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Shorter Contributions

Recent Discoveries in the Fort and Extramural Settlement at Vindolanda: Excavations from 2009–2015

By ANDREW BIRLEY, ALEXANDER MEYER and ELIZABETH M. GREENE

ABSTRACT

The most recent work at Vindolanda has produced some startling results which both support and challenge our standing interpretations of some aspects of the frontier zone in Roman Britain. These include the timeline for the development of forts on the frontier, the foundation of extramural settlements and the relationship between fort and extramural settlement. The work raises questions not only about Vindolanda but more generally about the formation of the frontier itself and the interpretation of the archaeology of other sites.

Keywords: Vindolanda; Roman army; excavations; Stanegate frontier; Hadrian's Wall; extramural settlement

CHALLENGING PERCEPTIONS ABOUT COMBATANT AND NON-COMBATANT AT VINDOLANDA

The last six years of excavations at Vindolanda (2009–2015) have spanned parts of two separate research projects. The final two years of the five-year 'Fort wall: a great divide' research excavation examined the evidence for the relationships between the third-century *vicani* and those who dwelt inside the adjacent fort. The current (2013 to present) 'Frontiers in transition' project is a broader historical exploration both of the fundamental changes which took place at the site and the diverse archaeological evidence for those communities who lived at Vindolanda over a 700-year period. This work has involved extensive excavations within the boundaries of the third- and fourth-century stone fort (FIG. 1), below the foundations of the associated third-century extramural settlement, and in the field north of the modern Stanegate road. The results have added much to our understanding of Vindolanda in Roman and post-Roman contexts and raised some fundamental questions about the perceived wisdom concerning the relationship between extramural settlements and their associated frontier bases.

The results of the excavations are described under the following headings: the third- and fourth-century fort; the extramural settlements; and the field north of the Stanegate. Important cross-overs between the fort and the extramural settlement are highlighted. The work in the field north of the modern Stanegate road has raised important questions about the date of this frontier system, offering the tantalising possibility (yet to be confirmed) that Vindolanda was an active military site in some form a decade before previously thought (possibly in the A.D. 70s), a conclusion which has repercussions for our reckoning of the frontier system at this period.

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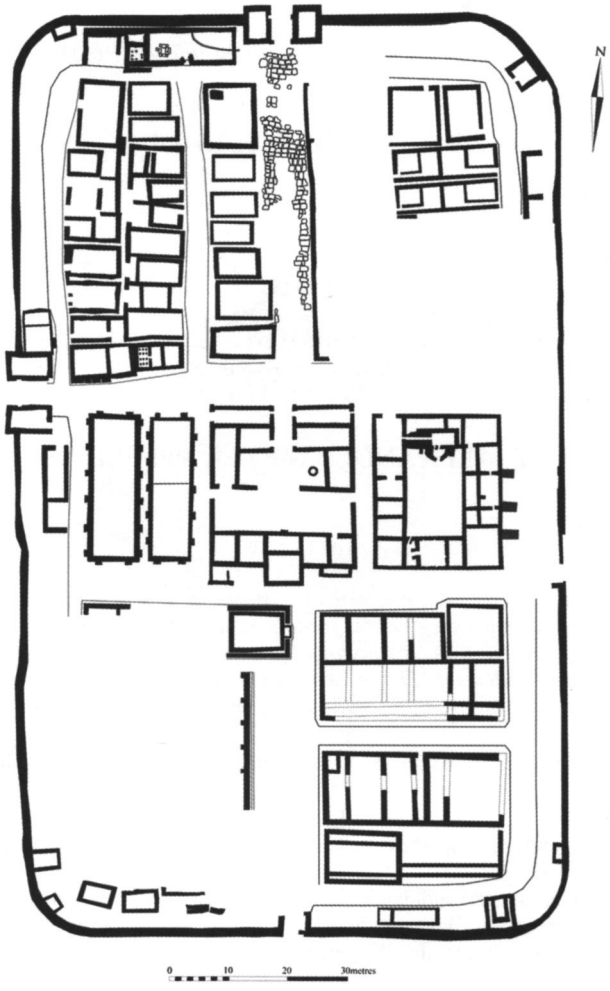

