

FIVE HUNDRED YEARS OF CONTINUITY AND CHANGE

EXCAVATION OF IRON AGE AND ROMANO-BRITISH SITES IN UPPER NIDDERDALE

James Brightman




UPPER
NIDDERDALE
Landscape Partnership


LOTTERY FUNDED

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EXCAVATION OF IRON AGE AND ROMANO-
BRITISH SITES IN UPPER NIDDERDALE

written by

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with a contribution from

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on behalf of

the Upper Nidderdale Landscape Partnership

and

the Iron Age Nidderdale Community Archaeology Group

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Front Cover: The view south-east across the excavations at Colt
Plain North and to Gouthwaite Reservoir beyond

Rear Cover: Aerial view looking north across the excavations at the en-
closure complex of Knott's Gill (© R. Stroud)

C ONTENTS

Contents.....	i
List of Figures.....	iii
Acknowledgements.....	v
1. INTRODUCTION	
Project Background.....	1
Geology and Site Locations.....	3
2. METHOD	4
3. KNOTT’S GILL	
Location and Layout of the Site.....	5
Trench 1.....	9
Trench 2.....	12
Trench 3.....	14
4. BLAYSHAW GILL	
Location and Layout of the Site.....	15
Trench 1.....	18
Trench 2.....	20
Trench 3.....	21
5. COLT PLAIN	
Location and Layout of the Site.....	23
Colt Plain South.....	27
Trench 1.....	27
Trench 2.....	30
Trench 3.....	33
Trench 4.....	33
Colt Plain North.....	34
Trench 1.....	34
Trench 2.....	39
6. RADIOCARBON DATING	
Method.....	42
Results.....	42
Knott’s Gill.....	42
Blayshaw Gill.....	44
Colt Plain South.....	45
Colt Plain North.....	45

7. SMALL FINDS.....	46
8. PALAEOENVIRONMENTAL ASSESSMENT	
<i>Lorne Elliott Archaeological Services Durham University</i>	
Introduction.....	47
Method.....	47
Knott's Gill.....	47
Blayshaw Gill.....	48
Colt Plain South.....	48
Colt Plain North.....	49
9. THE NIDDERDALE SITES IN CONTEXT	
Location and Distribution.....	50
Form, Sequence and Date at Knott's Gill.....	50
Enclosure and Agricultural Practice at Blayshaw Gill.....	55
Colt Plain and Coaxial Field Systems.....	56
Roundhouse Forms.....	59
The Future.....	61
Bibliography.....	63
Appendix 1 Palaeoenvironmental Assessment Tables.....	65
Appendix 2 Site Matrices.....	69

L IST OF FIGURES

Figure 1 Looking north up Nidderdale across a boulder marked with prehistoric cup-and-ring rock markings north of the Colt Plain site.....	1
Figure 2 Location of excavation sites.....	2
Figure 3 Overall plan of the Knott's Gill complex showing the location of all main features and the excavation trenches.....	6
Figure 4 Section of the wall of roundhouse feature B showing some of the surviving orthostat wall facing.....	7
Figure 5 Plan of Knott's Gill Trench 1 showing all features.....	8
Figure 6 Looking west across Trench 1.....	9
Figure 7 Section through the stone footings of the Phase 2 wall.....	10
Figure 8 The clay-lined pit in the roundhouse interior.....	10
Figure 9 Sondage through the 'yard' surfaces in the eastern end of the trench.....	11
Figure 10 Plan and section of Trench 2.....	12
Figure 11 Facing south-east across Trench 2 and looking along the line of the rough facing stones defining the internal face of the enclosure wall.....	13
Figure 12 Angled top-down shot of Trench 3 with the walls defining either side of the opening at the top and bottom-centre of shot.....	14
Figure 13 Looking east along the best-preserved section of the enclosure bank prior to excavation.....	15
Figure 14 Blayshaw Gill site plan showing extent of enclosure and location of trenches.....	16
Figure 15 Blayshaw Gill Trench 1 plan and sections.....	17
Figure 16 Looking east across Trench 1 after initial cleaning.....	18
Figure 17 Section through the clay-lined hearth set against the rear of the enclosure wall.....	19
Figure 18 Blayshaw Gill Trench 2 plan and section.....	20
Figure 19 Looking south across Trench 2.....	20
Figure 20 Blayshaw Gill Trench 3 plan and section.....	21
Figure 21 Looking south-east across the south-west end of Trench 3.....	22
Figure 22 Facing east from the top of the rear enclosure bank of the Colt Plain South enclosure.....	23
Figure 23 Looking south across the small fold in the corner of the Colt Plain North enclosure.....	24
Figure 24 Looking north up the valley across two of the cup-marked panels to the north of the Colt Plain North complex.....	24
Figure 25 Overall plan of Colt Plain complex.....	25
Figure 26 Plan of Colt Plain South site showing location of all features and excavation trenches.....	26
Figure 27 Overview of the roundhouse in Trench 1.....	28
Figure 28 Colt Plain South Trench 1 plan and sections.....	29
Figure 29 Box-section through the stakehole.....	30
Figure 30 View across Trench 2 and looking down the line of the coaxial boundary.....	31
Figure 31 Colt Plain South Trench 2 plan.....	31
Figure 32 Colt Plain South Trench 3 plan and section.....	32
Figure 33 Looking south across Trench 3 after excavation.....	33
Figure 34 Looking east-north-east across Trench 4 showing the cup-marked boulder.....	34
Figure 35 Colt Plain North site plan showing features and trench locations.....	35
Figure 36 Colt Plain North Trench 1 plan.....	36

Figure 37 Looking across Trench 1 showing the excavated roundhouse.....	38
Figure 38 Stone-lined hearth pit after excavation of the fill.....	39
Figure 39 Colt Plain North Trench 2 plan and section.....	40
Figure 40 Looking along the line of the stone-revetted lynchet as Trench 2 is opened.....	41
Figure 41 Depth of accumulated sediment behind the revetted lynchet in Trench 2.....	41
Figure 42 Probability distributions of dates from the Knott's Gill site.....	44
Figure 43 Probability distributions of dates from the Blayshaw Gill site.....	44
Figure 44 Probability distributions of dates from the Colt Plain South probable stakehole.....	45
Figure 45 Probability distributions of dates from the Colt Plain North hearth.....	45
Figure 46 Two fragments of Black-burnished ware pottery from Blayshaw Gill.....	46
Figure 47 View across the stone-walled field system at Fortress Dike on Kirkby Malzeard Moor.....	51
Figure 48 Plan of the Knott's Gill complex.....	52
Figure 49 Aerial view looking north-north-east over the excavations.....	53
Figure 50 Volunteers begin to expose the paving in front of the roundhouse in Trench 1.....	54
Figure 51 A 'gateway' between two parts of a coaxial field system in Swaledale.....	57
Figure 52 Excavations underway within the roundhouse at Colt Plain North.....	58
Figure 53 The paved front edge of the Colt Plain North roundhouse interior with the orthostats and fallen stone door jamb to the left of shot.....	60

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1. INTRODUCTION

Scattered among the cotton grass and half-hidden in the peaty turf of the gritstone moors and high pastures of the Pennines are the remains of ancient farms. Recognised for centuries as the dwellings and fields of our ancestors, they have attracted the interests of antiquarians, archaeologists and idle passers-by, but most remain uninvestigated and poorly understood. For many of these sites, we can only start to glean an understanding of the people who lived there when we start to conceive of them as parts of larger landscapes: interlinked enclosures and folds for the corralling of livestock; field systems that stretch for kilometres beneath the walls and trappings of modern agriculture; gatherings of roundhouses linked

by trackways and banks of stone. The families who farmed the land we now view as marginal were our forebears, and this volume recounts how local volunteers set out to tell their story.

PROJECT BACKGROUND

The excavation work reported on in this volume has been jointly funded by the Heritage Lottery-funded *Upper Nidderdale Landscape Partnership* (under the *Our Farm Heritage* strand) managed by the Nidderdale Area of Outstanding Natural Beauty (NAONB) and the Heritage Lottery-funded *Prehistoric Nidderdale* project run by the Iron Age (Nidderdale)

Figure 1 Looking north up Nidderdale across a boulder marked with prehistoric cup-and-ring rock markings north of the Colt Plain site



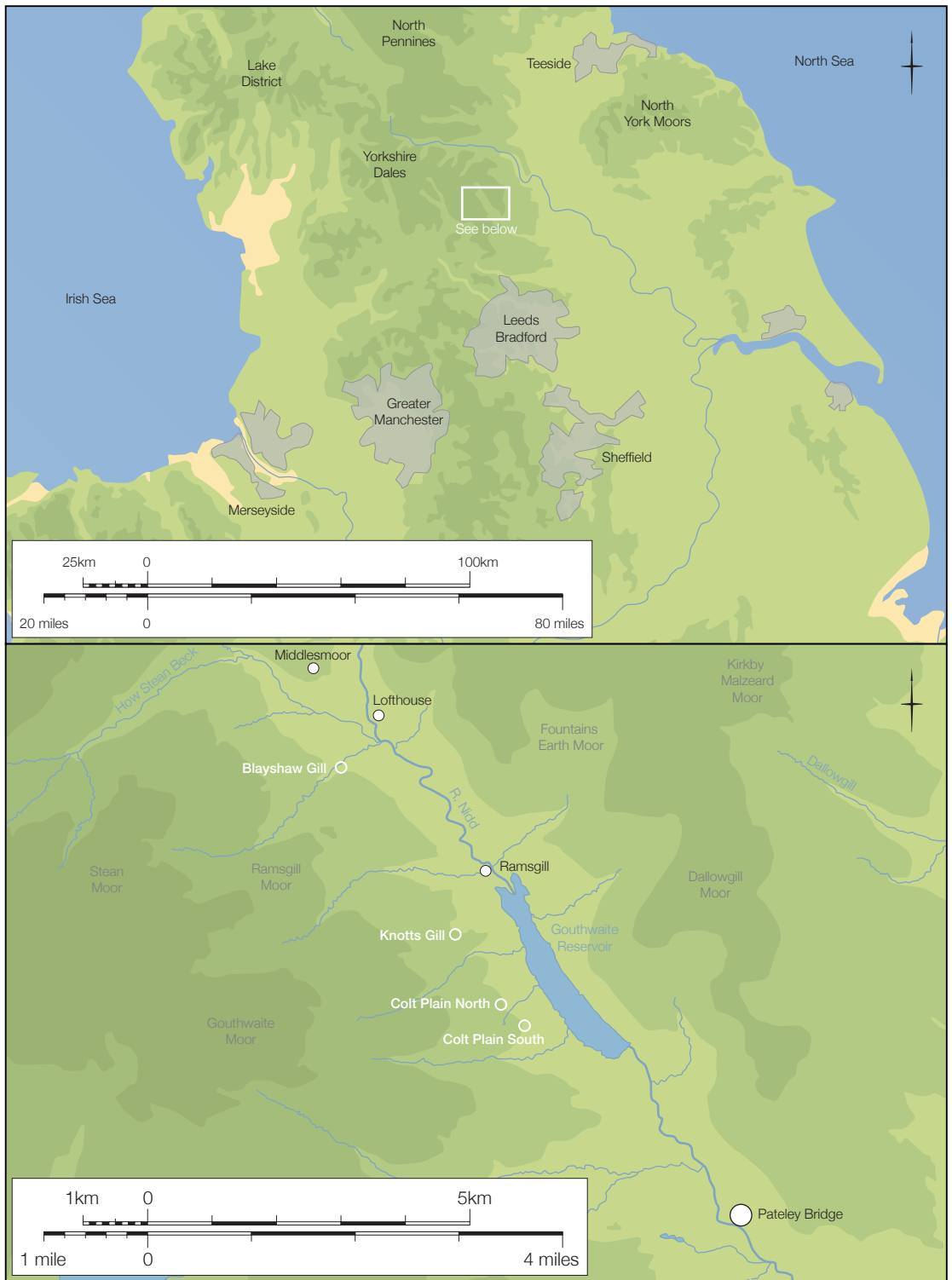


Figure 2 Location of excavation sites

(IAN) Community Archaeology Group. The four excavations on prehistoric sites on the western flanks of Upper Nidderdale were undertaken by volunteers with professional archaeological supervision from Solstice Heritage.

Whilst some of the sites had been previously identified, the targeted excavation reported on here follows on the heels of extensive survey work that formed the initial phase of the *Our Farm Heritage* project. This work saw teams of trained volunteers from the IAN Community Archaeology Group, along with other community volunteers, undertaking walk-over survey on landholdings across over 1000 hectares of land in Upper Nidderdale, adding a substantial amount of new information to our understanding of, in particular, the marginal areas of high pasture and moorland. From this survey work a series of key sites were identified, representing examples of significant settlements or other archaeological sites. The selected targets for further excavation were principally those suspected of being prehistoric or Romano-British in date, given that very little definitive or detailed evidence from pre-medieval archaeological sites is known in Nidderdale. Going some way to both redress this, as well as hopefully providing impetus for future research, has been a key aim of this work from the start.

GEOLOGY AND SITE LOCATIONS

The Millstone Grit series, which caps only the high fells of many of the other Pennine dales, forms the valley sides of Nidderdale, with the interbedded Yoredale sequence of limestones, sandstones and cherts only revealed in certain parts of the base of the dale, such as in the dramatically cut How Stean Gorge west of Middlesmoor. The three sites that formed the focus of this project all lie on the interbedded sandstones of the Millstone Grit. Indeed, many of the structures and walls of the settlements and their surrounding field systems make use of both the scattered sandstone boulders and the naturally outcropping edges from which they derive.

The four excavations were spread across three separate sites: Blayshaw Gill, Knott's Gill and Colt Plain, which for the purposes of this report is split between the Colt Plain North and Colt Plain South areas. Detailed locations and site descriptions are given in the relevant chapters below, but in general terms, all three sites are ranged along the western side of Upper Nidderdale at or around the 230-270 m contours.

All the features described in this book are on private land, and with the exception of Colt Plain North which is on open access land as defined by the *Countryside and Rights of Way Act 2000*, express permission of the farmers is needed to visit. All of the sites, including Colt Plain North, are on working farms with hazards of both moving machinery and animals. All excavation trenches were back-filled and reinstated following the conclusion of fieldwork.

2. METHOD

The excavations were undertaken over four separate weeks: Blayshaw Gill in April 2017, Knott's Gill in June 2017, Colt Plain North in August 2017 and Colt Plain South in October 2017. Conditions were changeable but generally good. The bedrock geology of the Nidderdale uplands meant that bowled depressions and features retained water, but this was infrequent and there is not considered to be any reason that the results presented here were prejudiced by conditions in any way.

All de-turfing and excavation was undertaken by hand, with all turfs removed and stacked to prevent degradation prior to reinstatement at the end of the excavation. All excavation was undertaken with hand tools suitable to the nature of the deposit and in accordance with standard stratigraphic principles to allow use of single context planning and recording.

All individual features were cleaned, delimited and excavated by hand prior to recording. Written recording was based on *pro forma* sheets creating a primary written record and was accompanied by a site diary giving a summary of each day's work including overall interpretive observations. The drawn record comprised plan and section/profile/elevation illustrations of all features at a suitable scale depending on the complexity and significance of the remains. The drawn and written records were accompanied and augmented by a full photographic record compiled in high-resolution digital format. Survey control was established with a site datum correct to OSGB National Grid and Ordnance Datum, located using a survey-grade GPS with an accuracy of ± 10 mm. A control network from the site datum was established

with a total station, from which all trenches and features were located and tied to the National Grid. This same control network was used for survey of the field systems and enclosures associated with the sites to ensure consistency of recording.

