



Further Work at Llanfor Roman Military Complex

By DAVID HOPEWELL and NICK HODGSON

ABSTRACT

Geophysical survey at Llanfor, near Bala, revealed two temporary camps and a large wooden fort in exceptional detail. The camps are assumed to be evidence of an early Flavian invasion force. The fort, which contained a garrison that probably comprised a complete ala of auxiliary cavalry and a cohort of legionaries, is interpreted as a short-lived campaign base that existed during the transition between invasion and consolidated occupation. Parallels are drawn between Llanfor and similar forts in Britain and Germany.

Keywords: Roman army; fort; Wales; Llanfor; timber buildings; stable-barracks; marching-camp

INTRODUCTION

A comprehensive series of fluxgate gradiometer surveys was carried out around all of the accessible Roman forts in North-West Wales as part of the Cadw-funded Roman Fort Environs Project. The initial findings were published in *Britannia* in 2005,¹ with additional work in 2007.² Summaries of all military sites in Wales have also been published in the new edition of *Roman Frontiers in Wales and the Marches*.³

The following paper presents the results of additional geophysical survey and a trial excavation at Llanfor, near Bala in the upper Dee Valley (SH 9379 3613), written by David Hopewell (Gwynedd Archaeological Trust). The paper also includes a discussion about the wider implications of the fort by Nick Hodgson (TWM Archaeology). The excavation was carried out as part of the Roman Fort Environs Project in 2006 and the additional survey work was carried out as one of the mitigatory measures in advance of the 2009 National Eisteddfod that was to be held within the scheduled area. All works were grant-aided by Cadw. Several phases of fluxgate gradiometer survey had previously been carried out on the site.⁴ These produced unusually clear results showing a fort and associated features in detail, but also revealed that there had been an accumulation of magnetic material within the soil after the 1997 Eisteddfod which had also been held on

¹ Hopewell 2005.

² Hopewell and Burman 2007; Burnham 2007, 246–9.

³ Burnham and Davies 2010.

⁴ Crew 1997; Hopewell 2005, 247–53.

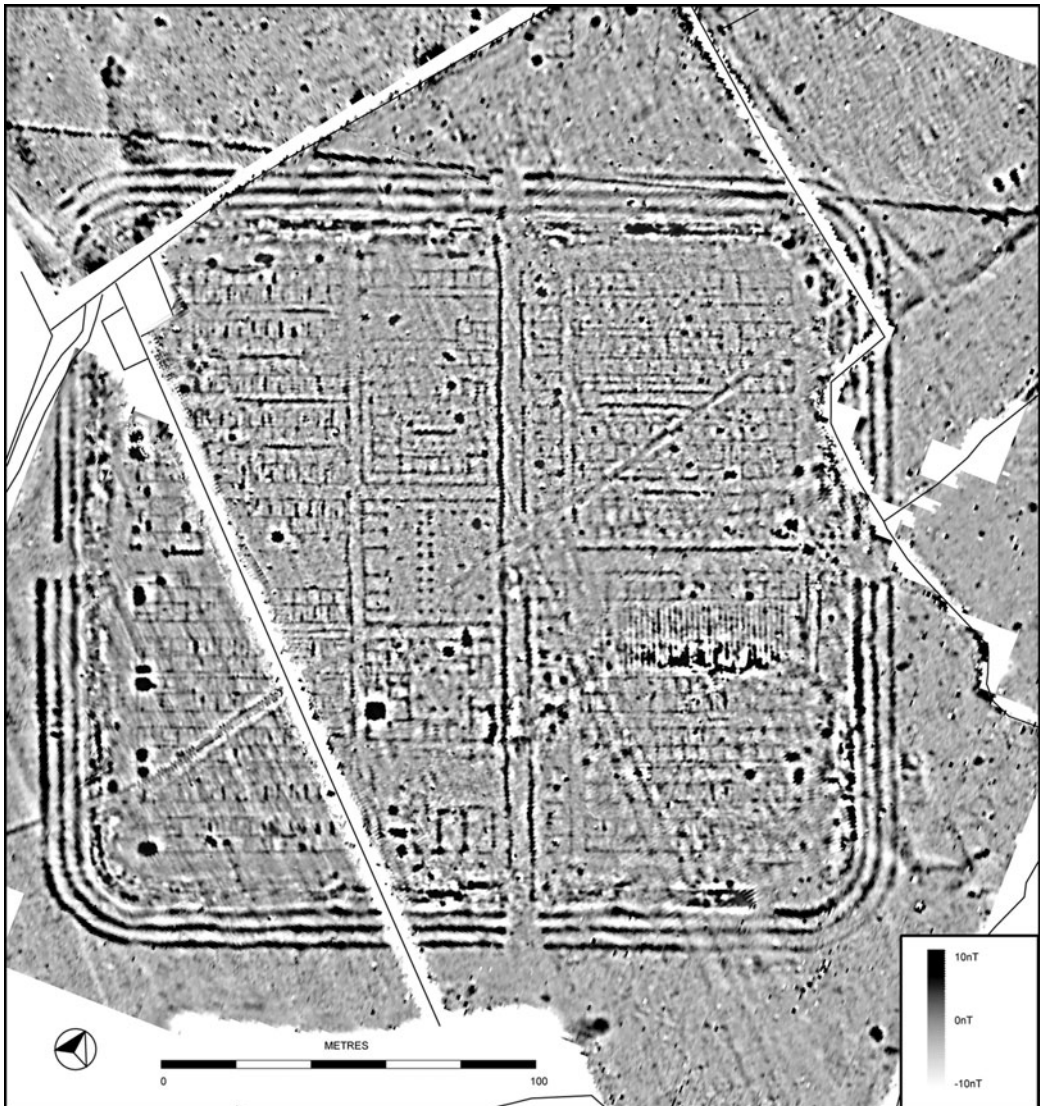


FIG. 1. High resolution gradiometer survey of the fort at Llanfor.
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the site. This was reducing the potential for the recovery of good quality magnetometer data from the site.⁵ It was decided, therefore, to re-survey the major features at high resolution (0.5 by 0.25 m sampling intensity) and to expand the survey area before the 2009 Eisteddfod took place. The surveys were carried out using a Bartington Grad 601-2 dual sensor fluxgate Gradiometer by the writer, Roland Flook and John Burman.

