ENGLAND

3. HADRIAN'S WALL

By ROB COLLINS

NORTHUMBERLAND

(1) **Vindolanda** (NY 769 663): (a) *inside the third- and fourth-century fort*: in the summer of 2017 the final programme of the current five-year research excavations (A Frontier in Transition Project) took place inside the south-eastern quadrant of the last stone fort. Previous seasons had exposed post-Roman foundations, fourth-century cavalry barracks, third-century barracks, Severan roundhouses, Antonine workshops and a toilet. In 2017, the deeper stratigraphic levels of the site, situated in an area where a large post-Roman robber trench had removed the Severan and later masonry, were explored. Here the partial remains of a late Antonine *praetorium*, its central courtyard and parts of the southern and eastern wings of the building, were encountered. The eastern wing was furnished with *opus signinum* floors and stone water troughs/channel blocks indicating the possible proximity of a bath suite which was not located. The southern range of the building had a series of smaller rooms of undetermined nature which opened onto the central courtyard. Each room had a finely made flagstone floor. The masonry consisted of the usual small block soft yellow sandstones which are typical of all the fort construction in this period (*c.* A.D. 180). The structure had been thoroughly cleared and demolished providing very little in material culture and a great deal of rubble, loose stones and clay filled the remains of the rooms and courtyard area.

A section of the *opus signinum* floor in one of the eastern range rooms was removed to determine the stratigraphic sequence of the area before backfilling. This work revealed that the *praetorium* had been constructed over an earlier phase of the Antonine fort, including a well-made stone-built cavalry barrack with thick cobbled stone floors and wide doors to each stable. 35–40 cm below the floor of this building the remains of an earlier phase, a Period IV (*c.* A.D. 105–120) timber-built cavalry barrack, was encountered. The preservation of the Period IV building was exceptional and unexpected below the eastern quadrant of the stone forts at Vindolanda due to a significant rise in the natural topography of the site in this area. Some 14 rooms of this barrack were either fully or partially excavated. These can be divided into stables on the western side, complete with urine pits, and living accommodation on the eastern side. The *contubernia* on the eastern side were each furnished with ovens and several had small refuse pits dug into the floors (FIG. 5). Although preserved in anaerobic conditions, the top layer of the building had been burned leaving a layer of ash and charred organic remains. There was an unusually high volume of material culture deposited in the living spaces of the building including items that one might not have expected to be left behind: many tools, personal items such as wooden hair-combs and a quantity of weapons which included two complete swords (one still in its scabbard), ballista bolts, lances and a quantity of copper-alloy cavalry fitments. Ten fragmentary writing-tablets were recovered from the building, both stylus and ink, as well as two exceptionally rare artefacts, leather boxing gloves. In comparison to the eastern wing, the stables produced very little material culture or non-organic matter associated with occupation. To the east of the cavalry barrack a large oven was set into a robust timber building with regular large oak posts which may have been the base of an interval tower. Several smaller buildings constructed into the base of the eastern rampart mound of the Period IV fort were also explored but their purpose could not be positively determined.

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FIG. 5. Vindolanda: a composite image and plan of the Period IV cavalry barrack.

(b) *Below the foundations of third-century extramural settlement*: the excavations in this area completed the exploration of the remains of timber forts in Periods II–V (*c.* A.D. 90–140) and extramural occupation in Period I (*c.* A.D. 85–90) in this part of the site. The majority of material from the early periods was preserved in either waterlogged or anaerobic conditions. However, the excavations were increasingly limited in scope due to the requirement of preserving later buildings in the area, including two large Severan barracks, later used as foundations for third-century extramural occupation.

The first significant find was a well-preserved cook-house of Hadrianic date (*c.* A.D. 120–140), situated directly below the junction of the later Severan barrack road as it intersected with the fortlet's southern rampart mound. This building had a well-preserved and high-standing clay oven, and artefacts included a range of domestic items, including wooden bowls, a grain scoop,

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spoons and a large quantity of pottery. Below the foundations of the cook-house was a continuation of the earlier Period IV barrack (*c.* A.D. 105–120), built in oak rather than birch, which added to the knowledge of the Period IV structures explored in 2014–2016 further to the north. Several stylus tablets and a broad range of leather items including shoes were recovered from this level as well as a number of ballista bolts and other militaria. Below this the comparatively flimsy Period III and II barracks (*c.* A.D. 90–105) were more partially preserved; these were constructed in wattle and daub with small birch and alder posts.