FIG. 1. The fourth-century fort plan of Vindolanda. (*Drawn by Andrew Birley. © The Vindolanda Trust*)

THE THIRD- AND FOURTH-CENTURY FORT

From 2009 to 2015 two quadrants of the last stone fort, constructed in *c.* A.D. 213 by the Fourth Cohort of Gauls, were excavated.[1] The north-western quadrant was explored between 2009 and 2011 and the south-eastern from 2013 to the present. The most important conclusion to emerge is that the fort was still densely occupied in the fourth century by a mixed military and civilian population using space within the fort in new ways. In the north-western quadrant the extensive remains of fourth-century, chalet-type buildings were found situated directly under a sequence of limited post-Roman occupational material.[2] These chalet-type structures were typical of later Roman occupation inside forts on Hadrian's Wall and appear to have had a range of roles and functions.[3] The majority were identified as potential domestic

1 Birley, A.R. 2013a, 47.
2 Birley, A.R. 2014, 195.
3 Hodgson and Bidwell 2004.

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dwellings, homes for combatants and their families, while other buildings from this period were likely to have been commercial premises, workshops, yards, and religious and social spaces. The fourth-century 'chalet' floor levels produced a large quantity of evidence for mixed occupation by combatants and non-combatants, including military kit and weapons, found together with a large number of glass beads, spindle whorls and other potential indicators of female occupation. This material is important for the ongoing debate about the shifting nature of military communities in the third and fourth centuries.[4]

Evidence for mixed use of space was also found elsewhere in this quadrant. The *intervallum* road surface to the north of the fort's west gate, just west of the chalet structures, produced a large number of coins. Their depositional pattern, strewn along the length of the road surface, mirrors the pattern of activity identified on the *via principalis* to the north of the granaries in the same period.[5] This suggests that intense commercial activity was focused here in the fourth century. Furthermore, the temple to Jupiter Dolichenus, discovered during the 2009 excavations, situated on the northern rampart of this quadrant appears to have remained in use until the mid-fourth century when the structure was demolished.[6] The fourth-century picture of contracted yet vibrant occupation at Vindolanda is one which can be seen across the frontier in this period at sites like Carlisle, Housesteads and Birdoswald.[7] After the move from adjacent extramural areas, some forts were furnished with small detached dwellings, commercial areas and working spaces, perhaps because of a reduction of garrison strength or even more fundamental changes to auxiliary units in this period. The impression is one of a military-style village inside the walls of the fort; it is possible that this was also the case at other frontier forts.

Although the settlement grid was largely respected by fourth-century activities, the north-west quadrant was more densely packed with structures than it appears to have been with the third-century barracks below.[8] The excavations of the fourth-century buildings produced numerous artefacts associated with military occupation, such as weapons, fitments and armour, in addition to hundreds of domestic items such as beads and spindle whorls, which alluded to the presence of a mixed community. The fort wall appears to have been a uniting rather than a divisive factor at this time.

In 2013 work started on the south-eastern quadrant of the fort.[9] The excavation encompassed the street to the south of the *principia* and the *praetorium* from the eastern fort wall to the western edge of the *via decumana*, the southern fort wall and eastern fort defences. Directly beneath the turf a greater variety and complexity of post-Roman remains were encountered than in the north-western quadrant. Areas paved with large flagstones and cobbles were found above the late fourth-century buildings, while two large apsidal structures and several associated paths, roads and post-pits show that occupation beyond Roman rule was significant and well organised. In places several courses of post-Roman masonry and two or three layers of archaeology survived above the latest Roman levels.