For all excavations other than Blayshaw Gill, a volunteer with 3 years' UAV flying experience joined the team, enabling aerial image capture and 3D modelling of both excavations and landscapes as an augmentation to the existing drawn and measured survey. All flights conducted during the project were within the Civil Aviation Authority guidelines.

After fieldwork, all finds and samples were processed and catalogued in line with standard guidance prior to specialist assessment. The small finds, flots and samples from palaeoenvironmental assessment, primary field records and digital versions of all relevant images have been compiled into a site archive for long-term curation.

There are a number of conventions used in the descriptions of each site. Firstly, context numbers are given in either round brackets (denoting a deposit or fill) or square brackets (denoting a cut). All contexts described are also shown in the stratigraphic matrices in Appendix 2. Calibrated radiocarbon date ranges are given in a standard form and are principally cited at 95.4% probability. Dates are rounded out to the nearest 10 years. Where Bayesian modelling has also been undertaken, these dates are posterior density estimates and are given in italics. More information on the modelling and presentation of the radiocarbon dates is given in Chapter 6.

3. **K**NOTT'S GILL

LOCATION AND LAYOUT OF THE SITE

The Knott's Gill site comprises a series of interlinked, irregular enclosures defined by curvilinear stone rubble walling. It is centred at SE11477004 and extends down a north-east-facing slope, with the upper edge of the enclosures set beneath a shallow natural edge which now carries a trackway. The whole area around the enclosures is covered with scattered natural sandstone boulders and cobbles, though a detailed walkover of the surrounding area confirmed that no structural remains appear to extend further uphill to the south than those mapped on Figure 3. Although the exact 'stratigraphy' of the various linked enclosures is difficult to unpick, there does appear to be a level of organic development to overall complex, emanating from the main enclosure which surrounds the two adjacent hut circles or roundhouses; this is explored in more detail in Chapter 9.

A detailed survey of the Knott's Gill complex was made prior to excavation by the author and a team of project volunteers, and it was possible to identify ten key areas or features (noted on Figure 3); they are:

A – the main enclosure extending east from the paired roundhouses. It is irregular in plan form, though some of this may derive from the irregular mound towards the centre of the northern wall. This feature was the target of Trench 2 and is described below. The whole of enclosure A sits on a rough natural platform, meaning its shape and extent was likely dictated by the edge carrying the later trackway to its rear, and the natural rock outcrop which has been used as the base of its front wall.

As far as can be discerned, there are two entrances within the circuit of the enclosure walling: one which opens north-east onto a steep but short slope into Enclosure F, and one at the east end which appears to lead towards a slightly higher but level area of land and the trackway. This possible link between the main enclosure and the track suggests that it may have earlier origins.

B – the larger of the two adjacent roundhouses at the western end of the main enclosure. This building has an internal diameter of *c.* 6.5-7 m and a noticeably better-executed wall construction than its neighbour. The walls were of an orthostat-and-rubble-core form, averaging *c.* 0.75 m in thickness and with several upright facing stones still in or very near their original position. The entrance faces almost due east opening onto the north end of Enclosure A.

C – the smaller and more roughly built of the two adjacent roundhouses at the western end of Enclosure A. This is the feature targeted for excavation in Trench 1 and is described in detail below.

D – the westernmost of the large enclosures in the complex. The walling largely follows natural breaks or features, with the southern limits defined by the edge which carries the trackway, the western side running along the side of a largely dry gill, and the southern limit following the natural contour of the ground before turning back uphill. The walling of this enclosure is relatively well defined, and the main entrance seems to be a *c.* 2 m gap in the south-east corner close to the access between Enclosures A and F.

E – a long 'funnel' or passage running directly up and down slope between Enclosures D and G with an entrance at the

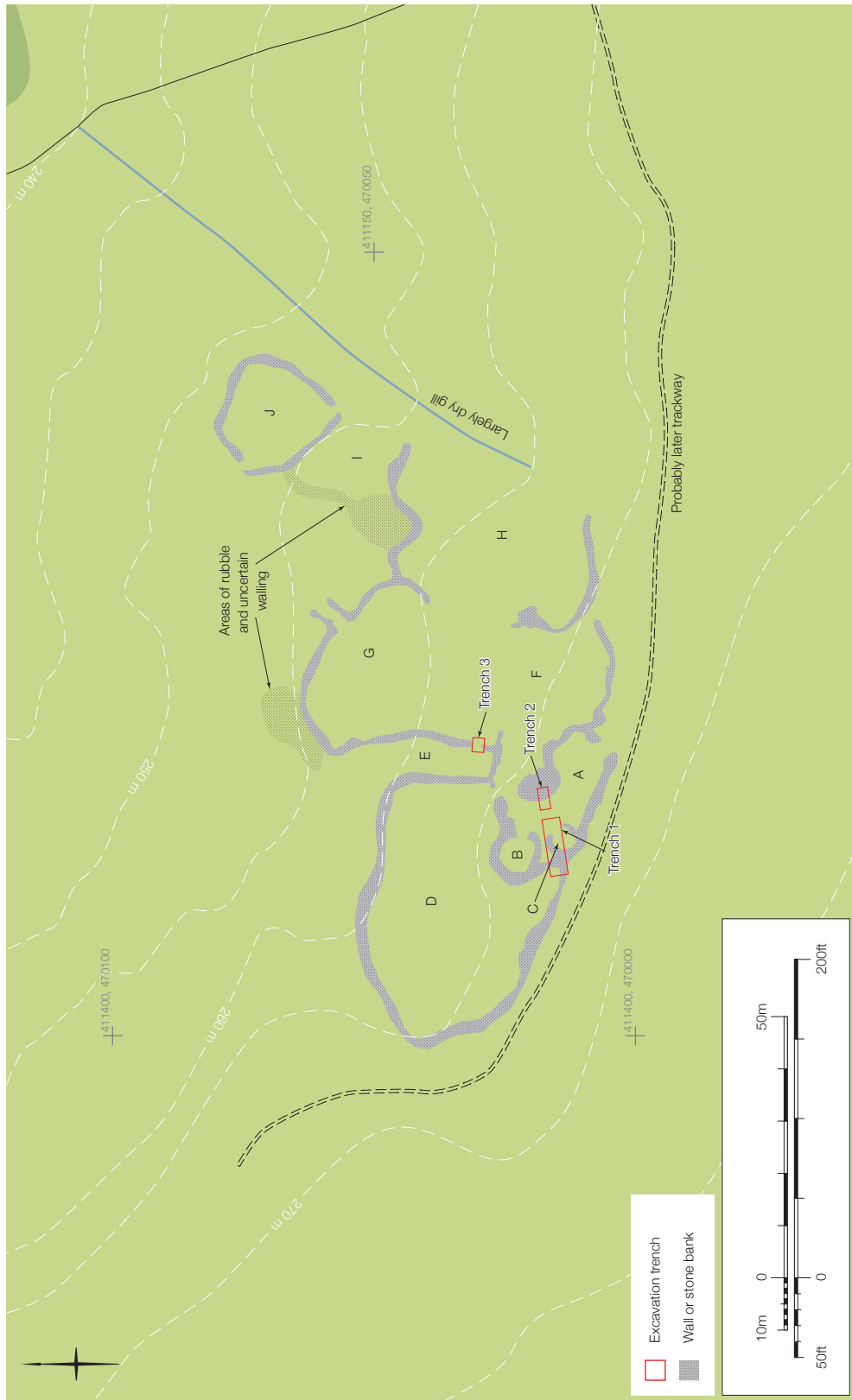


Figure 3 Overall plan of the Knott's Gill complex showing the location of all main features and the excavation trenches

Figure 4 Section of the wall of roundhouse feature B showing some of the surviving orthostat wall facing



south-east into Enclosure G (investigated in Trench 3 and described below). Purely in terms of plan form as presented in the survey data, a funnel of this kind leading into a large system of linked enclosures is heavily suggestive of livestock management and herding. It must be noted, however, that the northern end of Feature E is covered with scattered and broken stone of different sizes, and an interpretation of this feature as a stock droveway must also explain why this area has so many more loose boulders in it than other enclosures within the complex. Whatever the reason for the narrow passage between the two enclosures, it appears to have been deliberate in construction given the slightly unnatural 'dog-leg' form of Enclosure G's western bank. Had the passage not been required, then it seems likely that Enclosure G's circuit bank would have simply continued its line to meet the northern edge of the earlier Enclosure D.

F – the least well defined of the enclosures within the complex. It is possible that Enclosures F, G and H were originally one large complex, but the alignment of surviving walling and average size of the other enclosures suggests that some of the original boundaries are now missing,

or were perhaps only ever constructed in earth, wood or hedging.

G – this enclosure stretches further downslope from Enclosure F. Its most notable feature is a clear out-turned entrance opening downslope out of the overall complex and ultimately in the direction of the Knott's Gill watercourse. If considered purely functionally in terms of likely livestock management, then a narrow out-turned entrance could suggest movement out of the enclosure. If, however, the stone walling was augmented with less substantial fencing or hedging to the exterior of the enclosure, then this could also be used to bring stock in from the surrounding land.

H, I and J – a series of three enclosures which run down the slope at the eastern side of the complex. All the enclosures use a largely dry gill as their eastern boundary, with Enclosures H and I unenclosed on this side. Indeed, Enclosure H is unusual within the whole complex as it is notably free of the scattered boulders and cobbles prevalent elsewhere. Enclosure J, the northernmost part of the Knott's Gill complex is fully enclosed with two small opposed entrances.

Where the enclosure walling survives best, it averages c. 1 m in width and

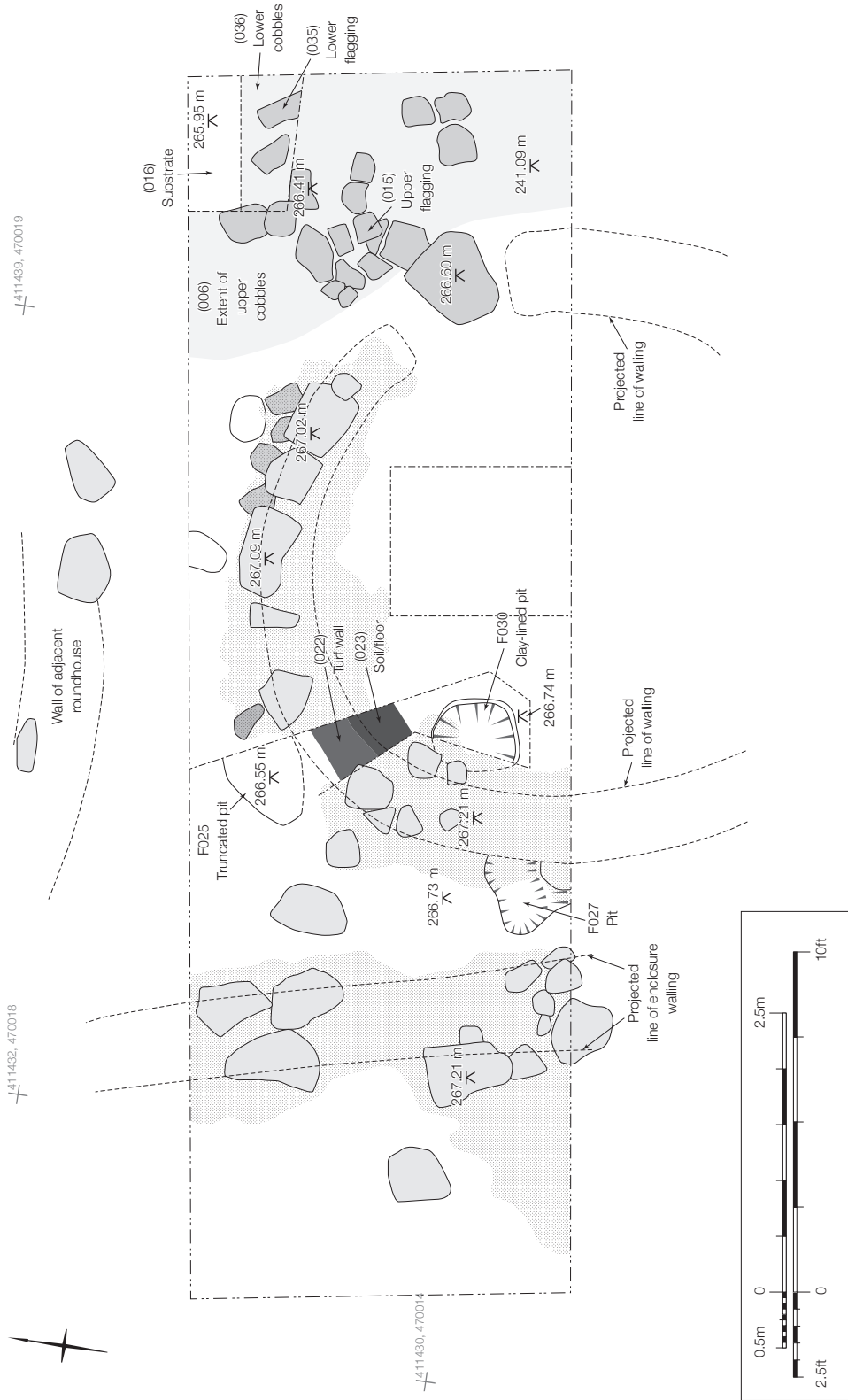


Figure 5 Plan of Knott's Gill Trench 1 showing all features

c. 0.5 m in height. Its construction differs between well-set orthostats infilled with smaller cobbles and rubble to a simpler stone dump bank. Two distinct areas of concentrated stone tumble have also been noted in the survey, though no structural form could be discerned within them.

TRENCH 1

Trench 1 measured 11 m x 3.5 m in plan and was opened to encompass the northern half of the smaller (southern) of the two adjacent roundhouses within the complex. The earliest phase of activity was the cutting of a platform or scoop [018] into the underlying clayey sand substrate. As with many sites in Nidderdale, the poor drainage above the sandstone bedrock and the often-ferruginous nature of the overlying deposits resulted in the extensive formation of iron pan, usually at the upper horizon of the local natural substrate. Despite its physical location in the sequence of deposits, the iron pan will have formed at a later date. One effect of this extensive hard pan formation across these upland sites, is that it can often blur the interface between the natural and cultural deposits, and perhaps more importantly,

where there is a thin or truncated deposit directly over the natural substrate, the nature and extent of this can be confused or, in some cases, almost entirely lost.

The material cut from the slope to form the scoop [018] was banked forwards to create a level platform (017) which was stabilised on the downslope edge with revetting of small to medium cobbles (009) packed against the dump of excavated material. The first phase of construction on the footprint of the roundhouse was represented by the heavily truncated remains of a probable turf wall (022), which was itself overlain by a thin organic-rich spread interpreted as the remains of an early packed-earth floor (023). Charred material suitable for radiocarbon dating was obtained from both these deposits, and by modelling the results in relation to their stratigraphic relationship the turf walling is likely to date to *160 cal BC – cal AD 0 (95% probability)* and the overlying deposit to *80 cal BC – cal AD 50 (95% probability)*. Palaeoenvironmental assessment of these deposits revealed the presence of charred fragments of alder (*Alnus glutinosa*), birch (*Betula* sp.) and hazel (*Corylus avellana*).