⁵ Hopewell 2010.

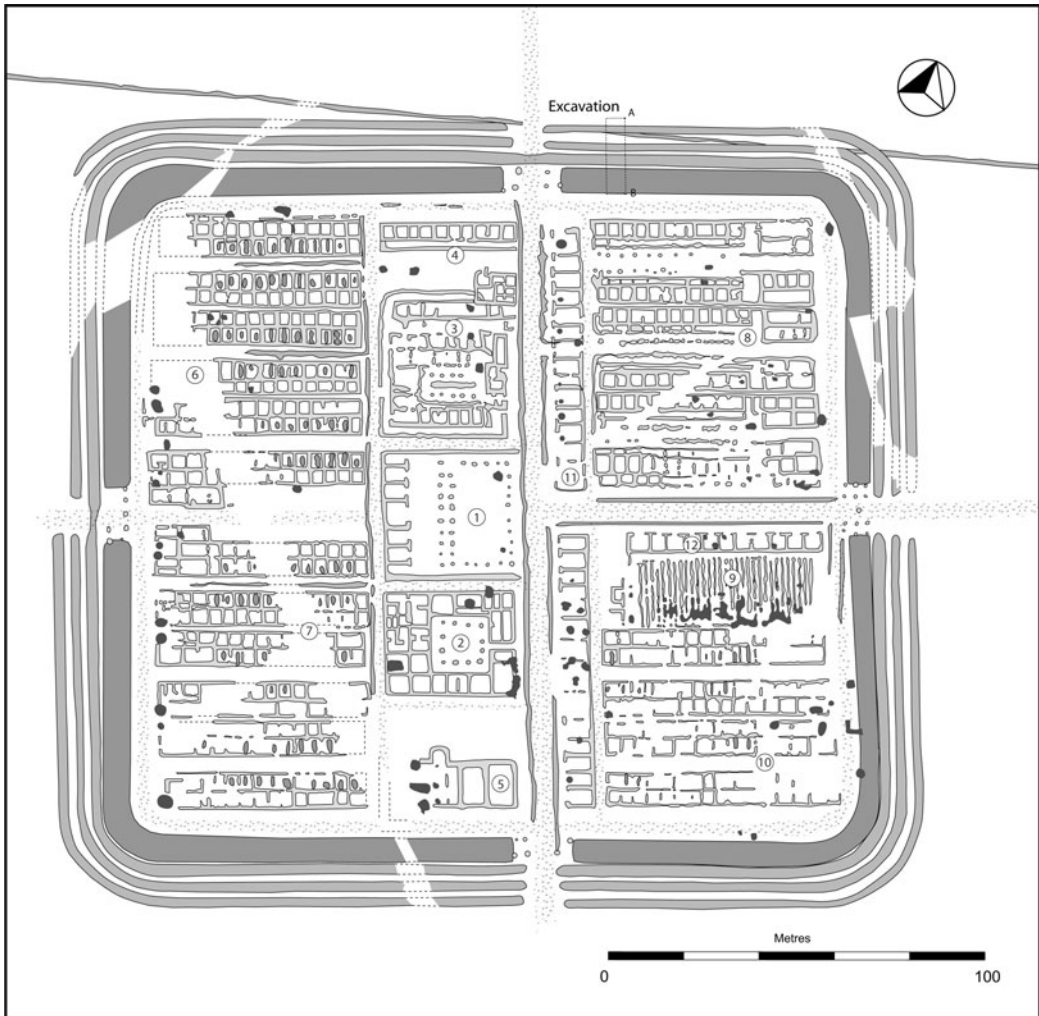


FIG. 2. High resolution gradiometer survey of the fort at Llanfor, interpretation plan.

THE HIGH RESOLUTION SURVEY OF THE FORT

The 0.5 by 0.25 m resolution survey revealed a greater level of detail than the 2002 survey, identifying the form and function of some of the less clearly-defined buildings. The data on the grey-scale plan (FIG. 1) have been processed using a high-pass filter in order to remove some of the large-scale variations caused by the underlying natural substrate. This has revealed an exceptionally detailed plan of the interior of the fort. The series of faint anomalies in the fort interior are clearly a product of the foundation trenches and post-holes of wooden buildings, along with internal drains and roads. There is little evidence of rebuilding, suggesting that the fort was very short-lived, and it is assumed that it was superseded by the auxiliary fort of Caer Gai in the mid-70s A.D. The results are transcribed on an interpretation plan (FIG. 2).