The late fourth-century buildings were very different from those encountered in the north-western quadrant. Rather than small independent 'chalets', a series of large barracks dominated the area. The material culture indicated a mixed occupation, similar to that from the north-western quadrant. However, this assemblage also included several higher-value items, which were conspicuously absent from elsewhere in this period. They included a gold coin of Nero and several gold-washed and enamelled brooches, as well as a higher concentration of silver artefacts such as rings, hairpins and brooches. The fourth-century buildings were heavily modified during their lifespan, with several showing multiple rebuilds and improvements, butt-jointed walls and additions. The structural changes and associated material culture raise the possibility that a different element of the garrison was based in this part of the fort. Perhaps a detachment of the late Roman army was billeted in these large unified barracks. In the south-eastern quadrant, unlike the other quadrants explored so far, there are no simple 'homes' for soldiers and their families, while the preliminary analysis on the range of high-status artefacts suggests a wealthier set of occupants than elsewhere.

In 2014/2015 a large water tank was excavated immediately to the south of the fourth-century *principia*. This tank had several phases of use before eventual post-Roman abandonment. It is possible that it was installed for

4 Birley, A.R. 2010; 2013a; Allason-Jones 2009.
5 Wilson 2009, 234; Birley, A.R. 2013a.
6 Wilson 2010, 356; Birley and Birley 2012.
7 Carlisle (Zant 2009); Housesteads (Rushworth 2009); Birdoswald (Wilmott 1997).
8 Wilson 2012, 291.
9 Wilson 2014, 323.

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cavalry use at the same time as the main barracks were constructed in this area. In a later phase the east side of the tank was demolished and a flight of steps led down into the structure. A preliminary interpretation of this phase suggests that it could have been used as a baptismal font for the apsidal building placed into the foundations of the nearby barrack, which can be interpreted as a potential church site. Such a facility is reminiscent of the late Roman church located within the walled courtyard of the *praetorium*.[10]

FIG. 2. A row of recently excavated (2015) Severan period roundhouses. (*Photograph by Adam Stanford, adapted by Andrew Birley. © The Vindolanda Trust*)

Throughout the fort several roundhouses have been discovered, constructed in neat rows of five. These buildings lay outside the eastern perimeter of an associated Severan fortlet and can be dated to the end of the Severan occupation from *c.* A.D. 208–11.[11] In 2015 five more of these buildings were uncovered (FIG. 2), making the total number of roundhouses explored more than 30. Each roundhouse was *c.* 4 m in diameter. Up to 140 of these structures may have covered the demolished remains of the Antonine stone fort. The true nature of this unique military complex remains difficult to interpret within a normal military context and it is hoped that over the next two seasons more evidence will emerge to offer a sensible hypothesis about their function. It seems certain that they represent an amalgamation of native form and military engineering, with their use of Roman materials and regular size, shape and plan, and were perhaps occupied by natives. Despite the discovery of hearths, a few sherds of pottery, small numbers of glass beads and bangle fragments from the floors and associated fill of some roundhouses, few have preserved much material culture. This contrasts sharply with the remains of the barracks located here both before and after this roundhouse phase. The roundhouse dwellers appear almost exclusively to have eaten barley rather than wheat, which is the normal fare of the barrack dwellers, suggesting that their food was sourced locally rather than brought in with normal military supplies.

EXTRAMURAL SETTLEMENTS

An important part of the recent work at Vindolanda was to explore the relationship between the forts and their extramural settlements. For this purpose much has been done to examine the western edge of the third-century extramural settlement and to understand further the levels below the structural foundations at the heart of the *vicus*. At the western periphery of the settlement, temples, water tanks, workshops and a complex network of roads and cobbled surfaces dominated the landscape (FIG. 3).[12] A notable find was an inscription dedicated to

[10] Birley, R. *et al.* 1998; Birley, A.R. 2014.
[11] Birley, R. 2009, 135.
[12] Blake 2014.

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a hitherto unknown deity, the goddess *Ahvardua* (interpreted as a goddess of water and the Ardennes), by the First Cohort of Tungrians, present in the late first and early second century.[13] Some of the roadways were no doubt legacies from earlier phases and in several cases these surfaces blended together to form larger cobbled yards.[14] Since the cobbled surfaces would have made ready traps for items associated with social gatherings and markets, the lack of artefacts recovered from these areas suggests that such activities cannot account for the use of space here. The nearby industrial and workshop areas appeared to have been associated with intense metalworking and manufacturing.