The excavations established the earliest phase of activity, 2.4 m below the foundation of the Severan buildings above. Here a small cobbled road and drain, running in a north–south direction, 25 m to the west of the outer ditch of the smaller Period I fort (*c.* A.D. 85–90), was encountered cut into the natural boulder clay of the pre-Roman field. The surface had been subsequently levelled for the construction of the larger Period II fort and some of the material used for this purpose contained a part of the archive of the commanding officer of the Period I fort, Julius Verecundus. 25 ink writing-tablets, amongst a variety of other rubbish, were recovered including several letters addressed to the commander and a letter from Verecundus himself.

(c) *The eastern fort ditch of the Antonine to post-Roman forts*: the final part of the excavations explored a long section of multi-period fort ditch to the east of the last stone fort, from the east gate to the corner of the site. This work showed that this defensive work had been in constant use in one form or another from the Antonine period (*c.* A.D. 140–200). The ditch profile had originally been a steep V-shaped cut through the boulder clay of the natural landscape, *c.* 5 m across at the top at its widest. This feature was recut in the early third century, partially filled in during the early fourth century with tumbled wall stones and rubble, and then recut towards the end of the Roman period when it became more of an open drain rather than a defensive work, perhaps only 2 m wide at its largest extent.

The artefacts from the multiple phases of the ditch showed that in the main a great deal of care had been taken to keep the ditch system clean. A single leather shoe and a few animal bones were recovered from the anaerobic base of the Antonine levels. The third- and fourth-century material continued this pattern with mainly animal bone and some pottery. In the post-Roman period a great deal of bone was dumped into the ditch before it was abandoned to fill with silt and soil, a pattern which is consistent with other post-Roman deposits at the site, particularly those in the drains to the south of the *praetorium*, excavated in 1998. The few artefacts of note in the area included a series of very fine brooches, an Antonine belt buckle and a badly preserved and fragmented iron Roman helmet.[20]

CUMBRIA

(1) **Birdoswald**, *Roman road from Birdoswald to Bewcastle* (NY 610 660): reassessment, making use of LiDAR, of the course of the road from the north gate of the fort at Birdoswald indicates that previous assumptions of the road's course were incorrect. The first half mile was assumed to run in a straight line from the north gate of Birdoswald fort across Midgeholme Moss — a large boggy area that provides protection to the fort but is not suitable for a road. LiDAR data showed no evidence for a direct road across the moss. LiDAR provides evidence for the start of an indirect route that circumvents the moss to the east, via Kiln Hill, and site visits were able to confirm the rest of the likely course (FIG. 6). The LiDAR reveals a terrace-way leading away from the north gate in a north-easterly direction. Across the modern road, a cutting is also evident in the LiDAR data heading north to the stream to the east of the modern bridge and indicating a likely Roman bridge site 90 m downstream from the modern bridge. North of the stream, a very pronounced *agger* is visible heading NNW towards the dog-leg in the modern road. Easily viewed from the road this length of *agger* is amazingly well-preserved. This dog-leg in the

[20] A. Birley sent information.

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modern road to the north-west eases the climb but is most likely derived from the Roman road which is also here angling across the slope heading back to regain the main Bewcastle alignment. In the field north of the B6318, clearly evident on the ground, is the dog-leg of the road *agger* rejoining the Bewcastle alignment (NY 6106 6600). The *agger* at this location is about 60 cm high making the change of direction obvious. This dog-leg is also visible in modern satellite photography.[21]