Within the roundhouse, a well-preserved but small clay-lined pit with an organic-rich silty fill (028) was revealed

Figure 6 Looking west across Trench 1. The large boulders supporting the downslope side of the platform are visible to the centre-right of the trench, and the rough rear rubble wall is visible beneath the horizontal ranging rod





Figure 7 Section through the stone footings of the Phase 2 wall showing the mottled remnants of the truncated Phase 1 turf wall and the darker spread of the early floor deposit to the interior of the roundhouse (scale = 0.3 m)



Figure 8 The clay-lined pit in the roundhouse interior, with the clay lining visible as a white halo around the organic-rich dark brown fill. The seemingly straight line of the rear 'wall' partially overlying the feature is an artefact of the excavation process, and it is not clear whether the material above the pit was in fact later rubble from the collapse of a poorly built wall

set close to the rear (west) of the structure. The uncertainty of the relationship between the pit and the probable floor deposit (023) described above – an uncertainty largely due to the extensive iron pan formation – presented two possible initial interpretations: first, if the pit were overlain by the flooring, then it was probably contemporary with the earliest use of the structure and should be broadly chronologically consistent with the turf walling; second, if it in fact cut through the floor

deposit (023), then it dated to a later phase of the roundhouse. The second key uncertainty was whether the stone wall of the Phase 2 roundhouse (004) overlay the pit or not. This uncertainty was largely due to the fact that the wall at this point was of rough rubble and was largely indistinguishable from the later tumbled material. A single radiocarbon date was obtained on a charred hazelnut shell (*Corylus avellana*) from the fill of the pit – a particularly suitable sample – returning a result of cal AD

Figure 9 Sondage through the 'yard' surfaces in the eastern end of the trench. The sequence is clearly visible comprising the natural substrate in the base of the right-hand side, the lower cobbles capped with rough paving, and then the later cobbles above, with the latest paving extending towards the roundhouse threshold stone to the top-left of shot (scale = 1m)



240 – 380 (95% probability). This places considerable weight in favour of the second interpretation outlined above: that the pit relates to a much later phase of activity on site, up to 500 years later than the initial construction. The potential ramifications of this interpretation are discussed in more detail in Chapter 9 below.

Above the truncated floor deposit (023), a second phase of the roundhouse structure was most clearly represented by the footings of a rough stone wall (004), broadly circular in plan form and comprising occasional facing stones with a rubble core, as well as sections of apparent rubble walling with little order or coursing. To the front edge of the platform, the wall had been footed against a line of larger rounded boulders (010) set on the lip to provide a rudimentary additional foundation. The final possible structural elements investigated were two small irregular depressions – one to the rear (west) of the roundhouse (F027) and one to the north between the two buildings (F025). There was a total of four amorphous spreads around the perimeter of the roundhouse, of which the two excavated were shown to be very shallow (c. 100 mm in maximum thickness/depth) and containing a mottled,

heterogeneous fill grading between a dark brown sandy silt and a light orange brown clayey sand. The depression to the rear (F027) extended beneath the later stone walls, and it is considered likely to have been natural or derived from animal action. Although uncertain, it is suggested that the three spreads to the north (lower) side of the roundhouse may represent the truncated remains of a once continuous drip gully.

The roundhouse entrance appears to have faced east-north-east, with a flat slab set slightly proud probably forming a threshold stone. The entrance opened onto an area of loose and irregular flags (005) sitting on a rammed cobbled surface (006) which spreads across the fold or yard to the east of the roundhouse. An exploratory sondage in the north-east corner of the trench showed that this cobbling overlay an earlier sequence of rough flags (035) over a lower cobbled surface (036). This sequence was also observed in Trench 2 (see below) and supports the multiple-phase use of the roundhouse observed in its differing construction materials. To the rear of both adjacent roundhouses, the line of the back (west) wall of the enclosure (007) was visible, again principally constructed in rough rubble walling though with a few

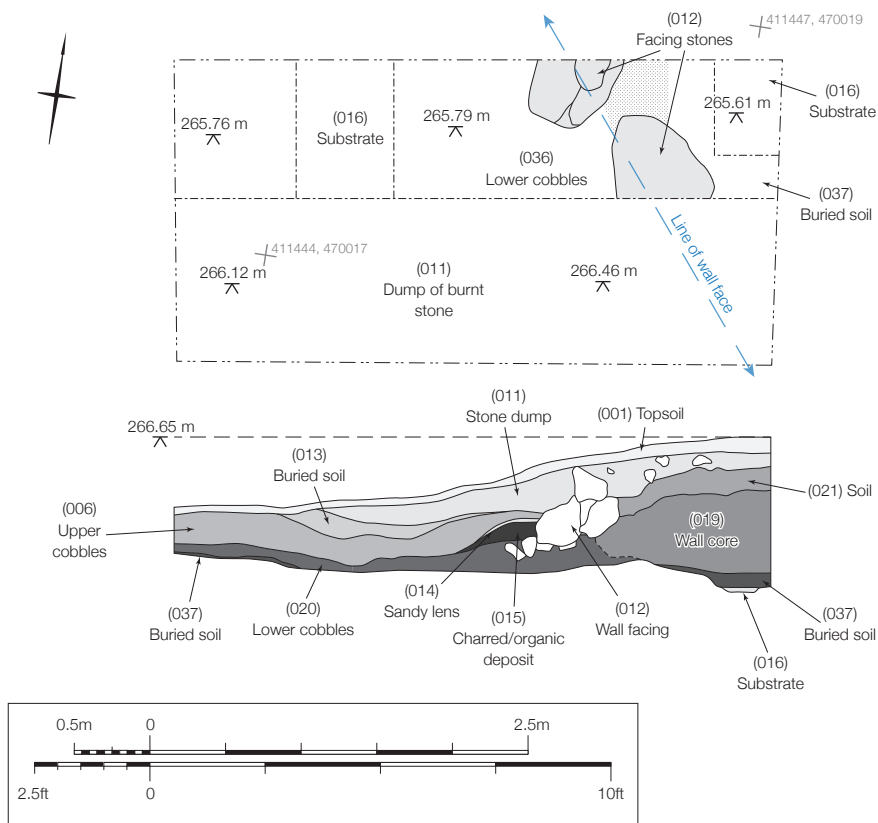


Figure 10 Plan and section of Trench

larger orthostats similar to those visible in the walling of the wider enclosures in the complex.

The roundhouse interior, and much of the surrounding area of the trench and beyond, is covered with the loose rubble (003) from the final collapse of the stone walling (004). As has been noted, the rough construction style of, in particular, the rear (west) elements of the roundhouse walling meant that defining a clear break between the *in situ* wall footings and later collapse was not possible for much of the wall circuit. Almost the whole trench, except where the stone walling and rubble stood proud of the turf was covered with a lens of mottled and leached subsoil or sandy colluvium (002). This was then sealed beneath the peaty soil and turf horizon which capped all trenches on the site.

TRENCH 2

Trench 2 measured 4 m x 2 m in plan and was opened immediately to the east of, and in line with, Trench 1, though leaving a standing baulk between the two. It was opened to target what appeared to be an unusually round and regular mound extending from the front wall of the main enclosure around the roundhouses. The earliest deposit encountered was a truncated sealed soil (037) beneath a spread of packed cobbles (020), seemingly forming a 'yard' surface almost certainly the same as the lower cobbling encountered in the eastern end of Trench 1 (036), though the baulk between the two trenches meant this could not be definitively demonstrated. The surface was heavily compacted and seemingly comprised more regular, rounded and well-set stones than the upper layer of cobbling above it (006).

Figure 11 Facing south-east across Trench 2 and looking along the line of the rough facing stones defining the internal face of the enclosure wall



The inner face of the main enclosure's front wall (012) was revealed at the east end of Trench 2, comprising a series of large though irregular and roughly set stones packed in with smaller cobbles, sitting partially over the lower cobbled surface (020). The wall of which this forms part would have been a considerable size in plan at this point, with the front edge defined by a quarried natural outcrop and the whole having a width of up to 3 m at the base. Between the large facing stones (012) and the quarried outcrop that formed the outer face of the wall (beyond the limits of the trench), the core comprised a substantial dump of mixed stone of small-medium size in a loose brown yellow sandy matrix (019). This was then capped by a seemingly stable soil horizon (021). If this represents the original height of the enclosure boundary then it would have been c. 1 m tall and would not have presented an insurmountable barrier unless also capped with a palisade or other type of fencing/hedging.

Abutting the external face of the wall (012) and overlying the lower cobbled surface (020), a small deposit of dark brown to black, organic- or charred-rich sandy silt was excavated (015). The discrete nature of the deposit suggested that it was an area of burning, though it was not set

within a defined pit, and the narrow trench did not allow for its full extent to be identified. Samples from both the lower cobbles (020) and the burnt/organic deposit directly above it were subject to palaeoenvironmental assessment. The cobbled layer included sealed fragments of birch (*Betula* sp.) and hazel (*Corylus avellana*) charcoal, and the area of burning (015) included considerable amounts of alder (*Alnus glutinosa*) and hazel (*Corylus avellana*) charcoal, as well as undifferentiated grass (Poaceae) remains. Charred samples from each of these two deposits were submitted for radiocarbon determination, and the results were modelled in terms of their clear stratigraphic relationship, indicating a date for the lower cobbles of 110 cal BC – cal AD 10 (95% probability) and a date for the burnt/organic deposit (015) of 80 cal BC – cal AD 30 (95% probability). These dates accord well with those obtained for the Phase 1 roundhouse, and it seems reasonable to suggest that the lower cobbled surface of the yard, and the activity represented by deposit (015), is contemporary with the turf-walled structure.

The burning/organic deposit (015) is sealed beneath a layer of sandy material (014), which is all in turn sealed by the upper layer of cobbles (006) visible in



Figure 12 Angled top-down shot of Trench 3 with the walls defining either side of the opening at the top and bottom-centre of shot

both Trenches 1 and 2. This deposit, particularly close to the large enclosure wall in Trench 2, was notably less compact than the lower cobbled surface (020) and made use of less-regular stones. In Trench 2, the cobbles (006) were partially capped by a thin but apparently stable soil horizon (013), extending from the wall (012) and presumably representing a relatively long period of inactivity at the site. All the deposits within the trench were then sealed beneath a dump of burnt and cracked stone (011) ranging in size from small to medium. This, presumably later, spread of stones comprised the main body of the incongruously round and regular mound which the trench was sited to investigate. The trench was ultimately capped with the same thin and peaty topsoil and turf horizon (001) found across the site.

TRENCH 3

Trench 3 measured c. 3 m x 2 m in plan and was a small exploratory excavation investigating a potential gateway in a section of enclosure walling c. 14 m

north-east of Trenches 1 and 2. The main enclosure walling (032) at this point comprised rough walling with some sections of more-regular orthostat construction. All the stone observed, as was the case in other trenches, was local sandstone from the underlying Millstone Grit series, and it seems probable that the walling was formed in some places from simple clearance of scattered boulders into stone banks. The 'gateway' on which the Trench 2 was focused did not appear to have any clear built form to it, and the semi-collapsed and rubbly nature of the walling meant that it was not possible to identify clear wall ends. Despite this, it did appear that the access through the wall was an intentional gap rather than an area from which stone had been removed at a later date. As with Trench 1, the rubble from the partial wall collapse (033) had been covered by a leached-out sandy subsoil (031) which had presumably accumulated, at least in part, through colluvial action. All features except the main upright elements of the standing wall were sealed beneath the same thin, peaty soil and turf horizon present in all trenches (001).

4. **B**LAYSHAW GILL

LOCATION AND LAYOUT OF THE SITE

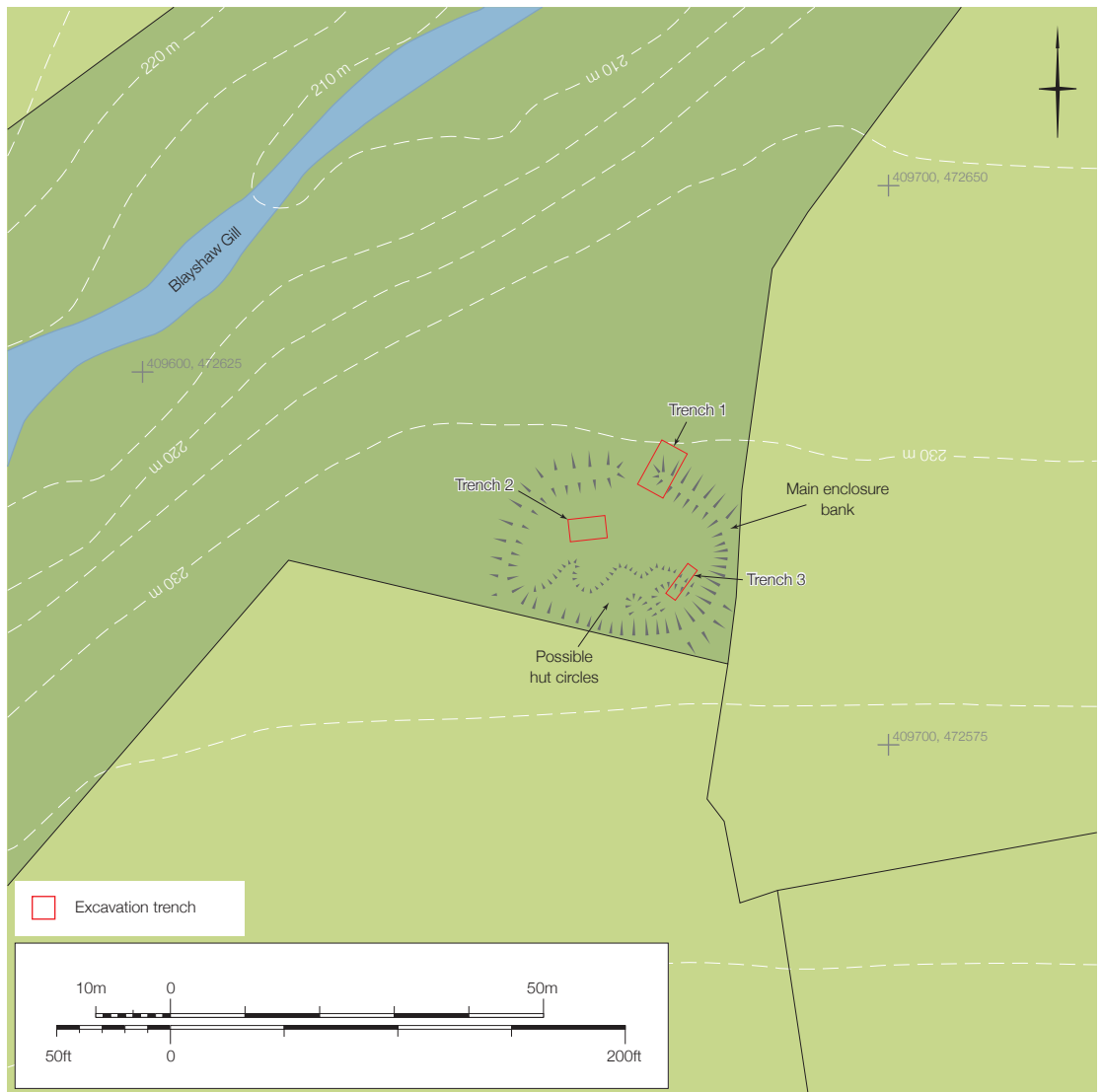
The Blayshaw Gill site (initially identified as Studfold Wood hence the site code for the palaeoenvironmental work being STUD17) is centred at SE09677260 and is the most northerly of the sites excavated during this project. It comprises a roughly oval earthwork enclosure sitting on flat ground above the steeply sloping southern flank of Blayshaw Gill, an incised tributary stream of the River Nidd. Unlike the other sites investigated, the Blayshaw Gill enclosure faces north, but sits in a protected location in the lee of the protruding saddle of Blayshaw Crags to the south and sheltered by the rounded flanks of the hill around Whit Beck to the west.