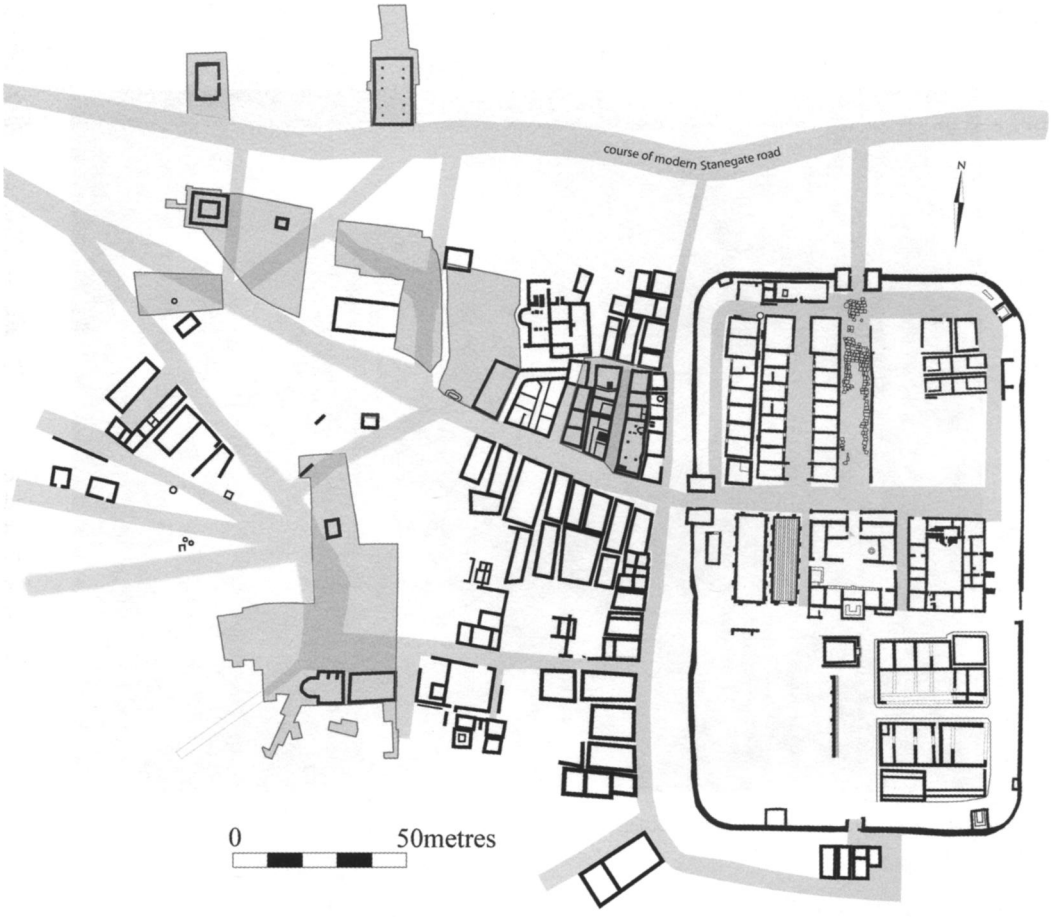

FIG. 3. The fort and extramural settlement of the third century, including *vicus* structures in the north field. (*Plan by Andrew Birley. © The Vindolanda Trust*)

The most interesting discovery came at the end of the 2012 excavations when, below the foundation of the third-century *vicus* and to the north of a pre-Hadrianic fort ditch, the remains of pre-Hadrianic wattle-and-daub extramural structures were uncovered, preserved in anaerobic conditions (FIG. 4). Two wattle-and-daub roundhouses were superimposed one above the other (with poorly preserved remains of

[13] Birley, A. *et al.* 2013; Tomlin 2013, 384–5.
[14] Wilson 2013, 289.