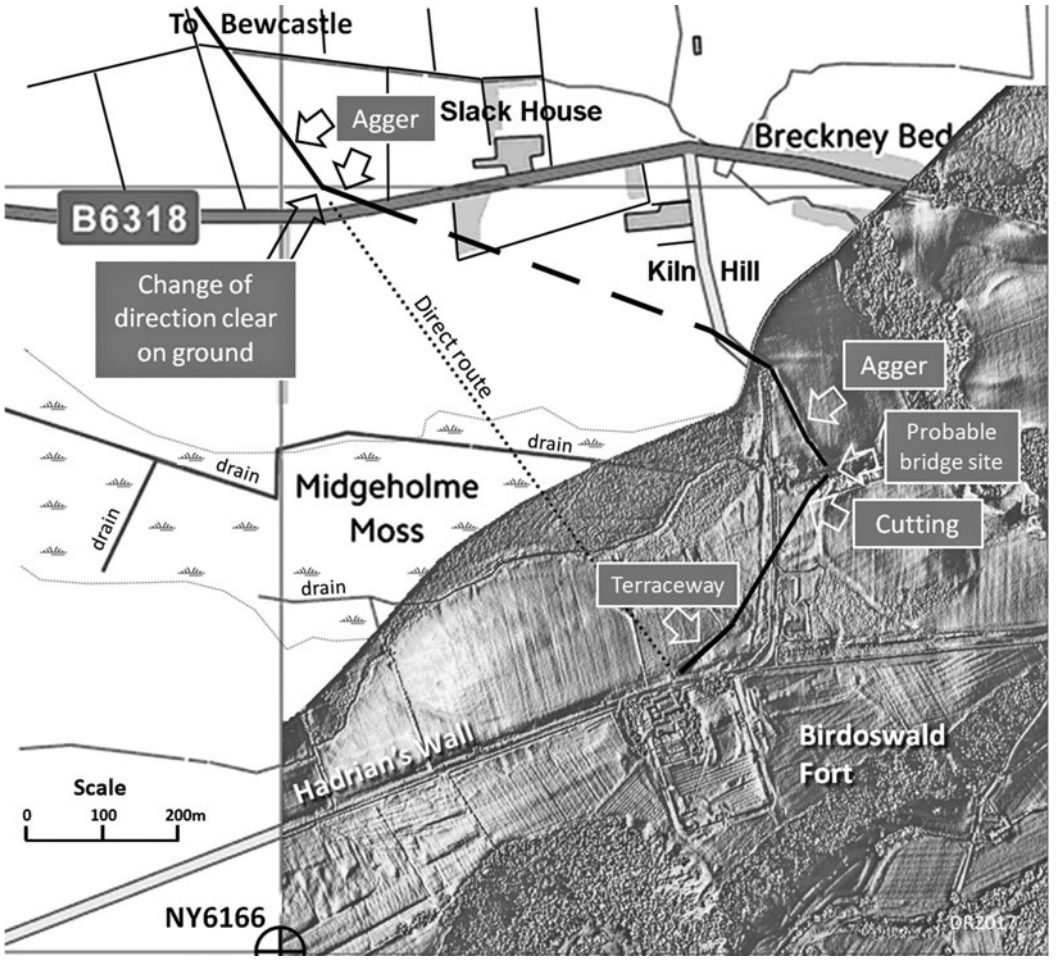


FIG. 6. Birdoswald. Composite LiDAR and Opendata mapping showing the previously assumed direct line through Midgeholme Moss and the newly discovered indirect, but drier, route via Kiln Hill.

(2) **Drumburgh**, *fort, Vallum and road to Kirkbride* (south and east of NY 260 600): LiDAR has confirmed and extended the length of road south-west of the fort of Drumburgh. Its course seems

[21] D. Ratledge sent information.

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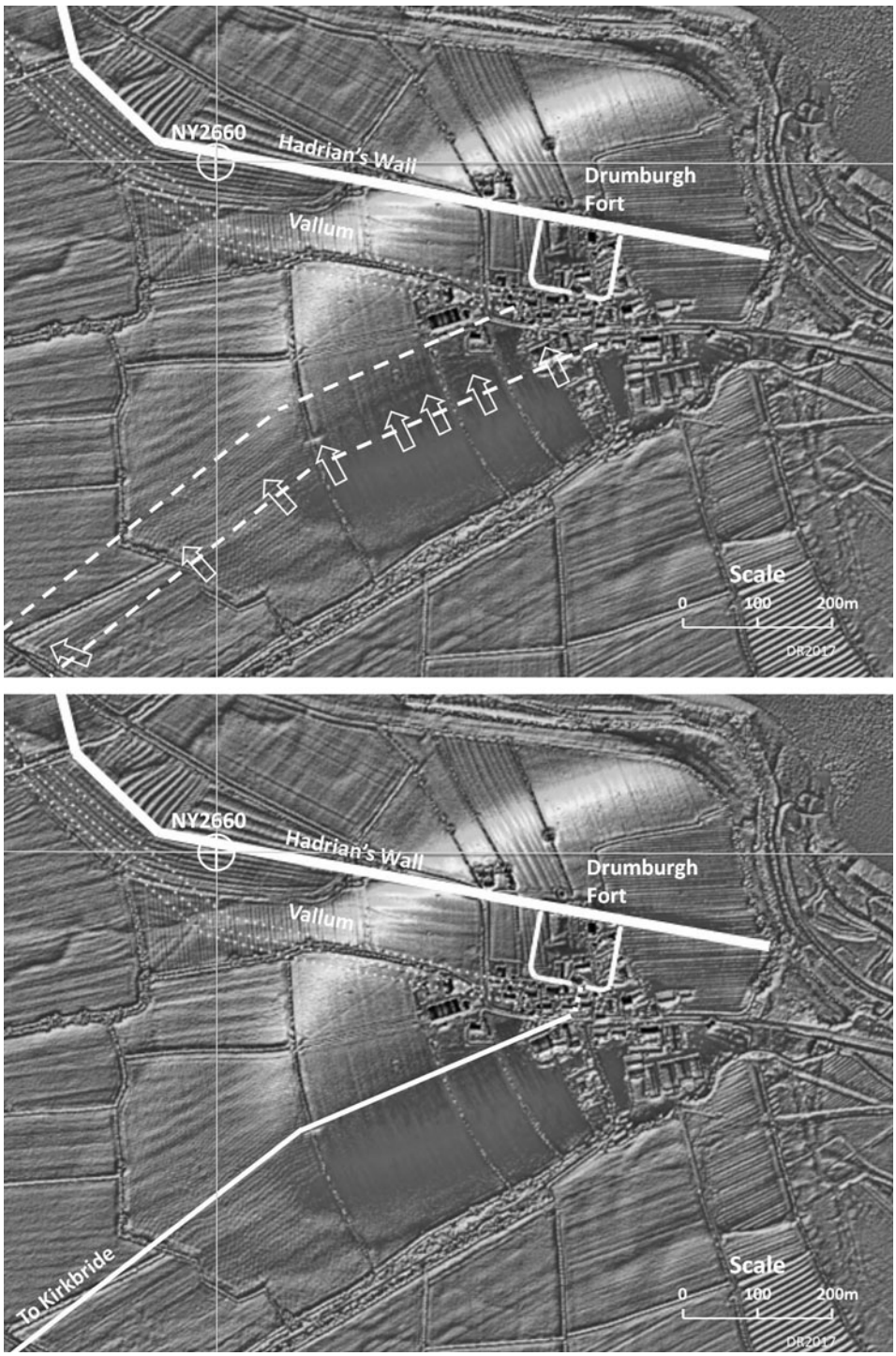