The fort is close to square with dimensions of 202 by 184 m across the ramparts and covers an area of 3.86 ha. The defences consist of three ditches and a turf rampart probably with twin-portalled gates. At the centre of the *latera praetorii* is the *principia* (1), with dimensions of 37.5 by 34.6 m. A colonnaded courtyard and cross-hall are defined by a series of large post-holes and there is a rear range of seven rooms. To the south of the *principia* is another colonnaded courtyard building (2) with dimensions of 34.9 by 28.0 m, which is best interpreted as the *praetorium*. It comprises two rows of small rooms in the rear range, with a single row of rooms on each of the other three sides. To the north of the *principia* is a complex building (3), with dimensions of 39.7 by 33.9 m, containing a small central courtyard surrounded by many small rooms and corridors, possibly serving as a *fabrica*, a hospital or a second *praetorium*. An open yard separates this from a rectangular building containing ten rooms with a corridor or drain along its southern side (4). At the south of the *latera praetorii* is a three-roomed building (5) set somewhat apart from its neighbours. The high resolution survey resolved details of this building, including what appears to be an apsidal end to the westernmost room and three strong thermoremanent anomalies along its western side. This building is best interpreted as a bath-house with three furnaces adjacent to the *caldarium*. The bath-house appears to be of a similar construction to the rest of the buildings in the fort and can, therefore, be assumed to have been a wooden as opposed to a stone construction. The relatively wide space left around it may have been an attempt to reduce fire risk.

The *retentura* is occupied by two blocks of six buildings with typical dimensions of 56 by 9 m (6 and 7) that were initially interpreted as barracks. Recent work on the second-century forts at Wallsend and South Shields and at several forts in the German provinces has, however, recognised a class of buildings interpreted as stable-barracks.⁶ These consist of one row of rooms designed to stable horses along with one row of conventional *contubernia*, housing the troopers. Officers' quarters would stand at one end as in a standard barrack building. The individual stable compartments each contained an elongated pit designed to catch horse urine. This arrangement is clearly visible in the buildings at Llanfor, with pits occurring in only one side, thus defining the stables. The stables were orientated in pairs across side-roads containing drains. The examples at Wallsend and South Shields contained nine *contubernia*. Unfortunately, the buildings at Llanfor are cut by a field boundary making it difficult to assess the number. The northernmost buildings are the only examples where the troopers' quarters are undisturbed and, although not entirely clear, there appear to be twelve stable-*contubernia* pairs here. The officers' quarters were the same width as the rest of the building and were subdivided into several rooms. Each building contained a large hearth in the rear corner, closest to the rampart, producing a characteristic double anomaly in the paired barracks. The two barracks adjacent to the *via decumana* had projections to one side of the officer's quarters. These were of different lengths and contained different internal arrangements, which suggests that they were not part of the original building design but were extensions that were added at a later date.

The northern quadrant of the *praetentura* contains a block of six barracks (8). These appear to be standard infantry barracks with dimensions of 59 by 9 m. They are laid out with single buildings at the north and south and two pairs of barracks in the centre. The officers' quarters are adjacent to the rampart and have dimensions of 18.6 by 9.0 m. They have one room arranged laterally at the inner end. The outer end is divided longitudinally into two, with further subdivisions producing a row of four rooms at the front and a larger room to the rear. In some cases, the rear room may also be subdivided. The men's accommodation is divided into eleven *contubernia*, each with a larger (3 by 4 m) *papilio* at the rear and a smaller (3 by 2 m) *arma* at the front. A well-defined line of post-holes shows that the *contubernia* opened onto a

⁶ Hodgson and Bidwell 2004, 131–6, fig. 1.

veranda. A small extension, consisting of a row of small rooms similar to *tabernae*, appears to have been built onto the rear (i.e. facing the *via praetoria*) of the southernmost barrack.

A large *horreum* with dimensions of 47 by 18 m, defined by parallel slots for the floor supports (9), stands to the south of the *via praetoria*. A substantial anomaly with high magnetic readings can be seen in the southern part, suggesting that it may have been damaged by fire. To the south of the granary are, what appear to be, four further stable-barracks (10), laid out with single buildings at the north and south and a pair in the centre. These buildings produced faint anomalies, but their general structure is visible and appears to be similar to the stable-barracks in the *retentura*. Each has 12 *contubernia* divided into equal-sized pairs of rooms, with occasional anomalies indicating pits in the stables along one side of the building. A narrow road running parallel to the *via principalis* divides the barracks from a further range of buildings (11). The high resolution survey showed these to comprise two blocks each containing a series of 14 rectangular rooms with dimensions of about 7 by 4 m, many containing small hearths, and each opening towards the *via principalis*. These appear to be *tabernae*, which are often found flanking the major streets in legionary fortresses. A further row of slightly smaller *tabernae* (12) was detected to the north of the granary, opening on to the *via praetoria*.

THE FORT ENVIRONS

A large area with maximum dimensions of 1040 by 830 m was surveyed around the fort. Parts of the earlier survey were also repeated at higher resolution. The results from the environs were not transcribed in the earlier paper and are, therefore, presented here. The results are shown in FIG. 3 with their interpretation presented in FIG. 4 (the numbering sequence continues from FIG. 2). The majority of post-Roman features are not transcribed on the interpretation plan.

The earliest features are two circular Bronze Age barrows (13 and 14), 26 m and 23 m in diameter. Crew suggests that there is another smaller barrow (15) with concentric ditches and a series of cremation pits midway between the two larger barrows.⁷ This is mostly based on aerial photographic evidence, although some small magnetic anomalies correspond to the possible pits and the inner ditch is just visible. Crew also identified a possible prehistoric pit alignment (16). Two additional small circular features with central anomalies were detected, which could also be interpreted as small barrows or roundhouses (17 and 18).

A range of Roman features extends across the survey. Most noticeable is a polygonal enclosure (19), possibly a supply base, storage or construction compound, measuring 147 by 101 m and enclosing 1.2 ha. The enclosure was heavily defended by a double-ditch and rampart. Three gateways, defended by four-posted gate towers, were set in the north-east side. Two rectangular features on the south side appear to have been timber-framed buildings, the easternmost exhibiting a series of parallel foundation trenches suggesting that it was a *horreum*.⁸ A faint anomaly in the north-western part of the enclosure appears to be a double-ditched feature with an entrance on the south-eastern side. This is tentatively interpreted as a small signal station or watch-tower, but is not necessarily Roman.