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two others nearby), which were similar in size to their later Severan counterparts (*c.* 4 m in diameter); they lay alongside three rectilinear wattle-and-daub structures, also multi-phased. The most striking characteristic of the pre-Hadrianic extramural structures was the abundance of Roman material culture found inside. The assemblage includes bow brooches, stylus pens, writing-tablet fragments, shoes, pottery and Roman coins. The very different form of these structures suggests that the early extramural settlements may have been occupied by a mix of local and non-local inhabitants. The discovery of these structures raises the possibility that extramural settlements may have been present at other pre-Hadrianic Stanegate sites but have yet to be recognised. Considering the large number of shoes which belonged to individuals other than adult males found in all pre-Hadrianic levels at Vindolanda,[15] we might expect to find active extramural settlements in all periods.

FIG. 4. A pre-Hadrianic extramural settlement. (*Photograph by Adam Stanford. © The Vindolanda Trust*)

Current excavations in the *vicus* are now focused on the levels below the foundations of the third-century *vicus* structures on the south side of the main street, in order to explore aspects of the pre-Hadrianic forts in the levels below previous excavations in the 1970s.[16] Here the well-preserved remains of the Periods II–IV (*c.* A.D. 92–120) *via principalis* and associated wattle-and-daub buildings have started to appear. Artefacts from this area are consistent with the normal range of materials for which Vindolanda is now famous: leather and wooden shoes, finely preserved textiles and writing-tablets, as well as a rare and well-preserved wooden toilet seat.

[15] Greene 2013.
[16] Birley, R. 1994.

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THE FIELD TO THE NORTH OF THE STANEGATE

Between 2009 and 2015 several exploratory trenches were opened in the field north of the modern Stanegate road. This work was designed to test the results of an earlier geophysical survey, to explore how the Roman road might have interfaced with the site over a long period of time, and to determine if the third-century extramural settlement extended into this landscape beyond its previously known limits.[17]

These excavations located Roman remains dating from the first to third centuries in all areas explored. The primary features were stone structures in use in the mid-second and third centuries; they overlay a series of earlier fort ditches from the pre-Hadrianic settlement which might perhaps date as early as the period of military conquest in the region (FIG. 5). These ditches, which did not appear on comprehensive geophysical surveys of the field (due partly to their depth and a layer of boulder clay, 0.5 m thick, sealing them), represent the greatest challenge to the known interpretation of the site. In a broad context, they give us a view of activity on the Roman frontier in the central sector before the construction of Hadrian's Wall.