The main enclosure bank varies in surviving width between 4 m and 5.7 m

(accounting for the spread of material over time) and in surviving height between c. 0.3 m and 0.6 m, and encloses an area of c. 350 square metres. The thin woodland soil across the site makes it easy to define the construction of the bank as being a stone dump of small to medium cobbles around its whole circuit. Trench 1 specifically targeted one of the bank terminals flanking the north-facing entrance, and the constructional form of the bank is described in more detail below. To the rear (south) of the enclosure, a series of low earthwork arcs describe the outline of up to three possible hut circles or roundhouses, though the surviving remnants are very slight, and more detailed investigation would be needed to confirm their nature. Trench 3, described below, was positioned in the south-east of the enclosure to investigate one of these possible hut circles.

Figure 13 Looking east along the best-preserved section of the enclosure bank prior to excavation





The post-medieval walling that defines the land of the gill now cuts a dog leg around the earthwork remains, slightly truncating but largely respecting the earlier remains. The enclosure is, however, currently within a modern conifer plantation covering a c. 600 m stretch of the gill, and both invasive root action and falling trees have noticeably impacted on the surviving remains.

In terms of other archaeological remains in the vicinity, there are a series of low scoops in the improved pasture land

immediately north-east of the enclosure. Initial walkover did not suggest that they were demonstrably related to the features investigated during this project, but any future work at the site may want to include a detailed survey and, if landowner permission was forthcoming, an evaluation test pit or trench. Blayshaw Gill was also the focus for lead mining between 1876 and 1910 (Gill 1974), and the remains of driven levels and the associated buildings and infrastructure can still be seen in the Gill bottom.

Figure 14 Blayshaw Gill site plan showing extent of enclosure and location of trenches

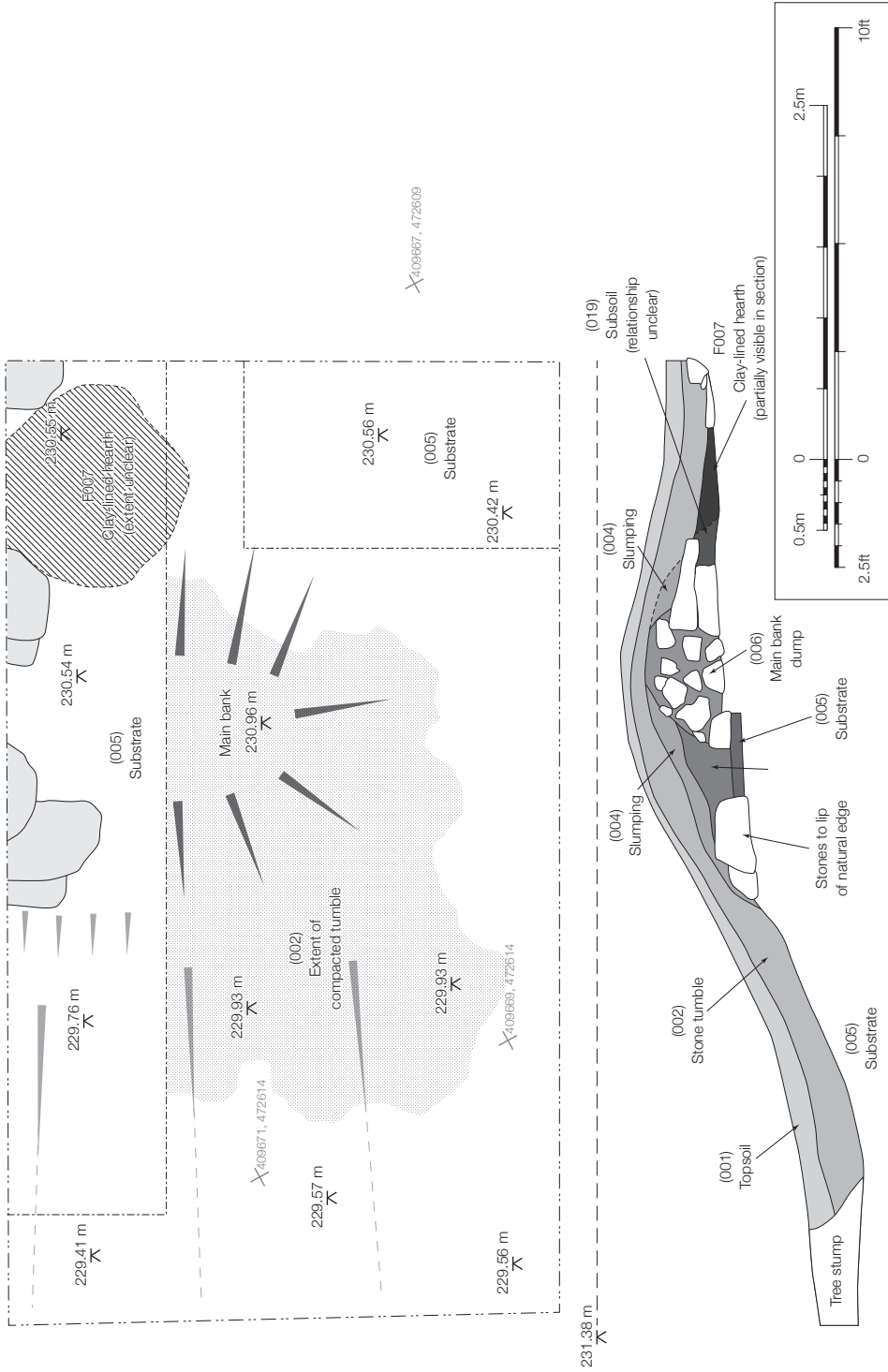


Figure 15 Blayshaw Gill Trench 1 plan and sections



TRENCH 1

Trench 1 measured c. 6.5 m x 4 m in plan and was targeted on the eastern terminal of the bank as it forms one side of the main enclosure entrance. At this point, the bank sits on a slight natural terrace edge, giving it an additional prominence and making it a more practical barrier from this side. Within the trench, it was observed that the slight terrace edge had been seemingly stabilised or partially revetted with a series of large boulders set into the sandy clay substrate (005), creating a narrow berm in front of the bank.

The main construction form of the bank comprised a dump of relatively loosely packed small to medium cobbles (008), perhaps with some large basal stones and a slight kerbing of larger stones to both the interior and exterior. The possible kerb or edge stones had, however, seemingly slipped from their original position, making such an interpretation tentative. Once excavated, the surviving elements of the initial stone bank dump measured c. 1.5 m in width and c. 0.6 m in height,

though a considerable volume of tumbled material to the front and back suggests it may have been much larger when originally constructed. After the initial stone bank, a dump of redeposited substrate (003) had accumulated or, perhaps more likely, been intentionally set against the front of the stone layer to help stabilise its external side. Above both these deposits, a phase of gradual collapse or slumping was represented by slipped material to both the interior and exterior of the bank (004). This included slippage of some of the large basal kerb stones over the top of the hearth feature (see below). A period of stabilisation followed this initial slumping or partial collapse, as the composition of this layer was demonstrably different to the main stone tumble above, comprising relatively compacted angular stones in a darker silty clay matrix.

Butted against the interior face of the wall/bank, an irregular and shallow hearth pit was excavated, measuring c. 1 m x 0.85 m x 0.2 m in maximum dimensions. It comprised a potential cut into the underlying subsoil and substrate, though

Figure 16 Looking east across Trench 1 after initial cleaning. The terminal of the stone bank is clearly visible, capped by the extensive stone tumble. The remainder of the eastern portion of the enclosure bank can also be seen curving away towards and under the later post-medieval walling (scales = 1m and 2m)

Figure 17 Section through the clay-lined hearth set against the rear of the enclosure wall (scales = 1m)



the base of the feature was characterised by a transitional lens of partially heat-affected soil rather than a clear cut. Parts of the feature had been clay-lined, though again this was truncated. The remaining parts of the fill comprised a dark silty matrix with considerable quantities of charred material.

Samples from both the hearth fill and clay lining were submitted for palaeoenvironmental assessment, and based on the assumption that the hearth is functionally associated with the settlement activity at the enclosure, the analysis has yielded much. The full results of the palaeoenvironmental assessment are presented in Chapter 8 below, but in summary: charred wood recovered from the samples included alder (*Alnus glutinosa*), birch (*Betula* sp.), hazel (*Corylus avellana*), ash (*Fraxinus excelsior*), oak (*Quercus* sp.) and willow or poplar (*Salicaceae*). The clay lining (015) also contained evidence of a considerable amount of charred barley (*Hordeum* sp.), including six-row barley (*Hordeum vulgare*), spelt wheat (*Triticum spelta*), red-shank (*Persicaria maculosa*), pale persicaria (*Persicaria lapathifolia*) and hazelnut shells (*Corylus avellana*). In addition to a number of the plant macrofossils noted in the clay lining, the fill of the hearth (006) also included evidence of indeterminate sedges (*Carex* sp.), undifferentiated grasses

(*Poaceae*) and docks (*Rumex* sp.). Single barley grains from both the clay lining and the fill of the hearth were submitted for radiocarbon determination, and the results were modelled in terms of the observed stratigraphy of the deposits. The returned date for the clay lining is *cal AD 80 – 200 (95% probability)*, and the date for the hearth fill is *cal AD 100 – 230 (95% probability)*.

A sandy subsoil of *c.* 0.2 m maximum thickness had accumulated to the rear of the stone bank, against the possible kerb stones and over the hearth feature, though the exact relationship was not clear. The interface between the subsoil and the stone tumble (002) above was more defined but still ambiguous, and it is probable that both contexts represent long-lived and gradual events. The main tumble deposit (002) from the stone enclosure bank capped all the other deposits in Trench 1 with the exception of the thin woodland topsoil (001). Finally, two sherds of Romano-British Black-burnished ware were recovered from the interface between the natural substrate and the stone tumble *c.* 2 m outside the bank, representing the only small finds from this trench and two of the only small finds recovered across all sites investigated as part of this project.

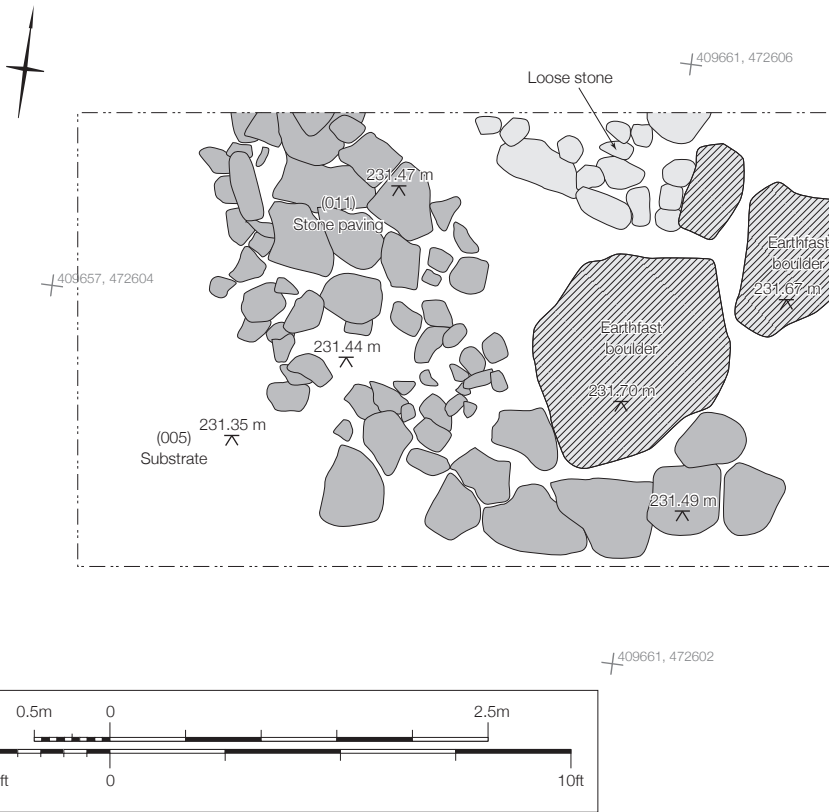


Figure 18 Blayshaw Gill Trench 2 plan and section



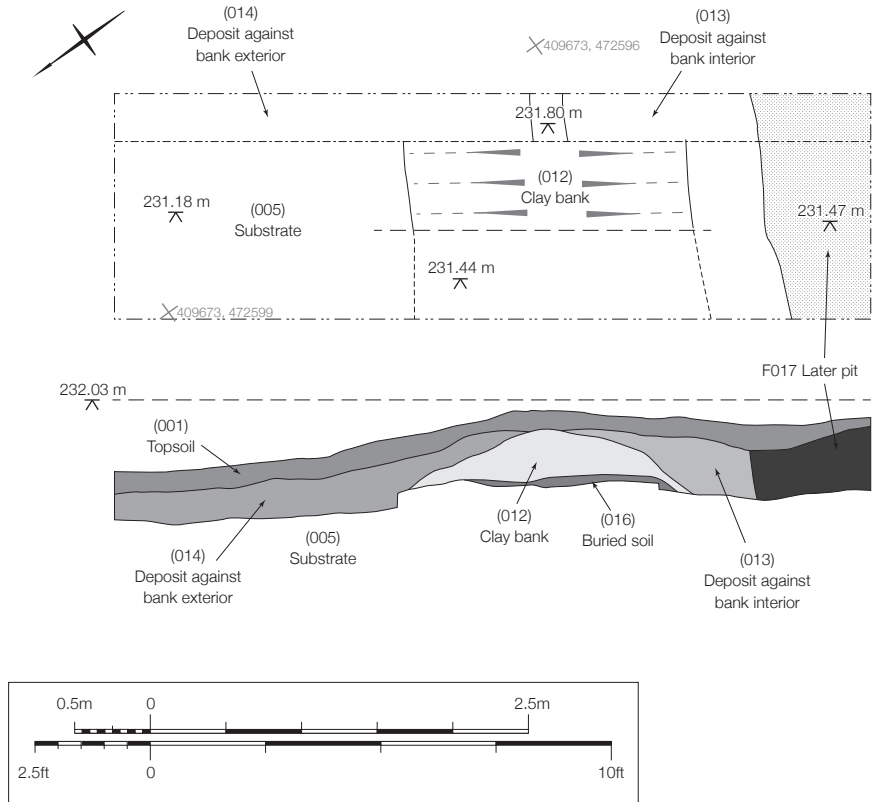
Figure 19 Looking south across Trench 2. The paving is visible running from the centre of the near baulk around the earthfast boulders to the left-hand side of the trench (scales = 1 m and 2 m)

TRENCH 2

Trench 2 measured 3 m x 5 m in plan and was opened close to the centre of the enclosure to test the form, origin and date of a small stone ‘cairn’: a prominent partially above-ground feature. After excavation, it was shown that the ‘cairn’ was a relatively modern dump of loose stone (009) within and in some cases above the

thin topsoil (001). It derived much of its form, however, from two large earthfast boulders set into the natural sandy clay substrate (005). Around and incorporating the boulders, a large area of irregular sandstone flagging was revealed lain onto the substrate, forming a relatively coherent surface. The average size of the individual flags was c. 0.45 m x 0.4 m x 0.1 m, but their appearance suggested that they were

Figure 20 Blayshaw
Gill Trench 3 plan
and section



not dressed in any way. The overall 'floor' defined by the paving appeared to have a defined and relatively straight edge on its northern side; its southern extent continued beyond the limit of excavation towards the possible roundhouse earthworks to the rear of the enclosure. As with the rear of the main enclosure wall in Trench 1, all of Trench 2 except the higher parts of the earthfast boulders were sealed beneath a yellow-brown sandy subsoil of c. 120 mm maximum thickness.