The road running from the *porta principalis sinistra* to the north of the fort is visible as a faint anomaly (20), flanked by hearths and rectangular buildings indicating the presence of a *vicus*. In some cases, particularly where later ridge and furrow is present, only the strong thermomagnetic anomalies from hearths are visible (21). Another linear series of hearths and faint anomalies (22) is located to the west of the road suggesting further settlement, but it is not aligned with any of the roads from the fort. It is also unlikely to have been on a bypass road, because there

⁷ Crew 1997, 17–18.

⁸ Crew 1997, 15–16.



FIG. 3. Gradiometer survey of the Llanfor military complex.
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FIG. 4. Gradiometer survey of the Llanfor military complex, interpretation plan.
 (Background map © Crown copyright Ordnance Survey. All rights reserved)

is a steep drop to the flood plain at the corner of the fort. The outer fort ditch was not completed at this point, presumably because of the natural slope, which would indicate that the topography has not changed significantly since the Roman period. A further road running north-east from the *porta praetoria* (23) is principally defined by a scattering of hearths to either side, although very faint rectangular anomalies indicate further *vicus* buildings.

The *vicus* at Llanfor is sparse compared with the examples recorded at other forts in North-West Wales, such as Cefn Caer, Pennal and Caerhun (*Canovium*),⁹ presumably reflecting the short period of its occupation. This has allowed a single phase of buildings to be seen as opposed to the palimpsest of multiple-phase remains at Caerhun which is difficult to interpret. The distribution of the hearths and the surviving wall lines at Llanfor indicates that there is some variation in the size and spacing of buildings. In some cases it is clear that there are conjoining rectangular buildings aligned with their narrow ends to the road, whereas elsewhere other buildings are more widely spaced and separate. It is informative to compare this situation with the various interpretations of the *vicus* buildings at Cefn Caer.¹⁰ Sommer reinterprets some of the geophysical anomalies at Cefn Caer as densely packed buildings, rather than overlapping multiple phases of a more widely spaced settlement. While it is likely that multiple phases were present, the arrangement of the buildings does resemble the layout of the conjoining structures at Llanfor. Further comparisons with Llanfor, however, suggest that Sommer's reinterpretation of the Cefn Caer evidence as a single phase of parallel buildings is less likely. Indeed, there was probably a range of building styles along with variation in density of layout at both sites, perhaps reflecting differences in the function of the buildings. It is also worth noting that Llanfor is presumed to have been a short-lived fort and the *vicus*, therefore, must have developed either concurrently with, or very soon after, the foundation of the fort. This supports Sommer's observation that camp-followers would accompany the troops into new territory and establish a *vicus* at the same time as the foundation of a fort.¹¹ The settlement at Llanfor is, however, relatively sparse and does not appear to contain larger 'semi-official buildings', such as a bath-house, a *mansio* or other courtyard buildings commonly found in later *vici* in the region. This would suggest that more complex *vici* were not established until the foundation of auxiliary forts during the consolidation phase of the occupation.

The road running beyond the north-east *vicus* appears to pass a sharp-cornered, rectangular, ditched-enclosure (24) with an entrance in the north-western side. Three sides of the enclosure were detected; the fourth presumably runs along the current hedge line. The entrance is probably centrally placed, so the dimensions of the enclosure can be estimated as 62 by 72 m. A series of post-holes (25) in the western corner define a rectangular building with dimensions of 7 by 13.5 m. Crew carried out a high resolution survey of the building and revealed six somewhat unevenly placed post-holes on each side, a centrally placed post at each of the narrow ends, and an internal post-hole perhaps indicating an internal division.¹² A pair of slightly-offset post-holes on the north-east side was interpreted as forming an entrance. The current survey added little to this, but there were indications that the internal division may incorporate two post-holes. Crew suggested an early medieval date for this enclosure, but its alignment and entrance on the road suggest that it may be contemporary with the fort. A trial excavation investigating the enclosure ditch and the building, recently carried out by Tudur Davies (Sheffield University), produced two AMS dates that suggest a first-century date.¹³

⁹ For Cefn Caer, Pennal, see Hopewell 2005, 227–33 and 254–9 and for Caerhun, *ibid.*, 242–6.

¹⁰ Hopewell, see note 9 and reinterpretation by Sommer 2006, 125–6.

¹¹ Sommer 1984, 497; 1989, 472.

¹² Crew 1997, 20.

¹³ Tudur Davies, *pers. comm.*

Two large temporary camps were detected to the north of the fort. The first (26) intersects the defences of the fort and the polygonal enclosure and is roughly rectangular with dimensions of 420 by 290 m (12.1 ha).¹⁴ Centrally placed entrances are visible in both the northern and southern sides. A further entrance is visible two-thirds of the way along the western side. Crew suggests that there was a second entrance on this side, close to the overlap with the polygonal enclosure, but a slightly clearer re-survey of the area suggests that this is not the case. This is also supported by the observation that there is no entrance in the opposing position on the eastern side. The camp ditch deviates around one of the Bronze Age barrows, suggesting that it was still a substantial mound when the camp was constructed. Excavation (see below) has shown that the camp predates the fort and it also appears to predate the polygonal enclosure, one side of which is aligned on the camp's defences. Llanfor I is overlapped at its northern end by a second camp (27).¹⁵ The survey did not reveal its full extent, but it is known to be 292 m wide and at least 240 m long. Davies and Jones assumed that it (Llanfor II) did not continue beyond the north end of the present field, because the ground rises steeply at this point. The line of the ditches, however, continues to the foot of the slope. The ditch appears to be less substantial than that of Llanfor I and is only intermittently visible as a narrow anomaly, which is lost as it runs up the slope on the western side. No entrances can be reliably traced. There are several breaks in the ditches, but most appear to be the result of modern disturbance and none are on opposing sides of the camp suggesting entrances. A centrally placed entrance on the south-east side would have been destroyed by the modern road. The lack of entrances in the other two sides suggests that the camp is of similar dimensions and orientation to Llanfor I and that the entrances lie further to the north-west, perhaps two-thirds of the way along the defences. Davies and Jones suggested that this enclosure was a construction camp for the later fort on account of its modest size, then thought to encompass an area of about 2 ha.¹⁶ This now seems unlikely, since the camp has an area of at least 7 ha and, if it has similar proportions to Llanfor I, could be around 12 ha.

