bombarded with missiles from three directions

Three voids left by pointed stakes driven into the natural at an oblique angle (pointing to the S above the ground)

Trench 43

Outer ditch, a fossa Punica with almost vertical side towards the enemy

Inner V-shaped ditch (rich in waterlogged remains)

Location of rampart

10 m

Fig 16. Alchester.
the Roman Empire (though similar features above the water table have been found elsewhere, such as at Rough Castle on the Antonine Wall.) Negative impressions prove the presence of three further pointed stakes at an oblique angle to the vertical between the tower and the ditch terminal; they formed an additional obstacle. Their tips above the ground would have pointed to the south, away from the gate. As one of the best-preserved defensive systems of its kind, this is of far more than regional importance for the history of military defences. Furthermore, these sophisticated obstacles may well indicate that rebellion and an attack on the fortress was regarded as a real danger or that there might even have been guerrilla warfare. They render it unlikely that the area was considered to be entirely pacified at the time.

The southern defences of the fortress
No military features were found in Trench 47. The ditches encountered in the trench were small and served drainage purposes and/or as property boundaries. They were not defensive. While we disproved the hypothesis that military ditches crossed the area of Trench 47, further fieldwork is required to clarify whether or not the main fortress extended beyond the modern course of the Gagle Brook to the south (as the location of the double granary in Trenches E4, 33, 34, 48 and 49 would suggest). Trial trenches in the meadow east of Trench 47 should answer the question. Geophysical survey has allowed us to detect a double ditch in this area, but it is, unfortunately, unclear whether it is curving to the north or running to the west. It is perfectly possible that this double ditch forms the southern limit of the main fortress, but it cannot be excluded that it served some other function, eg that it was part of a minor road. The fact that it does not continue far to the west adds strength to the former rather than the latter hypothesis.

Discovery of important waterlogged remains (Trenches 43 and 42)
We recovered a large number of important waterlogged artefacts and objects. They include probably dendro-datable posts from Trench 42 and the earliest evidence for the import of stone pine cones into Britain (Dr Mark Robinson, pers comm) from the ditch terminals next to the AD 44 gate of the annexe (Trench 43). These ditch terminals also yielded a wealth of wooden artefacts, including various thin wooden tablets and what is probably a wooden stylus. The tablets are being conserved at Leicester under the direction of Dr Graham Morgan and we will have to await the results of conservation to see whether or not any of them carry writing.

The Iron Age Banjo enclosure (Trench 46)
The section through the Banjo enclosure ditch proved to be very rich in waterlogged material. Because of the density of twigs and wood debris, we excavated slowly and therefore have not reached the bottom. The pottery was, except for the pieces from the uppermost layers, exclusively of Iron Age date, but has not yet been analysed. To judge by differences in the gravel concentration, there must have been a bank on the inside of the enclosure ditch.

The colonnaded street (Trench 41)
We found the northern counterpart of the wall unearthed in 2002 and described in SMA 33. Its position and width leave no doubt that this is a section of the parallel northern wall, even though it had been robbed out. The correctness of the theory of the two walls, quite possibly forming part of a colonnaded street, leading along either side of the west-east running road for at least 140m has thus been confirmed.

A decapitated burial (Trench 45)
We discovered a burial with the skull positioned at the feet of the deceased. Found on the last scheduled day of the excavations, only parts of the skeleton were uncovered and none of the bones was exhumed. Post-mortal beheading, undoubtedly for ritual reasons, was widespread in the later Roman period in Britain (cf. Sauer 1999: 65, 67) and other examples have been found at Alchester before (Booth et al. 2001: 152-9 passim). It is likely that this example belongs to the same period even though no grave goods or stratified datable objects provided independent confirmation. This appears to be an isolated burial rather than being part of a cemetery since it is the only one encountered so far in the area.