TRENCH 3

Trench 3 measured 5 m x 1.5 m in plan and was excavated as an exploratory slot over the centre of one of the circular earthworks identified as a possible roundhouse to the rear of the enclosure. The deposits exposed were unclear in form, suggesting that there had been some

considerable later truncation, particularly to the rear of the feature.

Above the natural sandy clay substrate (005), a thin sandy silt deposit (016) was encountered, interpreted as a buried land surface or soil. Above this, a low clay bank had been built, measuring c. 1.6 m in maximum width and c. 0.3 m in surviving height. The line of the clay bank followed that of the earthwork outline of the possible roundhouse observed at ground level, and it seems most likely that it represents an earthen wall footing. Overlying the remains of the clay or earth bank or footing, there were deposits to both the exterior (014) and interior (013). Both deposits had a slightly raked profile, giving the appearance that they had slumped from the bank outwards, perhaps representing the gradual collapse of what were originally larger earth walls.

A steeply sloping cut at the southwest end of the trench had truncated the



Figure 21 Looking south-east across the south-west end of Trench 3. The remains of the low clay or earth bank is visible to the left of shot, and the later cut with its dark, loose, stony fill can be seen in the right-hand end of the trench (scales = 1m)

internal slumping deposit (013), the possible buried soil (016) and cut into the natural substrate (005). The feature extended beyond the limits of the trench, and its fill (018) comprised a considerable amount of angular sandstone blocks and cobbles in a black silt matrix unlike any other deposits observed on site. Only a small amount of this feature was excavated, but the loose

and unconsolidated nature of the fill suggests that it is a relatively modern pit cut into the centre of the probable round-house. Such an interpretation would accord with the recovery of a piece of creamware dating to after c. 1750 and a 19th- or early 20th-century shotgun cartridge head from the Trench 3 topsoil.

5. COLT PLAIN

LOCATION AND LAYOUT OF THE SITE

The Colt Plain site is the most southerly of the three sites investigated and is split over two areas: Colt Plain South and Colt Plain North. The two areas are, however, part of a single, larger, coherent complex of boundaries and enclosures which have been truncated by the intervening millennia of agricultural practice. Colt Plain is on an east-north-east-facing slope, with the surveyed features ranging between 270 m and 220 m OD in elevation. The overall character of the surviving remains at Colt Plain is notably different to that at Knott's Gill and Blayshaw Gill, comprising coaxial boundaries aligned up and down the slope, as well as stone-revetted lynchets often running along the slope as transverse boundaries.

To the north of the Colt Plain North enclosure, the northernmost coaxial bank is the best preserved in this part of the landscape. In common with the well preserved southernmost coaxial bank – investigated in the Colt Plain South Trench 2 – the form of the bank comprises a mix of large orthostats or earthfast boulders with dumps of smaller stones and cobbles. The arrangement of possible walls to the south of the Colt Plain North enclosure is tentative, as there are several areas of scattered natural boulders. Despite this, the principal line of these remains aligns with extant rough walling in Copy Wood to the east. There is a notably different form to the central coaxial bank to the north of the main Colt Plain South enclosure: all the axial boundaries and cross-slope lynchets in the south-west corner of Copy Wood comprise stone-revetted edges rather than

Figure 22 Facing east from the top of the rear enclosure bank of the Colt Plain South enclosure across the stone and earthwork remains of the larger (unexcavated) roundhouse





Figure 23 Looking south across the small fold in the corner of the Colt Plain North enclosure (scale = 1 m)



Figure 24 Looking north up the valley across two of the cup-marked panels to the north of the Colt Plain North complex

stone dumps or clearance walls. This may be the result of local topography or availability of different types of outcropping sandstone, but it is notable that this part of the complex makes much greater use of orthostat construction than any other. Should further work be undertaken on the site, then a detailed measured survey of a wide area encompassing the whole complex may answer some of the outstanding questions about sequences and zoning of the remains.

In certain parts of the overall Colt Plain complex, the space between coaxial boundaries is partially divided by

stone-revetted lynchets. The best-preserved example in the Colt Plain North area and the lynchet carrying the southernmost roundhouse in the Colt Plain South area were both targeted for excavation during the project; the results of these investigations are presented in the relevant sections below. The transverse boundaries within the south of Copy Wood are an extension of the stone-revetted coaxial boundary to which they are joined, using a similar form of construction.

There are two clear foci of probable settlement activity within the overall surviving complex and a third roundhouse

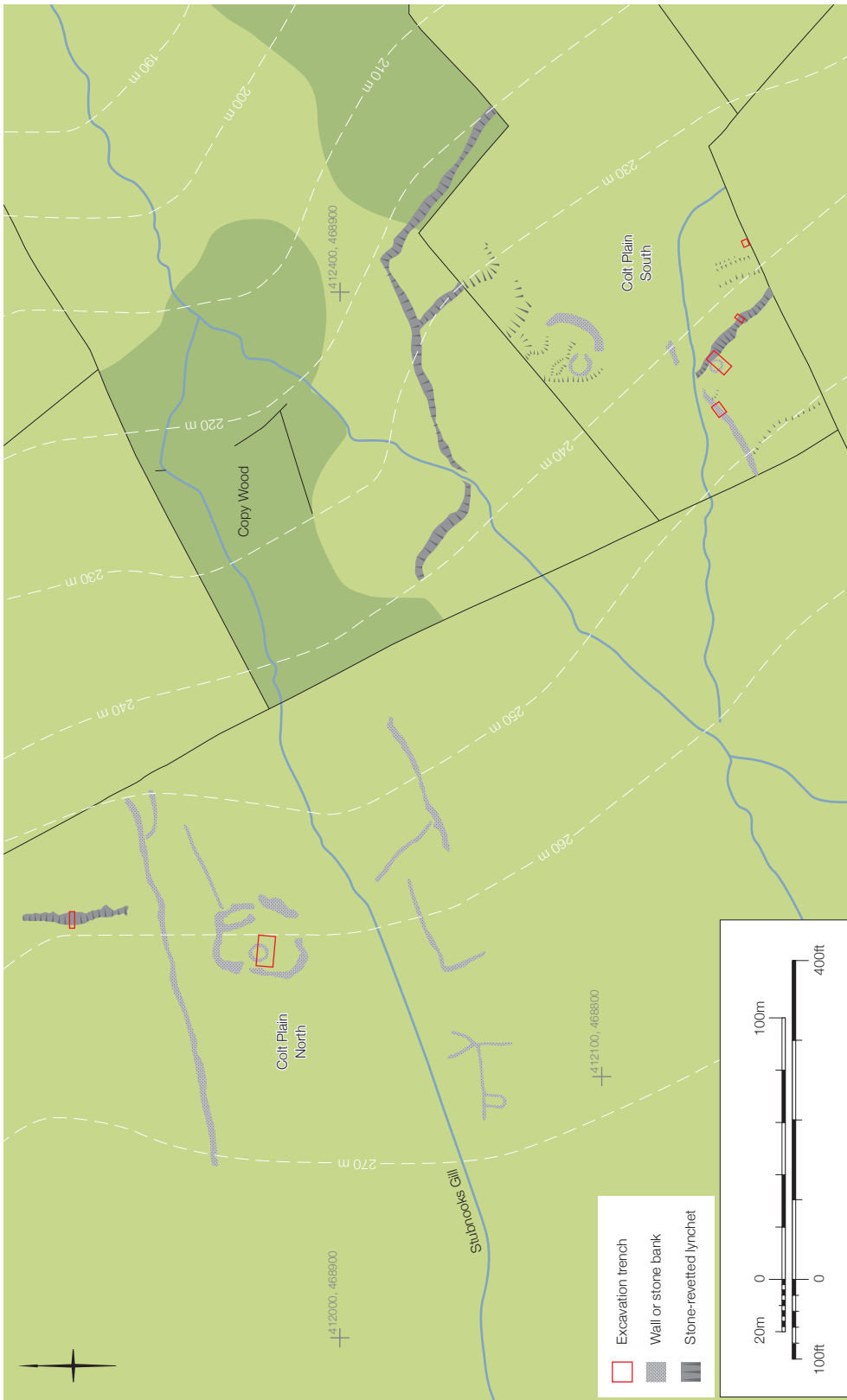


Figure 25 Overall plan of Colt Plain complex

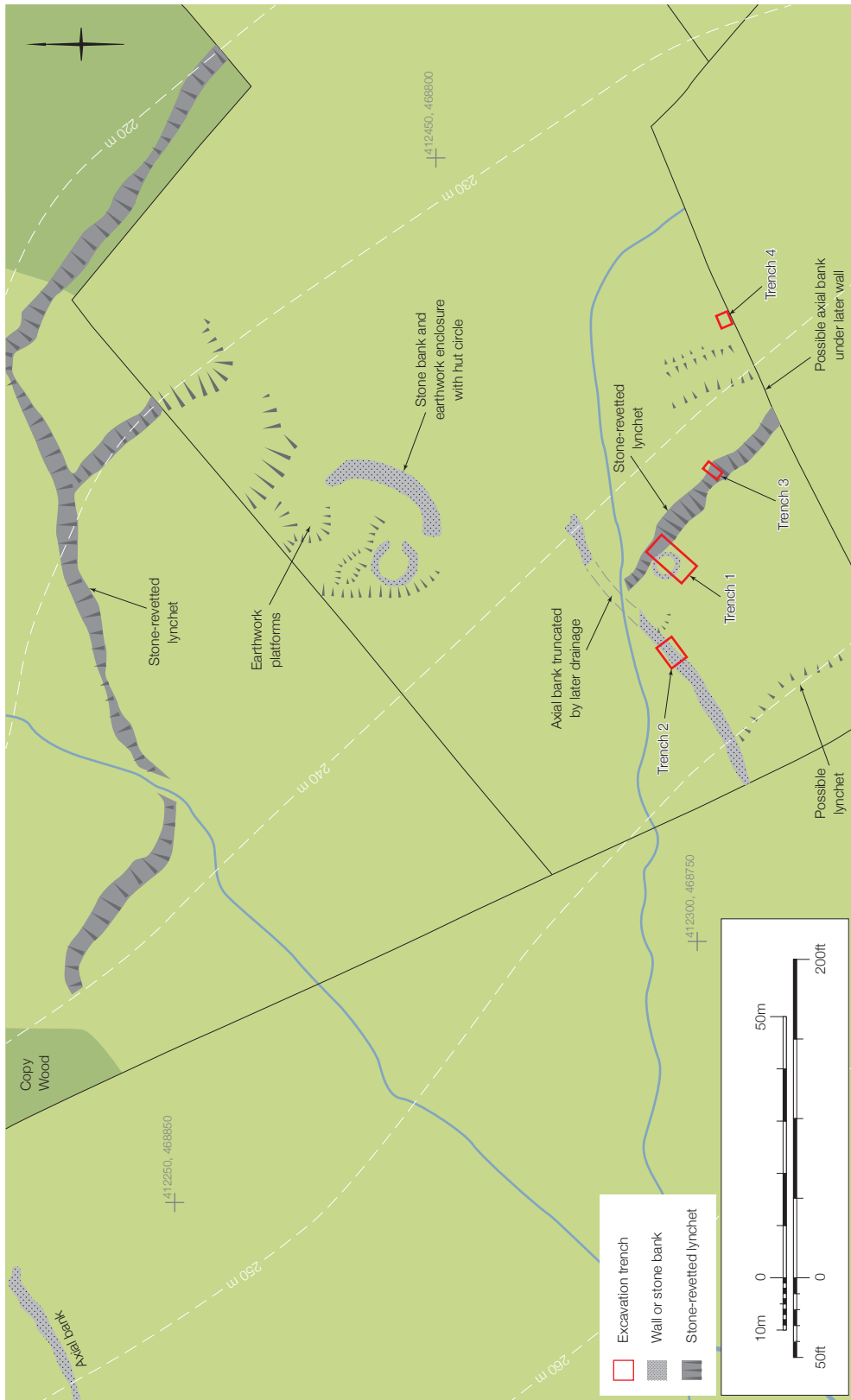


Figure 26 Plan of Colt Plain South site showing location of all features and excavation trenches

seemingly unconnected to a defined enclosure. Within Colt Plain North, a single stone-built roundhouse with an internal diameter of *c.* 6 m is set within a slightly irregular rectilinear enclosure. The enclosure is defined by the same sort of spread stone banks as the coaxial boundaries; it has probable entrances to the south and east, and in the north-east corner of the enclosure there is a smaller sub-enclosure or fold. The main focus of probable settlement activity in the Colt Plain South area lies *c.* 40 m north of the area investigated as part of this project. A stone-built roundhouse of *c.* 6 m internal diameter is set within a roughly oval enclosure defined by a steep slope to the rear (west), and a low stone and earthwork arc of bank to the east. The roundhouse is notable for its well-preserved orthostat walling, very similar in construction style to the unexcavated roundhouse at the Knott's Gill site discussed above. To the north of the roundhouse, a series of earthwork scoops may represent the footings for more roundhouses, though no stonework can be seen. Moving further downslope, two earthwork lynchets are evident, with the lower of the two lining up with the stone-revetted lynchet on the opposite side of the drystone wall in Copy Wood.

The southernmost group of features within the Colt Plain complex was targeted for excavation as part of this project. It comprises a clear coaxial bank, the possible line of a second coaxial bank preserved in a post-medieval to modern field boundary, a clearly defined stone-revetted lynchet joining the two and the footings of a stone-built roundhouse set within a scoop on the lip of the lynchet. This roundhouse is slightly incongruous in terms of its relationship to surrounding features, principally the lack of a surrounding or associated enclosure common to all other similar structures identified and investigated during this project. More details about the form and construction of this feature are given below.

Finally, the Colt Plain site also hosts a number of rock art panels, dating to a much earlier period than the late prehistoric and Romano-British remains which formed the focus of the excavations but nevertheless a significant part of past land use in the area. The most extensive group of rock art comprises four panels of cup marks on an outcropping edge to the north of the Colt Plain North enclosure and shown on Figure 35 below. In addition, a single panel of more complex cup-and-ring rock art with a possible grid-pattern carving sits a further 200 m to the north-west of the first group (off the northern edge of the site plans below). Both these instances of prehistoric rock art are in prominent edge locations with wide views along Nidderdale and into the valley bottom. This setting is in contrast to the final known piece in the Colt Plain area, which is a single cup-marked panel on an earthfast boulder at the southern edge of the Colt Plain South complex. The area around the boulder was excavated as part of this project, and the results are discussed below. All the rock art within the study area of this project at Colt Plain – whether previously known or newly discovered – was subject to detailed recording by experienced volunteer Richard Stroud, hopefully, for eventual entry into the England's Rock Art database.

COLT PLAIN SOUTH

Trench 1

Trench 1 at Colt Plain South measured *c.* 9 m x 4 m in plan and was positioned to investigate the south-east half of the rough hut circle or roundhouse sat on a stone-revetted lynchet. The lynchet itself was less well preserved at this point than in Trench 3 (see below), but the overall form could still be discerned. It seems likely that the lynchet followed the line of a natural break in slope caused by the underlying bedrock, though it was not outcropping at this point



as had been the case with accented edges investigated at other sites through the course of this project. The sondage cut at the eastern corner of the trench demonstrated that the stone cobbles forming the stable front edge of the lynchet (023) overlay a truncated and discontinuous buried soil horizon (004) visible in other parts of the trench.