A series of post-Roman roads and a raised footpath run towards Llanfor, while a medieval field-system with ridge and furrow lies between the fort and Llanfor village (not transcribed in FIG. 4).

EXCAVATION

An assessment trench was excavated across the northern defences of the fort in 2006. The topsoil was stripped from an area of 18.0 by 4.5 m using a mini-digger. The trench was then cleaned by hand and all features in a 1.5 m-wide strip on the western side were fully excavated (FIG. 5). The location of the excavation is shown on FIG. 2.

The natural subsoil (25) consisted of very loose coarse gravel probably of fluvioglacial origin, which contained frequent large cobbles at a depth of around 1.5 m. Overlying this was a very variable deposit (18) consisting of clean gravel and silty clays that clearly predated the Roman features and appeared to be entirely natural in origin. A small gully (28) and a buried horizon of bright orange-brown soil at the north of the site were presumed to be part of the same series of deposits. A periglacial origin seems to be most likely.

The earliest Roman feature was a roughly U-shaped slot (4), 1.0 m wide and 0.7 m deep, corresponding to the defences of the large marching camp. This relatively slight feature would not have represented much of an obstacle, but seems to be comparable to the ditches of other

¹⁴ Llanfor I: Davies and Jones 2006, 120–2.

¹⁵ Llanfor II: Davies and Jones 2006, 120–2.

¹⁶ Davies and Jones 2006, 6 and 57.

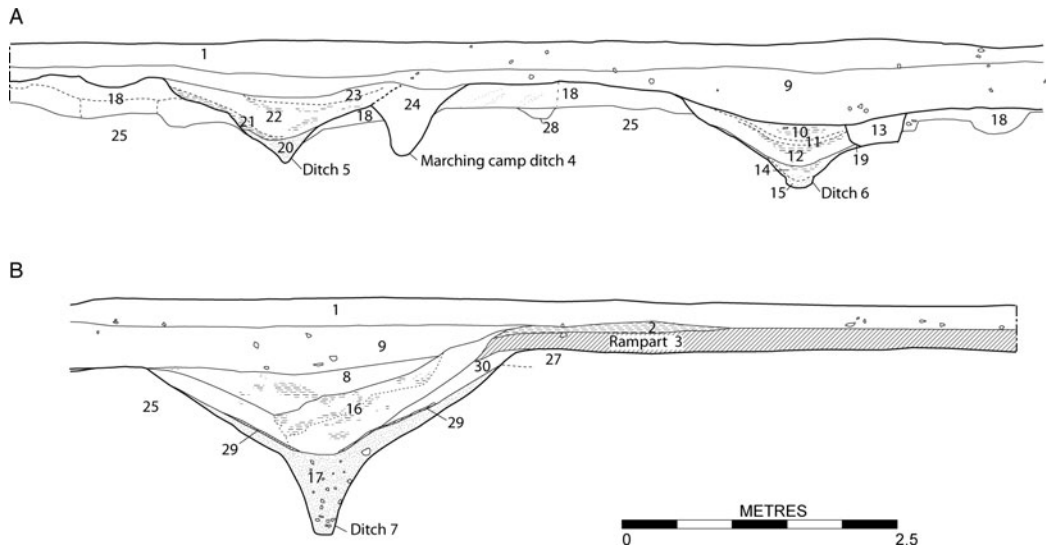


FIG. 5. South-west-facing section through the ditches and rampart of the fort at Llanfor.

camp in Wales and the Marches.¹⁷ This was almost certainly truncated by the outer ditch (5) of the fort. The relationship was not entirely clear because the upper fills of both features were almost indistinguishable from one another.

All three fort ditches were excavated. The innermost was found to be a major defensive ditch, while the outer two were smaller. There was a 2.0 m gap between the inner and central ditches and a 2.6 m gap between the outer two. The inner ditch (7) was 3.5 m wide and 1.7 m deep (from the top of the subsoil/buried soil). The profile of the upper 1.0 m was in the form of a shallow V. The lower part was steep-sided and flat-bottomed with a cleaning slot intermittently present. The lower 0.7 m was filled with gravel (17). It quickly became obvious, as the excavation proceeded, that any steep-sided cut into the coarse gravel subsoil (25) would have been inherently unstable. The gravel contains very little silt or clay and although well packed, was very loose. It appears that attempts to keep the lower part of the ditch open were abandoned. This section was allowed to fill with gravel (17) and the ditch was subsequently maintained at a depth of 1 m with a shallow profile. Four amphora sherds and two abraded coarseware sherds were recovered from the gravel. A thin layer of red clay (29) was found to coat much of the gravel sides of the re-profiled ditch. This could not have been a natural deposit, because the subsoil drains very freely and there would have been no accumulation of water in the ditch. It seems likely that the clay had been deliberately added, as a lining, in an attempt to halt the erosion of the gravel. This erosion seems to have made the ditch significantly wider than its original cut and clay from the edge of the rampart (3 and 27) had begun to slump into its northern side. The ditch was subsequently backfilled with a dump of mixed clays, soils and turves (16 and perhaps 8), that was probably derived from the levelling of the ramparts when the fort was abandoned. A single sherd of coarseware was recovered from this context (16).