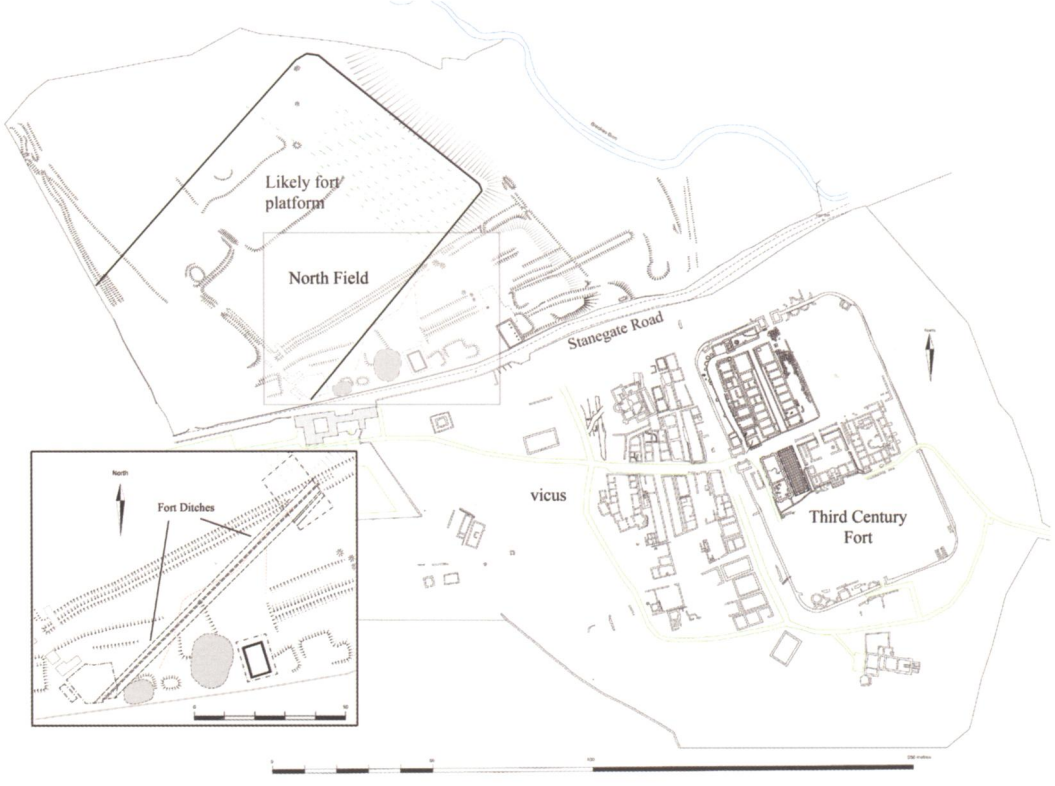

FIG. 5. The position of the north field ditches, excavation trenches and proposed fort platform. (*Drawn by Andrew Birley and Alexander Meyer. © The Vindolanda Trust*)

The defensive features in the north field comprised two quite separate systems of multiple early fort ditches on completely different alignments. Neither of the two systems could be directly associated with the already-known forts of the late first or early second centuries and are separated from the known site by the line of the Stanegate road itself. The defensive systems were first discovered at the far western end

[17] Greene and Meyer in prep.

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of the field, while further extensions of the earlier ditch system were explored *c.* 75 m to the north-east in subsequent seasons.[18] The pottery from these ditches indicates that both features date to the pre-Hadrianic period of occupation, but just how early the first of the ditches were cut, used and filled cannot yet be determined.

The ceramic assemblage from the later ditch matches pre-Hadrianic groups from elsewhere at Vindolanda, such as a carinated bowl with 'aberrant' rim and other early carinated types, as well as early mortaria forms;[19] there is also an absence of black burnished ware which was not brought to the northern frontier before the early Hadrianic period.[20] A precise dating sequence will only be established after a statistically significant amount of material emerges from the ditch fill of the earliest system; however, since the earlier ditches were cut out by the digging of the later ditch, which appears to have been filled in the first quarter of the second century, it seems that the field was in use from at least the late first century and probably earlier. It is possible that the earlier of the ditches may represent the first military occupation at the site and the possibility that this ditch pre-dates Vindolanda Period I (*c.* A.D. 85–90) cannot be discounted. The earlier of the two systems produced numerous Roman artefacts, including a fine enamelled silver seal-box, animal bone and other occupational material. A more striking discovery was the remains of a disarticulated skeleton of a male located over a 20 m length of the ditches. A taphonomic study shows that the body was deposited in the ditches rather than that the ditches cut through an earlier burial. DNA analysis is currently ongoing and a separate publication is in preparation on this discovery.[21]

If the final dating analysis concludes that these features were concurrent with either Vindolanda Period I or later, it is quite likely that the military installations on the north side of the road were contemporary with the pre-Hadrianic forts to the south. The gaps in occupation in the pre-Hadrianic period are too small to allow for separate occupation at this time.[22] The sequence of occupation on the main site is now well understood, with dating supported by a variety of sources including dendrochronological data, dated writing-tablets, coins and pottery.[23] The discovery of multiple early fort ditches in the north field suggests there may have been greater forces along the Stanegate frontier at Vindolanda before the construction of Hadrian's Wall than has previously been thought. In light of these results a re-evaluation of the Stanegate system, especially in the central sector, may be required.