Initially thought to be contemporary with the later roundhouse walling, the rough stone footings (022) set on the edge of, and parallel to, the lynchet were shown to be an earlier phase. Two broad interpretations of this feature are possible: first, it may be the remains of a wall which ran the length of the lynchet and entirely pre-dated any phase of the roundhouse construction; alternatively, it may be contemporary with the cutting of the scoop [015] for the phase 1 roundhouse and represent the stabilisation of the front edge of the platform being created. Excavation of other sections of the lynchet top may be able to resolve this.

The excavation of the scoop [015] to accommodate the roundhouse cut through both the pre-existing soil (004) and into the underlying orange clayey sand substrate (011). The front edge of the platform (021) was built up, presumably with the excavated material from the rear and banked against the existing stone footings along the lynchet top (022) as described above. The 'floor' and accumulated deposits in the roundhouse interior are described below, but sealed beneath these, a small stakehole (F019) was identified cut into the underlying substrate. Given the observed stratigraphy, this stakehole pre-dated the stone-footed roundhouse and either post-dated the excavation of the circular scoop above, or represents the basal remnant of a deep stakehole contemporary with the lynchet and truncated by the scoop for the roundhouse. Whichever of these interpretations is correct, the stakehole suggests the presence of an earlier structure on the site of the roundhouse, though no other structural cut features were observed. The fill of the stakehole

Figure 27 Overview of the roundhouse in Trench 1. The front wall of the roundhouse to the right of shot sits on the lip of the stone-revetted lynchet, and the rougher rear wall can be seen set into the back of the scooped cut

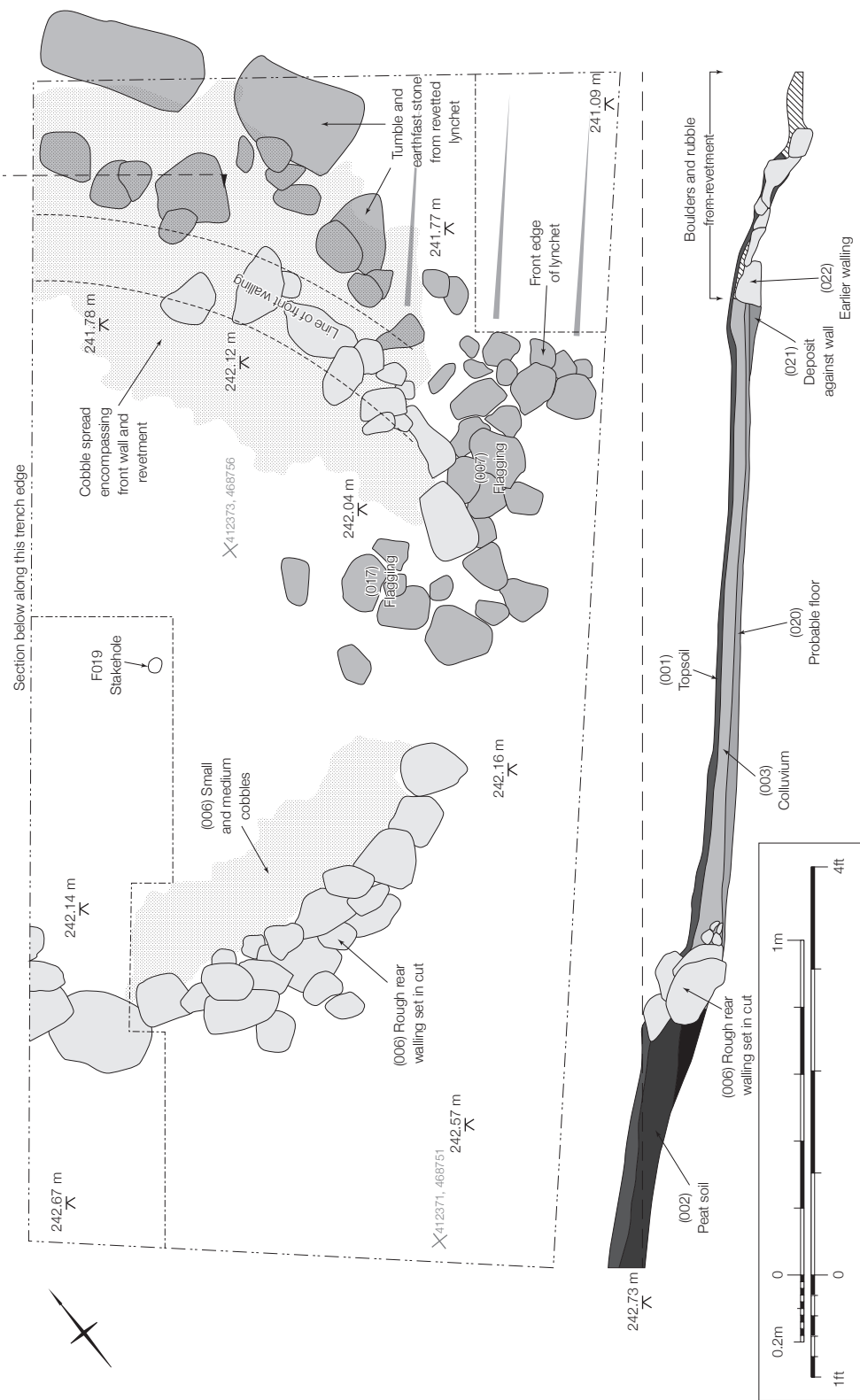


Figure 28 Colt Plain South Trench 1 plan and sections



Figure 29 Box-section through the stakehole preserved beneath the probable floor deposit of the later roundhouse (scale = 0.3 m)

was submitted as a sample for palaeoenvironmental assessment, which revealed the presence of alder (*Alnus glutinosa*) and heather (*Calluna vulgaris*) charcoal, as well as evidence of barley (*Hordeum* sp.), wheat (*Triticum* sp.) and dock (*Rumex* sp.). Duplicate samples of alder charcoal were submitted for radiocarbon determination, and the results were modelled to return a date for the samples of *cal AD 130 – 230* (95% probability) (see Chapter 6 below).

The stakehole was sealed beneath a thin, leached-out clayey sand spread (020) which filled the scoop of the roundhouse and extended partially beneath the rear walling. It is possible that this deposit represents the remains of an original earth floor, but the interface between this and the later overlying colluvium (003) was graded to imperceptible in places, meaning any interpretation is tentative at best.

The main stone walling (006) of the most-visible phase of construction comprised at least three separate forms: to the front, close to the edge of the lynchet, the pre-existing walling (020) was incorporated into the circuit; the south-east side of the walls around the probable entrance comprised the most clearly defined section, with a number of larger blocks representing relatively clear external and

interior facing; finally, the rear of the wall inside the cut was very roughly built from seemingly uncoursed large boulders infilled with smaller cobbles. A deposit of soil/colluvium (016) had either been deliberately bedded in behind the rear walling to secure it in place or was the result of later infilling through natural action. An area of rough stone flagging was revealed both internally (017) and externally (007) to the eastern side of the roundhouse around the probable entrance.

All internal contexts were overlain by the spread stone tumble from the final collapse of the roundhouse walling (005), which also extended over the front of the stone-revetted lynchet. Upslope of the roundhouse scoop, a well-developed diplotelmic peat soil (002) had developed, presumably due to the stones of the rear wall further impeding the already poor drainage on the site. Indeed, during excavations the volume of water which the turf mat (001) and peat soil (002) held required small drainage channels to be cut to divert run-off around the trench.

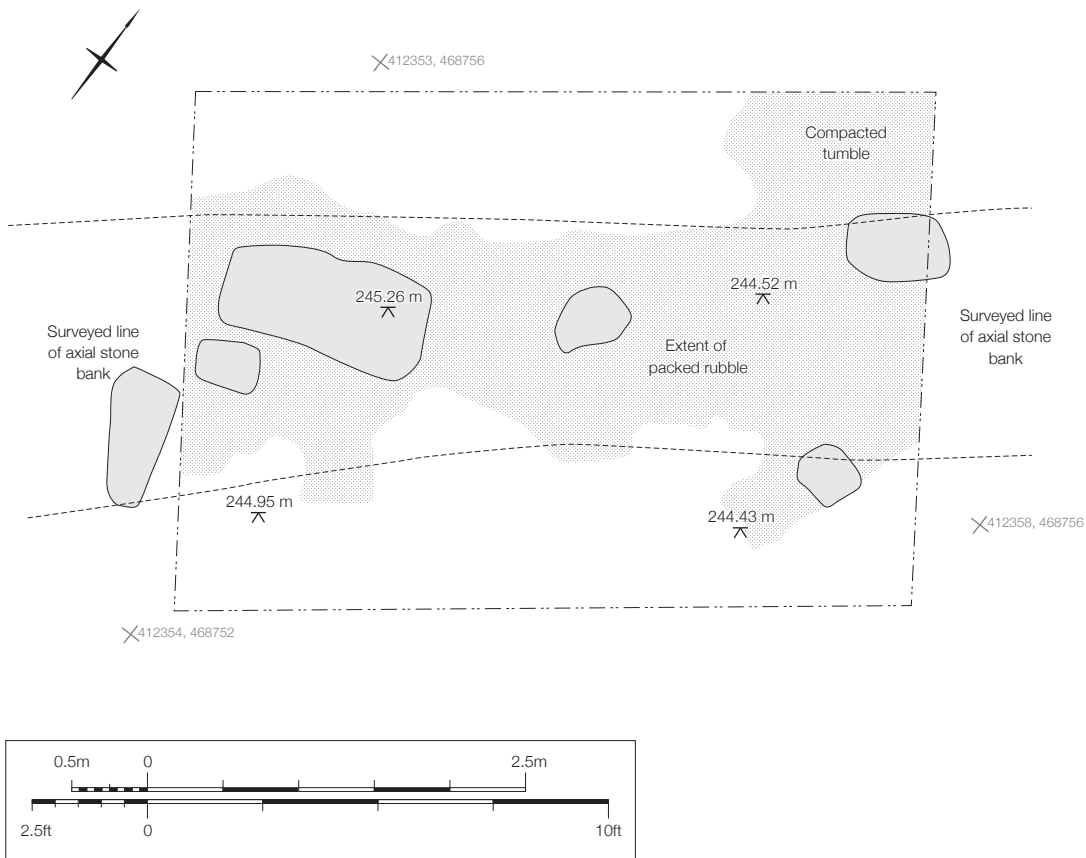
Trench 2

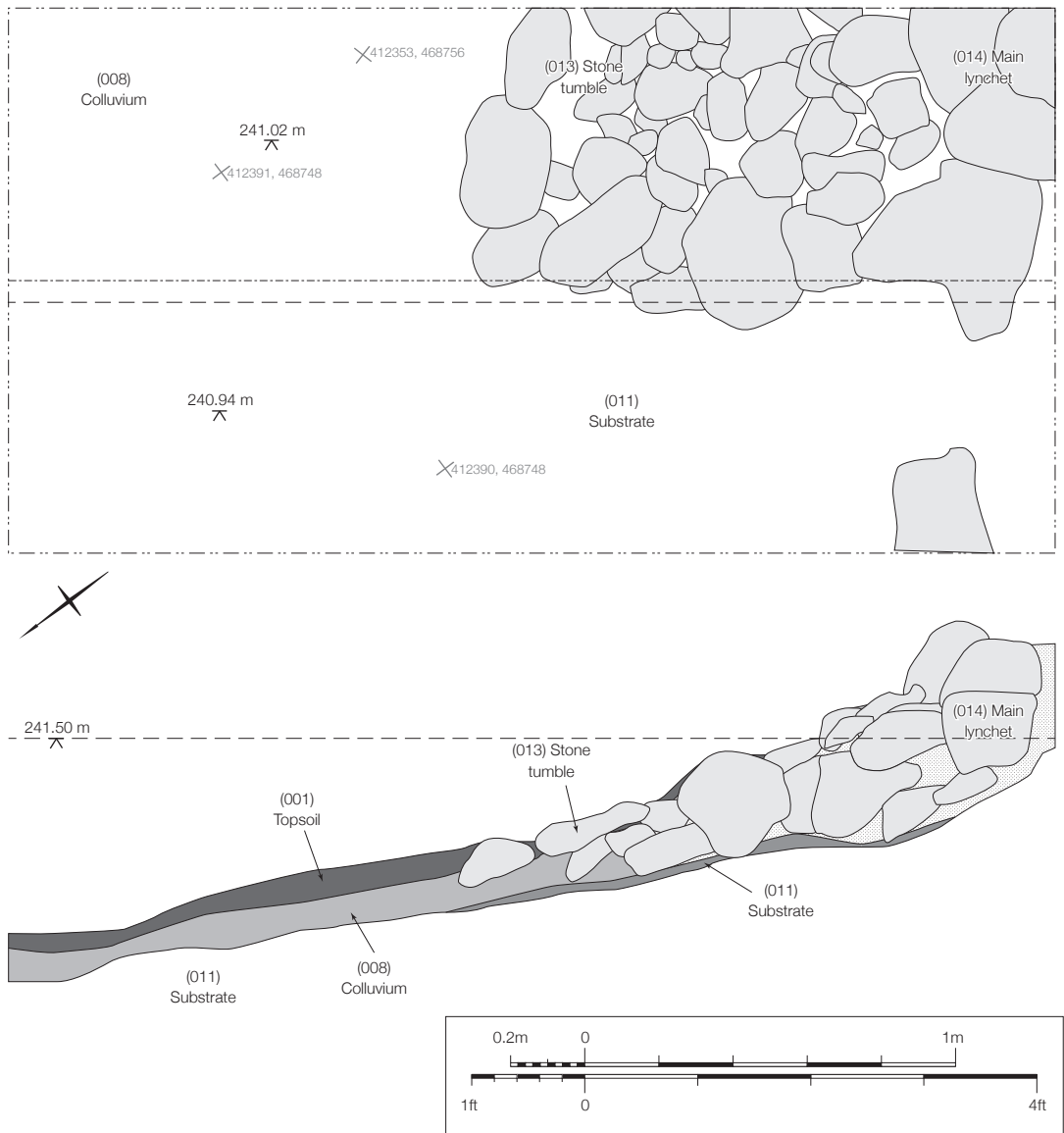
Trench 2 was a smaller trench measuring *c.* 5 m x 3.5 m in plan and positioned 22 m to

Figure 30 View across Trench 2 and looking down the line of the coaxial boundary to where it has been cut by the modern drainage channel



Figure 31 Colt Plain South Trench 2 plan





the west of Trench 1. It was sited to investigate a section of the most clearly defined of the nearby coaxial stone banks running across the contours. The construction of the wall (010) was rough and seemingly ad hoc, alternating between large or very large boulders – presumably rolled into position – and loose rubble banking between. Excavation of the wall demonstrated that there was no defined or faced edge. The

impression gleaned is very much that the wall was formed from clearance of available nearby stone rather than through the careful erection of orthostats with a rubble core as was the case with the unexcavated roundhouse in the complex to the north. Given this loose form of construction, it was difficult to discern the later stone tumble (009) from the *in situ* bank. As with all trenches on the site, all earlier features, including the stone tumble, was overlain

Figure 32 Colt Plain South Trench 3 plan and section

Figure 33 Looking south across Trench 3 after excavation (scales = 1 and 2 m)



by a later leached-out, grey, sandy colluvium (008), likely to have formed over a considerable time with the gradual movement of sediment down the slope. This was in turn overlain by a thin peaty topsoil and turf (001).

Trench 3

Given the relatively poor condition of the stone-revetment to the front of the lynchet in the north-eastern end of Trench 1, a small trench (measuring 3 m x 1.5 m in plan) was opened to investigate the downslope face of a better-preserved section c. 15 m to the south-east. Although relatively rough, it was possible to discern two constructional elements to the lynchet (014): first, large boulders were set into either a purpose-made cut or against a natural edge, defining the line of the lynchet; secondly, a bank of small to medium cobbles was set against the front (downslope) side of the larger boulders. The stones forming the front of the lynchet appeared to sit directly over the sandy clay substrate (011). Given the drainage across the site altering the character of buried deposits, it may be that there was an original thin soil or land surface beneath the stones, but this was no longer visible.