FIG. 7. Drumburgh. Roman features are highlighted to indicate the position of Hadrian's Wall and the fort of Drumburgh, the likely position of the Vallum and the road to Kirkbride as it relates to the south gate of the fort.

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to indicate that the south gate of the fort was located east of the central position. LiDAR also reveals indications of the presence of the Vallum to the south-west of the fort (FIG. 7).[22]

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4. NORTHERN ENGLAND

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(1) **Corbridge**, *Roman station and town* (NY 97825 65032, NY 98338 65214): an ongoing integrated programme of geophysical survey and aerial photographic analysis examined the area in and around the English Heritage Guardianship Area (FIG. 8).[23] Gradiometry survey results revealed the presence of a substantial barn-like building, 50 m by 20 m, south-west of the Guardianship Area. The building lies on the west side of Dere Street as it approaches the Roman bridge over the Tyne, just beyond the furthest extent of the Edwardian excavations. Other notable results include further traces of the earthworks observed at Bishop Rigg in 1974 and the discovery of intensive Roman activity at Shorden Brae, an area otherwise known archaeologically only for its second-century mausoleum.[24] A reappraisal of aerial photographic evidence has employed Structure-from-Motion and Multi-View-Stereo (SfM-MVS) image matching methods to create multi-epoch orthomosaics and Digital Surface Models which are being used to characterise landscape change within the Scheduled Area.

CUMBRIA

(1) **Beckfoot**, *Roman fort, extramural settlement and cemetery* (NY 0897 4885): a range of survey techniques focused on the intra- and extramural areas of Beckfoot Roman fort have expanded the known extent of settlement through gradiometry survey, resistivity survey of the fort interior and drone survey (FIG. 9).[25] The extent of the fort is visible through its defensive ditches, with a road

[22] The road was first reported by R. Bellhouse in 1952 in the *Transactions of the Cumberland & Westmoreland Antiquarian and Archaeological Society*. D. Ratledge sent information.

[23] Geophysical survey directed by I. Haynes and A. Turner as part of the Corbridge Roman Station and Environs Project, Newcastle University. Access to the Beaufront Estate by kind permission of A. Cuthbert. Aerial photographic modelling analysis conducted by the team in conjunction with the AHRC-funded project Cultural Heritage Through Time 2 (CHT2) notably J. Mills, K. Fieber and M. Peppa. Professor Haynes sent information.

[24] Bishop Rigg: G. Jobey, 'Palisaded enclosures, a Roman temporary camp and Roman gravel quarries on Bishop Rigg, Corbridge', *Archaeologia Aeliana* 5th series 7 (1979), 99–113; Shorden Brae: J.P. Gillam and C.M. Daniels, 'The Roman mausoleum on Shorden Brae, Beaufront, Corbridge, Northumberland', *Archaeologia Aeliana* 4th series 39 (1961), 37–62.

[25] Work undertaken for the Beckfoot Fort and Environs Project, Newcastle University in association with J. Murray, V. Murray and W. Longcake. The survey developed from earlier work commissioned by Maryport and District Archaeology Society from Wardell Armstrong. The drone survey was completed by the AHRC-funded Cultural Heritage Through Time 2 (CHT2) initiative in association with J. Mills, M. Peppa and K. Fieber, Newcastle University. Professor Haynes sent information.

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