Several later extramural Roman buildings of the second and third centuries sealed the ditch systems here. While the majority of these had been badly damaged by later ploughing, enough of their floor surfaces and occupation layers remained to provide good dating and archaeological sequencing. The building covering (and collapsing into) the later of the two ditches had a clay-packed floor surface with occupational material and pottery dating to the first half of the second century. Included in this assemblage was a worn mortarium stamp of *Felicioles*, a potter active between *c.* A.D. 110 and 140,[24] as well as several single-handled flagon fragments of pink fabric.

Stone foundations of structures which can be firmly assigned to the third-century extramural occupation were explored in three excavation areas in the north field. Two large buildings were located adjacent to the modern field wall lining the current boundary of the Stanegate, in close proximity to the stone temple and a storage building on the main site. The first stone structure (explored in the 2009 season) was large, *c.* 21 by 12 m along its outer walls, and had a colonnade on both long sides of the interior space. The lowest foundation course remained and it stood to three courses of stone (including foundations) at the north-west and south-west corners. Below this building were the fragmentary remains of an earlier structure, more roughly built, perhaps only a stone foundation for a timber superstructure. Two very large stone slabs were also found near the surface in the south-west corner of the trench, but their function could not be determined.[25]

The 2010 campaign produced a similar structure roughly 37 m to the west of the aisled building, again with heavy stone foundations. The construction type is very similar to that used in the third-century extramural

18 Wilson 2011, 343.
19 Hartley 2010; Birley, R. and Sheehan-Finn 2011.
20 Gillam 1970; 1976, 61.
21 Buck and Greene in prep.
22 Birley, R. 2009.
23 Birley, R. 1994; Birley, A.R. and Blake 2005; 2007; Birley, A.R. 2013b; Blake 2014.
24 Hartley 2010; Birley, R. and Sheehan-Finn 2011.
25 Greene and Meyer in prep.

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settlement on the main site, with large limestone block foundations. This building also had a simple rectilinear plan, but was smaller and without any internal supports, unlike the structure to its east. Only the very lowest foundation course remained, with no preserved floor surfaces or material from the superstructure. The area cleared (*c.* 1–2 m around the structure) did not produce any building materials from the superstructure or roofing system, indicating that the structure was probably stripped of useful material in antiquity. Most likely its squared building stones and roof materials (either tiles or slates, one small piece of each was found nearby) were taken for use in the fort in the fourth century after the extramural settlement was abandoned.

The final feature in the field was a large ditch to the north of the stone structures, which was not associated with any of the early ditches discussed above.[26] Only a small section of this was explored, roughly 3 m in length, but the presence of nearly two dozen coins within the fill gave a date in the A.D. 270s for its infilling. The section explored ran east–west through the trench before turning south towards the stone structures. It could not be followed further south, but it appears that it may have been a part of a defensive system associated with the third-century extramural occupation, which can be seen on a geophysical survey of the field. This date coincides well with the abandonment of the extramural settlement at Vindolanda in the A.D. 270s, at which point perhaps the ditch was no longer maintained and filled in quickly with clay, rubbish and silt.

SUMMARY

The results from recent excavations in all areas at Vindolanda have shown that the extent and quality of the archaeology is adding much to our understanding of the development of the Roman frontier in Britain from the first century to the end of the Roman period. The north field excavations demand that we re-examine the evidence for the early occupation of the Stanegate frontier. While more work will have to be done before any concrete conclusions can be drawn about the potential first-century fort in the north field, it is a very real possibility that it will provide evidence of more extensive occupation of the frontier in the A.D. 70s than has previously been assumed. Furthermore, the third- and fourth-century remains from all excavated areas on site are shedding light upon the changing population and occupation of Vindolanda in these later periods. The abandonment of the extramural settlement, which based on evidence from the north field, was far larger than previously thought, in favour of occupation within the fort itself shows that there was a contracted but still active community on site. The picture emerging from the fort plateau indicates that the community at Vindolanda remained prosperous while contracted into the fort walls and used space in new and different ways.

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[26] Wilson 2013, 289.

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