The middle ditch (6) was 2.0 m wide and 0.9 m deep, with a shallow V profile and a pronounced ankle-breaker or cleaning slot. The lower 0.2 m of the ditch was filled with gravel (14 and 15) eroded from the sides, while the upper part contained mixed clay (10–12) that

¹⁷ Davies and Jones 2006, 25–7.

appears to represent backfilling with rampart material. A single sherd of coarseware was recovered from this context. The fills of the north side of the ditch were cut by a square-sided linear feature (13) of unknown function that did not extend across the width of the excavation trench. The outer ditch (5) was of a similar scale to the middle ditch being 2.4 m wide and 0.8 m deep with a shallow V-shaped profile. The lower 0.25 m was filled with gravel (20) eroded from the sides and the upper part with a dump of mixed clays and silts (22 and 23), again representing backfilling with material from the ramparts.

A layer of hard red clay (3), 0.2 m thick, extended across the northern part of the excavated area for some 4.5 m. This was, in places, sealed by a thin layer (maximum 0.15 m deep) of hard grey clay (2). These deposits presumably represented the base of the rampart. The rampart ran up to, and appeared to have begun to subside into, the edge of the inner ditch (7). This, as noted above, was probably a result of a widening of the ditch owing to the erosion of its sides. A 1.5 m-wide strip of this hard clay was excavated revealing a bright orange/brown buried soil. There were no signs of post-holes, which would suggest that the rampart had been revetted with turf.

The pottery was examined by Dr Peter Webster (Cardiff University), but was found to be insufficient to produce a definitive date. There were four Dressel 20 South Spanish olive oil amphora sherds which were common throughout the first and second centuries. The coarseware was in poor condition. The sherd from context 16 might be a copy of a samian form 37 bowl, which would indicate a Flavian or later date.

THE PLAN OF THE FORT AT LLANFOR AND ITS SIGNIFICANCE FOR ROMAN MILITARY STUDIES
By Nick Hodgson

DATE

Although the fort at Llanfor has not been closely dated by excavated material, it was almost certainly a campaign base founded in the 70s A.D. As noted above, an early Flavian date is supported by a small amount of pottery from the site and the fact that Llanfor is apparently a predecessor to the fort at Caer Gai, whose foundation is dated to *c.* A.D. 75–80. It might be argued that Llanfor could belong to the pre-60 phase of campaigning in North Wales (discontinued after the Boudiccan revolt and only resumed in the 70s), but this seems unlikely in view of the parallels for the fort plan that will be discussed below. Llanfor — because of its short-lived nature and minimal alteration — offers an astonishingly clear plan with rich possibilities for interpretation.

TYPE OF GARRISON

The number and disposition of barracks as a whole does not fit any known type of single auxiliary unit. The 12 barracks in the *retentura* of the fort (6 and 7) are clearly ‘stable-barracks’, each accommodating a troop (*turma*) of 30 or so cavalrymen and their mounts, in what is now recognised as the standard form of cavalry accommodation during the Principate.¹⁸ Each of the buildings can be resolved into 12 *contubernia* and a decurion’s house: the regular occurrence of double rooms each with a pit located in the front room ends after 12 *contubernium* spaces. The decurions’ houses would also have contained urine-pits, but these would not normally

¹⁸ Hodgson and Bidwell 2004; Hodgson 2003, 37–90.

continue the regular sequence seen in the *contubernia*. The survey did not identify many precisely in the officers' houses, but there are plenty of possibilities.

The barrack immediately south of the *via decumana* appears to have had a projection on its north side. This projection ends exactly at the point where the 12 *contubernia* join the officer's house, which probably indicates that it was some form of extension to the decurion's quarters. It should be noted that this extension projects from the rear of the barrack, which fronts onto the street shared with its neighbour to the south. It is not, therefore, the projecting officer's house of an L-shaped barrack in the conventional sense. The barrack on the north side of the *via decumana* includes a similar, but somewhat longer extension.

The presence of 12 *contubernia* deserves comment: it is higher than the number in recently excavated stable-barracks in Britain, such as the Elginhaugh barracks which have 10 and Wallsend and South Shields where there are 9. The last two forts, however, are much later in date than Llanfor and provided accommodation for mixed cohorts, which may have had smaller centuries than a first-century A.D. *ala* (the kind of unit probably at Llanfor). Cavalry barracks with 12 *contubernia* have been proposed at Echzell (Germania Superior) and with 13 at Rottweil III (Germania Superior).¹⁹ The recently published barracks of an *ala milliaria* at Heidenheim (Raetia) also have 13 *contubernia*.²⁰

A further four barracks (10) are to be found in the right (south) *praetentura*. These do not show as clearly as the others on the survey, but in places the elongated pits in the front rooms, which identify stable-barracks, can be seen (particularly in the building immediately south of the granary; two more show in neighbouring rooms in the next-but-one building to the south). These four barracks can be reconstructed as having the same number of *contubernia* as those in the *retentura* and appear to be of the same length. Like the barracks in the *retentura*, the officers' houses do not project and they lack frontal colonnades. The *contubernia* are clearly divided equally into front and back parts, as are those in the *retentura* and invariably in other cavalry barracks elsewhere. It seems probable that these four complement the other 12 and, hence, provide the 16 stable-barracks necessary to accommodate a quingenary ('500 strong') *ala*, which contained 16 *turmae*.