Some elements of the smaller stone packing had become dislodged over time and had spread slightly as loose tumble (013), though the difference between the loose material and the *in situ* banking was barely discernible. Above and around the banking and tumble, a relatively thin (max. 350 mm thickness) leached-out sandy colluvium (008) covered the downslope half of the trench beneath a thin and peaty topsoil (001).

Trench 4

Trench 4 measured 3 m x 1.3 m in plan and was opened around the north-west side of the cup-marked boulder c. 20 m downslope of the lynchet. It was primarily excavated to establish whether the boulder was in its original position. The boulder (024) hosting the rock art was a large and isolated single piece of the local sandstone rather than part of an *in situ* outcrop of bedrock. Despite having a convex base, the bottom of the boulder was slightly bedded into the underlying substrate (011), and it is considered most likely that it is still in its original position, having either rolled down the hill and come to rest on this part of the slope, or potentially deposited at a glacial margin. No further rock art was



Figure 34 Looking east-north-east across Trench 4 showing the cup-marked boulder with the later wall (scale = 1 m). Photograph © B. Barker

identified on any of the exposed sides of the boulder, further supporting the notion that it was in this position when the cup marks were carved into its upper face.

The majority of the walling which runs over the top of the boulder is evidently post-medieval in date, keyed into and matching construction form of the other presumably enclosure-period or later field walling in the surrounding area. It was noted, however, that in several places the basal courses of the wall comprise notably larger boulders, many of which were earthfast and similar to those seen in the stone bank investigated in Trench 2. The alignment of the wall (025) is broadly parallel to the other sections of truncated coaxial boundary (as is noted above) across the Colt Plain complex. It is, however, not entirely straight, and it was noted during excavation of Trench 4, that there appeared to be a slight deviation of the course as it passed over the top of the boulder. It is possible that this was entirely coincidental, but the effect is to ensure the cup marks on the boulder were visible rather than covered by the later walling, raising the

possibility that the original construction respected the earlier rock art.

As in all other trenches, the clay substrate was overlain by a sandy, grey colluvium (026) which had presumably accumulated over some considerable length of time through downslope movement of sediment. The colluvium had filled around the boulder along with a number of smaller cobbles, and this was capped with a thin, peaty topsoil (001) from which the cup-marked boulder stood proud.

COLT PLAIN NORTH

Trench 1

Trench 1 was opened to encompass the majority of the stone-footed roundhouse or hut circle within the wider enclosure. The lowest deposit encountered in the trench was the natural sandstone bedrock (006), here set in clear, regular, squared bedding planes but also eroded in such a way so as to have formed a natural hollow beneath a low outcropping edge. In parts of the trench the bedrock was overlain by

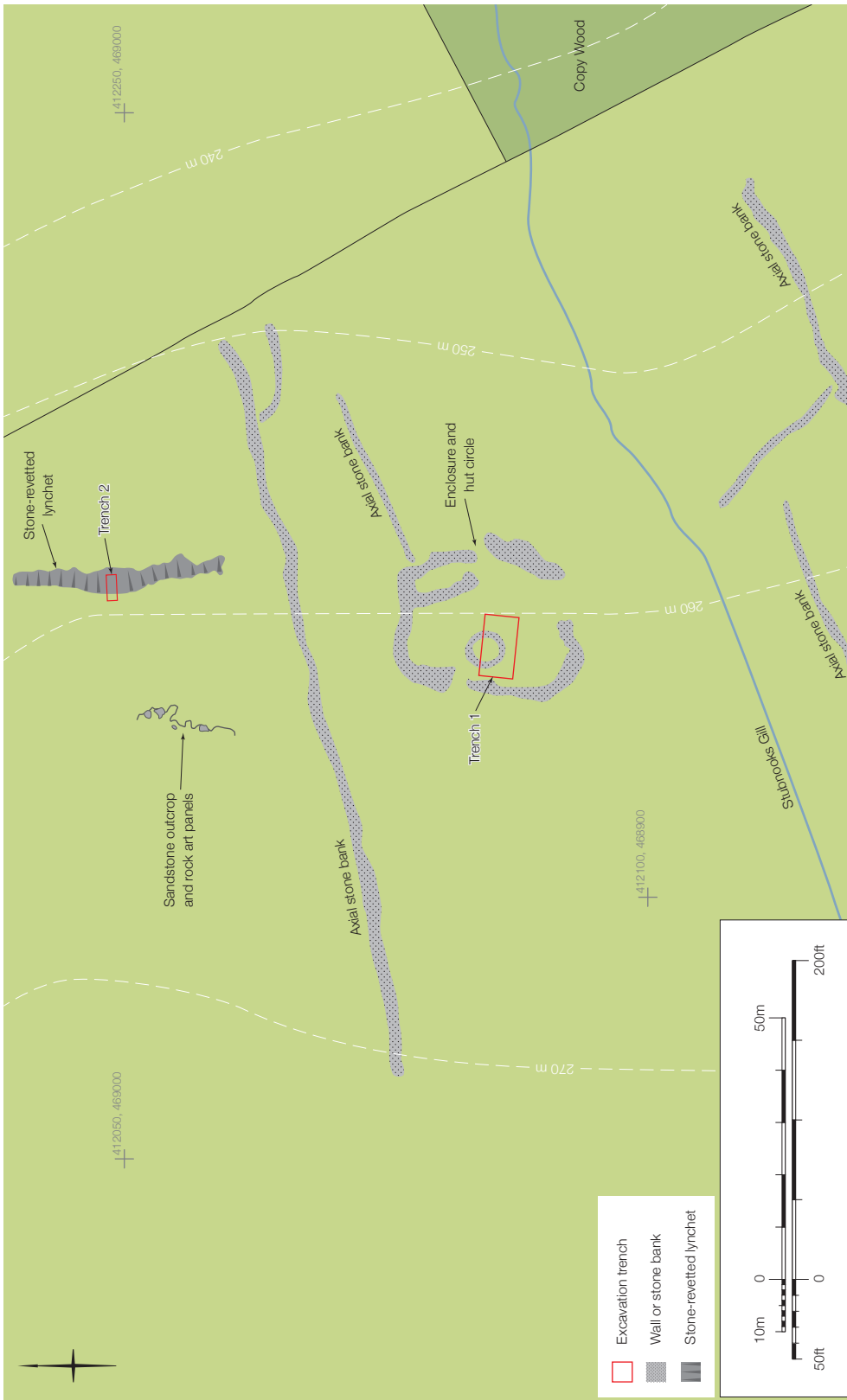


Figure 35 Colt Plain North site plan showing features and trench locations



a ferruginous clayey sand substrate (019). Prior to the construction of the roundhouse, the hollow had been partially filled by a thin, sandy silt soil (020), only now visible to the rear of the hollow and

truncated by building of the structure.

The preparation works for the building of the roundhouse appear to have comprised three separate and likely contemporary elements: the first was

Figure 36 Colt Plain
North Trench 1 plan



additional working or quarrying of the natural hollow (recorded as context [007]), which cut through the earlier soil horizon described above and created a better-defined edge along the southern side of the

roundhouse. The additional cutting and stone removal appears to have been contemporary with the creation of the main walls of the structure, or at least with the positioning of some of the largest boulders



forming a base or partial element of some of the walling. Towards the rear (west) of the scoop, larger slabs of bedrock formed the edge of the cut, whereas towards the eastern front edge of the structure, smaller slabs and blocks were used to create a stable platform for the walls in places. Finally, the preparation works also included the mounding forward of loose substrate and soil to create a defined front edge (022) to the platform.

The main walls of the roundhouse (004) sat within the accentuated natural hollow or scoop, in places using *in situ* bedrock to define the edge and giving an overall internal diameter for the structure of c. 6 m. Indeed, the rear of the roundhouse appears to have comprised almost entirely looser stone packed against the outcropping bedrock. As the wall emerged from the scoop to become a free-standing structural element towards the eastern frontage of the roundhouse, it had a double-skin form comprising roughly dressed facing stones to the exterior and interior, with a loose rubble core between. To the

front (east) of the structure, the wall was even more impressively built, with double-orthostat-and-rubble construction and an entrance flanked by truly massive orthostat jambs, all but one of which has since fallen. At the southern side of the roundhouse, where the form of the wall was more regular, the footings were c. 0.5 m wide; at the front around the entrance, the width increased to closer to 1 m.

Abutting the internal face of the walls, the front quarter or third was laid with flat sandstone flags (005). The slabs were relatively flat, slightly irregular in shape though well keyed-in to form a definite floor surface. Offset from the centre and slightly to the rear of the roundhouse, a stone-lined pit was identified, probably representing a hearth. The stone-lining (018) gave a clear built form to the feature, comprising flat slabs across the base of the pit cut, smaller rounded cobbles packed into the sides and a large slab set upright on one side of the pit. A third slab was laid across the top of the pit, and it is considered likely that it was originally a paired

Figure 37 Looking across Trench 1 showing the excavated roundhouse. The rough rear wall is to the bottom of the shot, whilst the more clearly defined wall can be seen curving to the right. The orthostats and internal paving can be seen by the roundhouse entrance to the back of shot (scale = 2m)

upright slab that had fallen flat after it fell out of use. This would have provided a relatively enclosed hearth with two upright stones to act as supports for some form of fire apparatus. The fill of the hearth pit (016) comprised a mottled sandy silt ranging between grey-brown to dark brown and containing visible charred material. A sample of the fill was submitted for palaeoenvironmental assessment, the full details of which are described in Chapter 8 below. In summary, the sample revealed evidence for charcoal from alder (*Alnus glutinosa*), hazel (*Corylus avellana*) and wild cherry/blackthorn (*Prunus* sp.), as well as plant macrofossils representing spelt wheat (*Triticum spelta*), hazelnut shell (*Corylus avellana*) and undifferentiated grasses (Poaceae). Radiocarbon determinations on a charred spelt grain and a charred hazelnut shell were modelled to produce a date for the fill of the hearth of *cal AD 250 – 380 (95% probability)*.

All structural elements were overlain by the loose stone tumble from the collapse of the walling (003), and all contexts had also then been covered by the development of a sandy grey colluvium (002)

with mottled patches of organic material. Finally, the long-term stabilisation of the remains had allowed the thin peaty topsoil and turf mat (001) to develop over the whole area, other than where prominent stonework stood proud.

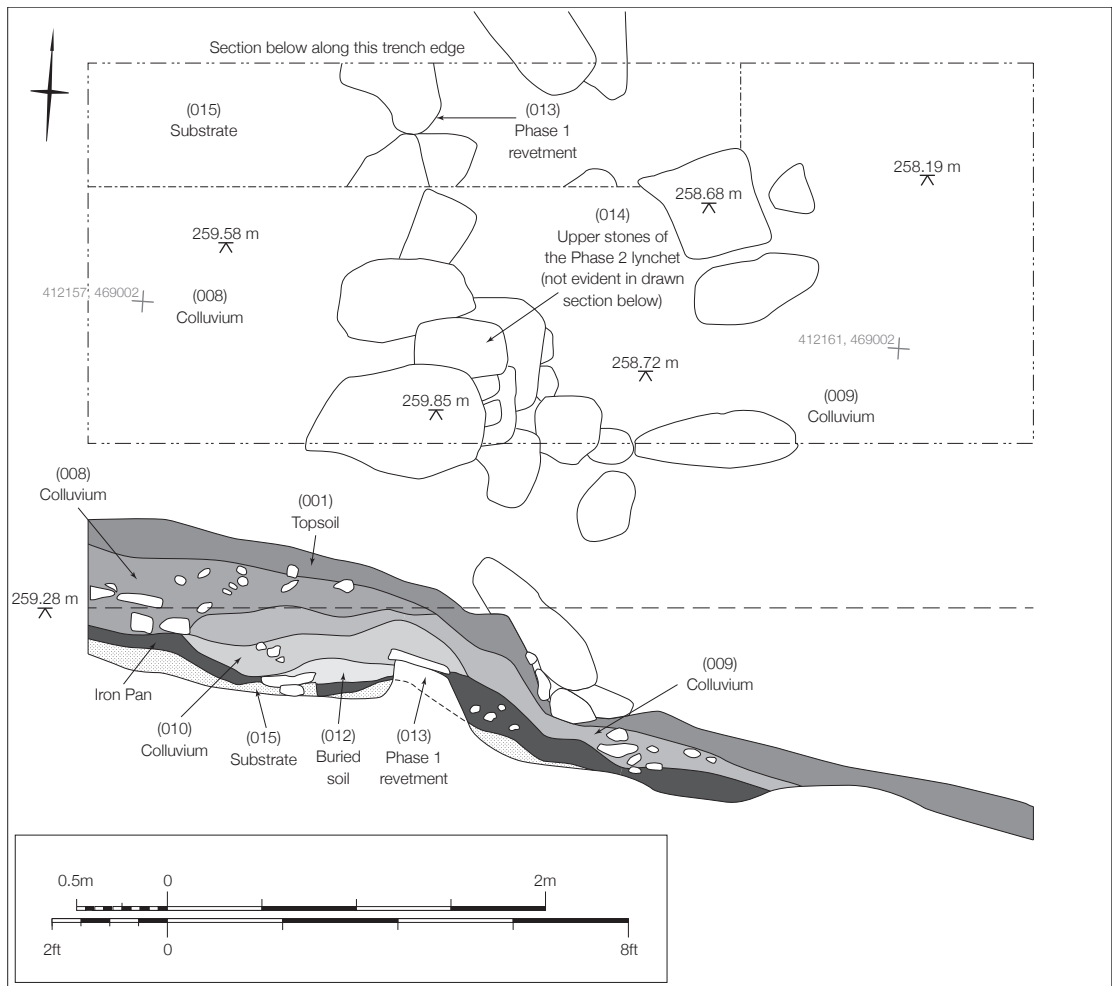
Trench 2

Trench 2 measured 5 m x 2 m in plan and was opened to examine the stone-revetted lynchet to the north of the main enclosure and downslope from the outcrop hosting the cup-marked rock panels. As with the Colt Plain South lynchet described above, it seems that the construction took advantage of a slight natural edge and then further enhanced it. It is possible that the Phase 1 revetting or low wall (013) was set in a slight cut [023] into the yellow-orange sand substrate (015), but this was not visible during excavations. Indeed, many of the lower deposits observed were unclear due to the extensive development of areas of iron pan within the top of the substrate and obscuring the interface with contexts above.

The Phase 1 wall (013) comprised a loose packing of medium-sized cobbles

Figure 38 Stone-lined hearth pit after excavation of the fill (scale = 1 m)





of the naturally occurring sandstone. A sealed soil horizon (012) was identified behind the Phase 1 walling. It is possible that this also preserved some original land surface upon which the walling had been partially set, but the development of iron pan noted above, meant this differentiation between contexts could not be firmly established. A sample from this soil was submitted for palaeoenvironmental assessment, but no identifiable charred remains or plant macrofossils were identified other than modern invasive roots.

The first of three separate colluvium deposits (010) overlay the Phase 1 wall and ran under the Phase 2 revetment. This second episode of walling (014) formed a stable front to the lynchet and incorporated

considerably larger stones than those visible in the first phase. A second episode of grey sand colluvium (009), this time including a spread of cobbles to the rear of the lynchet, butted against the rear of the Phase 2 revetment and, in the northern side of the trench where the larger stones were partially absent, ran over the lynchet. Above this, a final colluvial deposit (008) with fewer cobbles sat against the back of the lynchet. The effectiveness of the lynchet in creating a terrace on the hillside is amply demonstrated by the fact that behind the revetting a total depth of *c.* 0.75 m of accumulated deposits was observed, whilst downslope of the lynchet there was a depth of only *c.* 0.16 m from the modern ground level down to the top of the substrate.