The west gate and town wall of Alchester (Trench 41)
The town wall in the area of the trench had been entirely robbed out except for its rubble foundations. Two stones in situ were all that survived of the upstanding masonry. By contrast, various superimposed surfaces of the road leading through the gate were preserved, being of little interest to the post-Roman stone robbers. The gate opening at foundation level was 2.95m wide corresponding roughly to ten Roman feet. There were no traces of a widening of the foundations (if one excludes a single irregular 0.4m wide and 2.2m long buttress on the outside (west) of the town wall (from 2 to 4.4m north of the gate opening). This suggests that the gate had not been provided with any massive flanking towers (if any towers at all), which would have required wider foundations than the town wall (whose foundations were three metres wide). The incorporation of 20 fragments of a Roman legionary tombstone, a fragment of a second tombstone and of an un-inscribed sculpted stone painted in red suggests that the town wall was erected at a time when security concerns were greater than any respect for the stone monuments erected by earlier generations. The tombstone of a legionary veteran itself is of substantial interest for the history of Roman Oxfordshire, providing the first known biography of an inhabitant of this part of Britain. It, furthermore, indicates that Alchester in all probability had been the base of the Second Augustan Legion and, initially, of Vespasian himself. It is intended to provide a much more detailed report on this important epitaph in the next issue of SMA. Since fragments of the tombstone were found in the buttress and main foundations alike, we may conclude that they are contemporary. Sections further demonstrated that the foundations had been built at once and that we are not dealing here with any later modification. Not a single one of the 17 re-used stone monument fragments whose three-dimensional position is known was found south of the gate opening, suggesting that two separate working parties were responsible for either side and only one of them used spoils in this area. The re-use of spoils, an
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Empire-wide phenomenon, incidentally, which one encounters more frequently on the Continent and in northern Africa than in Britain, is normally a late Roman practice, mainly from the mid 3rd century onwards. Coins from artificially-built-up deposits west of the town wall, into which the town wall was cut, suggest now a *terminus post quem* of AD 260 (probably even AD 286) for its construction. It seems likely that it will be possible to refine this date once the pottery has been analysed and the coins cleaned. By this time the earlier town ditch, probably associated with a rampart/earthwork defence of the late second century had already been at least partially filled up.

Further evidence for a lowering of the water table (all Trenches except 44, 45 and 49)
Our fieldwork yielded further evidence that much of the unique waterlogged deposits is currently well above the summer water table. Wood was found in places over 500 mm above the present water table and at the moment still well-preserved wood was found as much as 305 mm above the present water table. The water table was distinctly lower than it had been in 2002; in the area of the granary the drop amounted to 230 mm, in the area of the west gate of the town it exceeded 315 mm. It is thus of paramount importance to continue to recover deposits which may well contain Britain's earliest handwritten documents and other unparalleled evidence for the history of the first years of the Roman conquest of Britain, before their imminent destruction in the light of a falling water table.

Acknowledgements
This article is dedicated to the memory of the late Mr Mick Miller without whose kind, dedicated and generous support the Alchester excavations could not have taken place. His deep interest in our project and his company will be sorely missed by all participants.

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UNIVERSITY OF OXFORD

Gary Lock and Chris Gosden (with contributions by David Bukach, Patrick Daly, David Griffiths, Paula Levick, Jedrez Majewski, Sheila Raven, Peter Warry, Carole Wheeler and Steve Yeates)

The background to the project and site has been detailed in previous interim reports in this journal (Lock *et al.* 2002; Lock, *et al.* 2003) and also on the website

As in previous years the excavation acts as a training excavation for Oxford University students and is committed to education in the widest sense. Education Officers were on-site throughout the month of excavation and gave tours to many visitors including groups from local schools and community organisations. Various activities were organised for National Archaeology Day when c 2,500 people visited the site and talks are given to groups throughout the year.

The location of trenches is shown in last year’s interim report (Lock, *et al.* 2003, page 85), they are based on a geophysical survey which was published in the first year’s interim report (Lock *et al.* 2002, page 71).

Brief report on the excavations in 2003
Based on our previous excavations, and those in the garden of the Noah’s Ark in the 1930s (Bradford and Goodchild 1939), the south-western area of the site shows a high concentration of Iron Age activity. This will be described first.

Trench 14
This was excavated over the two seasons of 2002-3, measured 15m x 10m and the features recorded in it ranged in date from the Iron Age to the Romano-British period.