That leaves six barrack blocks (8) in the left (north) *praetentura*. These are some 3–4 m longer than the cavalry barracks and of quite different plan, with projecting officers' houses (which are much longer in proportion to the length of the barrack) and frontal colonnades. The *contubernia* each have a much smaller front room (*arma*) than back room (*papilio*), which is generally the case in infantry barracks. This would indicate that six centuries of infantry are represented. The barracks are short by legionary standards, but their 59 m length is paralleled, for example, at the legionary fortress at Exeter; conversely they are extremely long by the standards of auxiliary infantry barracks. This might well suggest that a legionary cohort was based at Llanfor. Legionary barracks frequently have more than 10 *contubernia* (12 at Exeter); those at Llanfor have 11. There are other signs in the Llanfor fort plan of a legionary presence, such as the large number of rooms in the rear range of the *principia* (three on each side of the *aedes* as opposed to the two in standard auxiliary *principia* plans) and the *tabernae* lining the *via principalis*, both of which are characteristic of legionary fortresses.

The most straightforward interpretation of the plan, therefore, suggests a combined force consisting of some 500 auxiliary cavalry (a complete *ala*) and some 480 legionary infantry (a cohort), accommodated in winter quarters during the subjugation of North Wales, which was resumed under Vespasian after c. A.D. 71.

¹⁹ Sommer 1995, 161.

²⁰ Scholz 2009.

PARALLELS AND SIGNIFICANCE OF FORT-TYPE

At first sight this combination of units and the large size (3.86 ha) of Llanfor might seem striking and unusual, but J.L. Davies has recently demonstrated a recurrent use of large forts in Wales, northern England and Scotland — which fall into three groups of about 3.2, 3.8 and 4.5 ha — with the examples being predominantly of the Flavian period.²¹ He suggests that these represent campaign forts, accommodating combined forces of heavy infantry and cavalry. The plan of Llanfor indeed discloses precisely such a formidable combination of legionaries and auxiliary horsemen. The accommodation provided for the auxiliaries is appropriate for a single and whole unit, and although — largely on the basis of the Vindolanda tablets — division of auxiliary units between forts has come to be regarded as normal in this period, Llanfor suggests that this was not an invariable practice. At contemporary Carlisle, too, there is evidence for the presence of a complete *ala*, as indicated by writing-tablets listing supplies distributed to all 16 of its constituent *turmae*.²²

Within the groups of Flavian campaign forts which Davies defines, it is possible to find elements of planning that recall what is seen at Llanfor. Excavations within the fort of A.D. 72–3 at Carlisle — which is square, like Llanfor, and covers 3.2 ha — revealed stores or workshops which possibly represent the *tabernae* of the Llanfor plan, lining what may be the *via principalis* and separating the ends of barracks from that street.²³ At Carlisle, however, there is no street separating these stores/workshops from the barracks. Such a street running parallel to the *via principalis* shows in the aerial photographs of the smaller (3.48 ha) of the two phases of fort at Dalswinton, and defines a narrow building plot similar to that occupied by *tabernae* at Llanfor.²⁴ The two parallel parch marks at Dalswinton have previously been regarded as being of different phases, but the close similarity to the Llanfor plan shows that they are almost certainly contemporary. Note also the exact comparison of the proportions and divisions of the barrack building-plots at the two sites. Moving beyond Britain, the plan of Rottweil III provides a striking parallel for the occurrence of two courtyard buildings flanking the *principia* in the central range (identified in the Llanfor survey as the *praetorium* and a *fabrica*, hospital or second *praetorium*). Rottweil III, whose plan is incompletely known, has been interpreted as accommodating a legionary detachment (perhaps brigaded with auxiliaries), because of the great length (70 m) and number of *contubernia* (13) of its excavated barracks, but it has also been suggested these might really be for cavalry.²⁵ Dating to shortly after A.D. 72/3, Rottweil III is almost certainly contemporary with Llanfor and at 3.50 ha is of broadly comparable size.²⁶

That Flavian forts of this order of size in northern Britain could contain legionaries and cavalry brigaded together has long been implied by the finds of military equipment from the Flavian II fort at Newstead (5.80 ha).²⁷ Another example can be found in the 3 ha fort of Roecliffe (North Yorks.), held briefly in the A.D. 70s, where military equipment recovered from outside the fort suggests a mixed force of legionaries and auxiliary cavalry.²⁸ The same combination probably occurred at Carlisle, where the fort was too large to accommodate just the attested *ala* and, as at Llanfor, the additional troops were very likely legionaries. Although the recent excavation report concludes that ‘it remains unclear whether or not legionary troops were in residence in

²¹ Davies 2009.

²² Tomlin 1998.

²³ Zant 2009, 420.

²⁴ Frere and St Joseph 1983, 123–6 and photograph 74.

²⁵ Sommer 1995, 161.

²⁶ Planck 1975, Teil I, 41–96 and Beilage 4.

²⁷ Manning 2006.

²⁸ Bishop 2005.

Carlisle during the Flavian period', their presence is certainly implied by the military equipment listed in that report.²⁹ As to whether the two soldiers of Legion XX, who exchanged a promissory note at Carlisle in A.D. 83,³⁰ were stationed there (as opposed to building), or the M. Iulius Martialis, to whom a letter was addressed 'at either Newstead or Carlisle' in the 80s or 90s,³¹ was a legionary, cannot be proven. However, these documents in combination with others have allowed a strong case to be made for a legionary presence along with the *ala* at Carlisle.³²

This recurrent Flavian pattern of combined forces of legionary infantry and auxiliary cavalry suggests that these types of troops were used to being accommodated together. If the identification of baths in the central range at Llanfor is correct, this represents one of the earliest known examples of a bath-house at an auxiliary fort. The identification of an *ala* at Llanfor is, therefore, interesting in this connection, for Paul Bidwell has suggested that the earliest occurrences of bath-houses at auxiliary forts, from the 70s onwards, tend to be at cavalry bases.³³ The frequent accommodation of cavalymen with legionaries, whose fortresses had contained baths for generations, might go some way to explaining why cavalry units were the first amongst auxiliaries to adopt the custom.

Campaign forts of the kind revealed at Carlisle and Llanfor can be seen as a new Flavian type replacing the so-called 'vexillation fortresses' of around 10 ha that had characterised the Neronian period in Lowland Britain.³⁴ It is notable that during the Flavian advance into Wales and the North, and during the subsequent invasion of Scotland, there are no clear instances of the 'vexillation' or 'half-legionary' fortresses. Rather, small forts (often less than 2 ha in area) co-exist with forts of an intermediate size (between 3 and 6 ha) as discussed by Davies.³⁵ Of the latter, Llanfor and Caersws I provide examples in Wales, Doncaster, Castleford, Roecliffe, Carlisle, Blennerhasset and Binchester in the North, and at a slightly later date, Newstead, Dalswinton and Cardean in Scotland. It has been shown that they typically housed mixed forces of legionary infantry and auxiliary cavalry. The transition to this smaller type of campaign base calls for an explanation. It is possible that there was less nervousness about splitting the army into smaller campaign groups than there had been in the earlier stages of the conquest of Britain. Rome was confronted with less politically centralised and cohesive societies in Wales and the North: in these areas a more dispersed pattern of resistance might have forced the Roman army into an arrangement of more and smaller bases — a point originally developed by Martin Millett.³⁶ The forces concentrated at a 'campaign fort' like Llanfor would seem to be part of a transitional stage between the initial penetration of the area by large armies (represented by marching camps) and the final consolidated occupation (represented by small forts). This fort-type was short-lived, for by the second century and with the end of active campaigning (except in Scotland) forts of the size of Llanfor became much rarer and the process of dispersal into smaller forts (exemplified at an early stage by the replacement of Llanfor with Caer Gai in the mid- to late 70s) was completed. Only on the northern frontier, where military problems continued, does the fort-type survive into later times, as at Newstead in the period c. A.D. 160–80, where a detachment of Legion XX was probably outposted with the *ala Vocontiorum* in the 5.9 ha fort.³⁷

²⁹ Zant 2009, 440 and list at 437–9.

³⁰ Caruana 1992, 69–70.

³¹ Hassall and Tomlin 1988, 496, no. 31.

³² Tomlin 1992, 150–3.

³³ Bidwell 2009.

³⁴ For examples and discussion, see Frere and St Joseph 1974 and Bishop and Freeman 1993. See also the discussion in Bidwell and Hodgson 2009, 35–6.

³⁵ Davies 2009.

³⁶ Millett 1990, ch. 3, especially 42–55.

³⁷ Manning 2006.

CONCLUSION

The successive use of land at Llanfor by two large temporary camps and then a fort indicates that the site was of great strategic importance to the Roman army. Two other temporary camps exist near by: Penrhos to the north-east and Pen Plaenau in the uplands to the east. Both are larger than the camps at Llanfor and Davies and Jones suggest that they mark the route of a possible pre-Flavian campaign along with Uffington I and Whittington further to the east.³⁸ If this is correct, it leaves the camps at Llanfor isolated from other contemporary camps and leaves no direct evidence of the campaign route with which they were associated. Llanfor's position in the upper Dee valley is, however, on a direct route from the Flavian legionary base at Chester (*Deva*) about 55 km to the north-east into the heart of the uplands of North-West Wales. It should be noted that Roman road RR66a³⁹ appears to follow a direct line between Llanfor and Chester as opposed to following the somewhat indirect natural corridor of the Dee valley. This road may have been constructed after the early A.D. 70s, but the general access route would probably have been known by this time. The upper valley then provides good access to routes into upland areas of southern Gwynedd.

Given the probable early Flavian date of the fort at Llanfor, the military structures may well mark several phases of activity during the conquest of North-West Wales in the 70s. The temporary camps would have functioned as short-term accommodation for large bodies of troops moving through the area during the initial campaigns. The smaller but still quite substantial garrison of the fort would presumably have served a somewhat different function and could have been used for quelling pockets of continuing resistance and providing stability across the newly-conquered territory. The presence of an undefended *vicus* and possible extramural building to the east suggests that threat levels were, however, not particularly high for at least part of the life of the fort. Presumably the establishment of the network of roads and auxiliary forts that characterised the next stage of the occupation would have become an urgent priority once the territory had been subdued, at least in part. It seems likely that the fort at Llanfor would have had a role in this process. The transition from newly-conquered territory to stable, consolidated occupation would require a strong military presence, an administrative centre and the importation of materials and manpower.

Presumably the establishment of the nearby auxiliary fort at Caer Gai quickly made the large fort at Llanfor redundant and it would then have been abandoned. Caersws I, the closest parallel to Llanfor in Wales, also stands at the edge of the uplands on a route from a legionary base (Wroxeter) and may have performed a similar function.

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Gwynedd Archaeological Trust (D.H.)
dhopewell@heneb.co.uk

TWM Archaeology (N.H.)
nick.hodgson@twmuseums.org.uk

³⁸ Davies and Jones 2006, 57.

³⁹ Margary 1973, 346–7 and Burnham and Davies 2010, 321 and fig. 4.3.

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