Figure 39 Colt Plain
North Trench 2
plan and section

Figure 40 Looking along the line of the stone-revetted lynchet as Trench 2 is opened



Figure 41 Depth of accumulated sediment behind the revetted lynchet in Trench 2 (scale = 1 m)



6. **R**ADIOCARBON DATING

A total of eleven samples from across the four sites was submitted for radiocarbon determination by the Scottish Universities Environmental Research Centre (SUERC). Five samples came from separate contexts at Knott's Gill, including the sequence of yard surfaces in Trench 2, the Phase 1 turf walling and soil/flooring deposit in the roundhouse in Trench 1, and from the clay-lined pit in the roundhouse interior; two samples derived from the clay lining and fill of the clay-lined hearth at the Blayshaw Gill site; for Colt Plain North, two duplicate samples were submitted from the fill of the central hearth feature in the roundhouse; and for Colt Plain South, two duplicate samples came from the probable stakehole in the roundhouse interior.

METHOD

A full method for the treatment and measurement of the samples by SUERC can be found in Dunbar *et al.* (2016). All the dates have been calibrated using the OxCal software (version 4.3) (Bronk Ramsey 1995; 1998; 2001; 2009; Bronk Ramsey *et al.* 2010; Bronk Ramsey and Lee 2013) and the calibration curve IntCal13 (Reimer *et al.* 2013). The calibrated date ranges are principally cited at 95.4% probability, though in certain cases either the 1 σ (68.2% probability) or specific spikes in the probability distribution have also been noted. Dates are cited in accordance with the form recommended by Mook (1986) and are rounded out to the nearest 10 years. They are also presented in accordance with the international standard known as the Trondheim convention (Stuiver and Kra 1986).

Bayesian modelling has also been undertaken in OxCal for some of the dates, principally involving the combine function for samples derived from the same context and sequence modelling of dates for which a clear stratigraphic relationship was observed on site (see Bronk Ramsey 2008). Modelled dates are posterior density estimates and are given in italics in the text.

RESULTS

Knott's Gill

The Knott's Gill samples can be best described in three parts: the Trench 2 sequence, the Phase 1 roundhouse sequence, and the clay-lined pit inside the roundhouse. The two samples comprising the Trench 2 sequence were a piece of alder charcoal from within the basal cobble layer of the 'yard' surface (020), and a piece of hazel twig charcoal from a concentrated burnt and/or organic deposit (015) which directly overlay it. This clearly observable stratigraphy has allowed for limited modelling of the two-date sequence, resulting in a date of *110 cal BC - cal AD 10 (95% probability)* for the sample from the lower cobbling and a date of *80 cal BC - cal AD 30 (95% probability)* for the accumulation of the burnt or organic deposit. The hazel twig charcoal within a discrete deposit is perhaps the more secure as an interpretable radiocarbon sample, and the most prominent spike in the probability distribution of the unmodelled date suggests a date of between 110 and 40 cal BC at 59% probability.

The two samples from the Phase 1 of the roundhouse were recovered from

Laboratory No.	Sample	Material and Context	$\delta^{13}\text{C}$ (‰)	Radiocarbon Age BP	Calibrated Date (95% confidence)	Posterior Density Estimate (95% probability)
Colt Plain North						
SUERC-76846	COLT17 2A	Charred spelt grain from fill of central hearth in roundhouse (016)	-22.5	1736 ± 24	cal AD 250 - 390	cal AD 250 - 380
SUERC-76847	COLT17 2B	Charred hazelnut shell from fill of central hearth in roundhouse (016)	-23.8	1744 ± 24	cal AD 240 - 380	cal AD 250 - 380
Colt Plain South						
SUERC-77002	COLT172 2	Alder charcoal from stakehole beneath floor of the roundhouse in Trench 1 (018)	-27.3	1808 ± 24	cal AD 130 - 320	cal AD 130 - 230
SUERC-76998	COLT172 1	Alder charcoal from stakehole beneath floor of the roundhouse in Trench 1 (018)	-27.7	1857 ± 24	cal AD 90 - 230	cal AD 130 - 230
Blayshaw Gill						
SUERC-76848	STUD17 4	Charred barley grain from fill of clay-lined hearth (006)	-23.3	1875 ± 24	cal AD 70 - 220	cal AD 100 - 230
SUERC-76849	STUD17 5	Charred barley grain from clay lining of clay-lined hearth (015)	-27.2	1860 ± 24	cal AD 80 - 230	cal AD 80 - 200
Knott's Gill						
SUERC-76856	KNOTT17 13	Charred hazelnut shell from clay-lined pit in roundhouse interior (028)	-27.5	1736 ± 24	cal AD 240 - 380	-
SUERC-76851	KNOTT17 9	Alder charcoal from truncated floor or soil in roundhouse in Trench 1 (023)	-27.1	2028 ± 24	100 cal BC - cal AD 50	80 cal BC - cal AD 50
SUERC-76855	KNOTT17 10	Hazel branchwood charcoal from Phase 1 turf wall of roundhouse in Trench 1 (022)	-24.8	2043 ± 24	160 cal BC - cal AD 20	160 cal BC - cal AD 0
SUERC-76850	KNOTT17 3	Hazel twig charcoal from patch of burnt material in Trench 2 (015)	-26.1	2052 ± 24	160 cal BC - cal AD 0	80 cal BC - cal AD 30
SUERC-76857	KNOTT17 8	Alder charcoal from basal cobble layer in Trench 2 (020)	-27.1	2014 ± 24	90 cal BC - cal AD 60	110 cal BC - cal AD 10

Table 1 Radiocarbon dating results

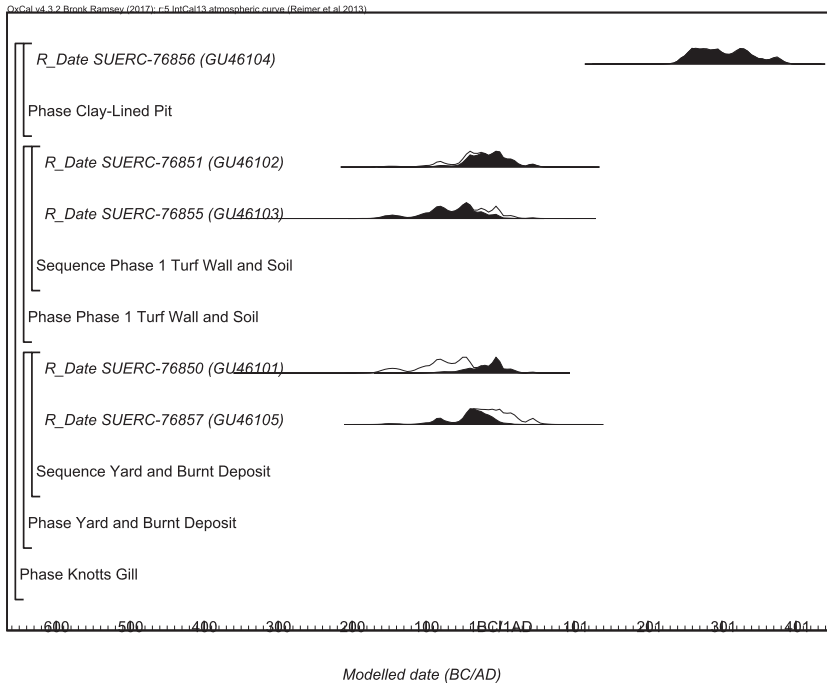


Figure 42 Probability distributions of dates from the Knott's Gill site. Each distribution plot represents the relative probability that an event happened at a certain time. For those sets of dates which have been modelled in terms of the observed stratigraphic sequence, the outline distribution shows the unmodelled calibrated date

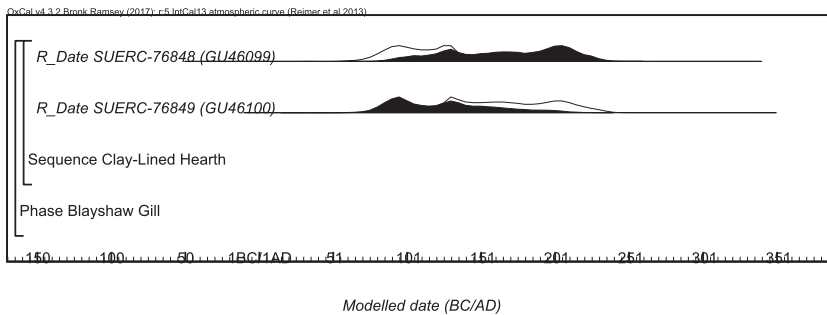


Figure 43 Probability distributions of dates from the Blayshaw Gill site. The depiction conventions are the same as in Figure 42

the truncated remains of turf walling (022) sealed beneath the later stone walls and from a truncated soil or floor deposit (023) which overlay the turf. The results have been modelled based on this observed stratigraphy, returning a date of *160 cal BC - cal AD 0 (95% probability)* for the turf walling and a date of *80 cal BC - cal AD 50 (95% probability)* for the deposit which seals it. Finally, a single charred hazelnut shell from the fill of a clay-lined pit (028) in the roundhouse interior returned a result of *cal AD 240 – 380 (95% probability)*, with the calibration plot suggesting a date within the late 3rd century as most likely.

Blayshaw Gill

Two samples were submitted for radiocarbon determination from Blayshaw Gill, both from a clay-lined hearth excavated behind the main rampart. Both samples were charred barley grains, one from the clay lining of the feature (015) and one from the fill (006). This stratigraphic relationship allowed modelling of the calibrated dates. The date of the clay lining is *cal AD 80 – 200 (95% probability)* and the date of the fill material is *cal AD 100 – 230 (95% probability)*, though given the nature of the feature in question, it seems likely that the two deposits will be chronologically close.

Figure 44 Probability distributions of dates from the Colt Plain South probable stakehole

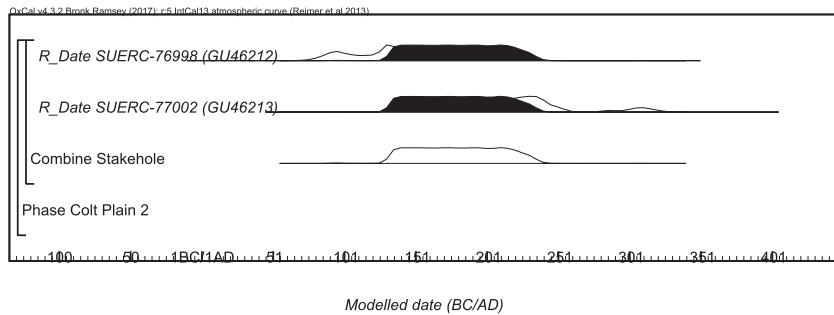
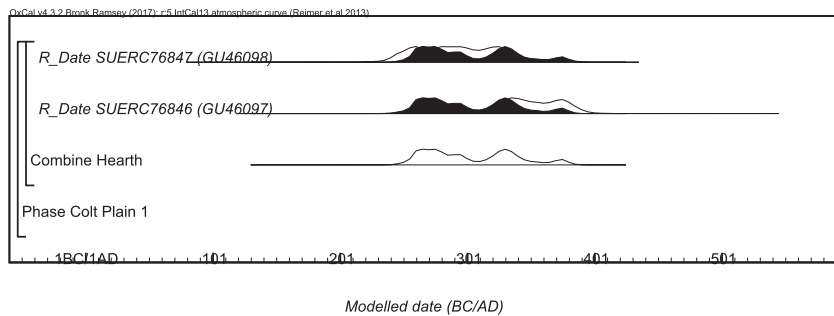


Figure 45 Probability distributions of dates from the Colt Plain North hearth



Colt Plain South

For Colt Plain South, duplicate samples were submitted from the same context: separate pieces of alder charcoal from the fill of possible stakehole identified within or sealed by the roundhouse floor deposit. The dates have been modelled using the OxCal combine function based on an assumption that they relate to the same event, returning a date of *cal AD 130 – 230 (95% probability)*. It is acknowledged, however, that this assumption may not be true, and the unmodelled calibrated and uncalibrated dates are given in Table 1 above.

Colt Plain North

As with Colt Plain South, the Colt Plain North samples were duplicates submitted from the same context: a charred spelt grain and a charred hazelnut shell from the fill of the hearth within the roundhouse. The dates have been modelled using the OxCal combine function based on an assumption that they relate to the same event, returning a date of *cal AD 250 – 380 (95% probability)*. As with Colt Plain South, this assumption may not be true, and the unmodelled calibrated and uncalibrated dates are given in Table 1 above.

7. SMALL FINDS

Small finds were only recovered from the Blayshaw Gill site. This is largely in keeping with previous experience of excavation on upland sites within Nidderdale dating to before the medieval period. The assumption is that this does not necessarily represent a lack of material culture in these periods, but it may rather be a product of poor preservation due to the acidic nature of soils on the Millstone Grit bedrock. The Knott's Gill and Colt Plain sites are on largely or entirely unimproved moorland with poor drainage and acid conditions. The Blayshaw Gill site, whilst still predominantly acid, hosts a sandier woodland soil, seemingly more free-draining than on other sites.

Two fragmentary body sherds of thin probable Black-burnished ware (BBW) were recovered from the interface between the stone tumble and the natural substrate outside the main enclosure bank in Trench 1. The pieces have a fine sandy fabric with small micaceous or quartzite inclusions, and the exterior of one sherd features a cross-hatch scratch pattern in the burnishing. Given the relatively poor condition and fragmentary nature of the pieces, assignment to the BB1 or BB2 sub-categories would be tentative at best, and there is the potential that they represent a locally produced grey ware in the style of BBW. The BBW pottery style and its derivative coarse wares are relatively prevalent on Romano-British sites across the country, appearing in the North in the 2nd century AD (Tyers 1996).



Figure 46 Two fragments of Black-burnished ware pottery from Blayshaw Gill

Other than the Romano-British pottery sherds from Trench 1, the only other small finds recovered were two relatively modern pieces from the topsoil of Trench 3. The first artefact is a rim sherd from a large creamware pot with a rolled and everted rim, and dating to after the widespread adoption of mass-produced domestic pottery in the mid-18th century. The final artefact is the brass head from a 12-bore cartridge. Unfortunately, the piece is so heavily corroded that no maker's name or date of manufacture is possible other than a broad ascription to the period between the adoption of centrefire cartridges and the replacement of paper casings with plastic (c. 1870-1950) (Centrefire Cartridge 2010).

8. PALAEOENVIRONMENTAL ASSESSMENT

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INTRODUCTION

This chapter presents the results of palaeoenvironmental assessment undertaken on a number of hand-recovered individual samples and bulk samples from four sites. The objective was to assess the palaeoenvironmental potential of the samples, establish the presence of suitable radiocarbon dating material, and provide suitable recommendations for the radiocarbon dating programme (see above). Assessment was conducted by Lorne Elliott; sample processing was undertaken for the Knott's Gill samples by Jenny Richards, for the Blayshaw Gill samples by Dr Steph Piper, and for the Colt Plain North and South samples by Lauren Kancle. Tables detailing the full results for each of the sites are included as Appendix 1.

METHOD

The bulk samples were manually floated and sieved through a 500 µm mesh. The residues were examined for shells, fruitstones, nutshells, charcoal, small bones, pottery, flint, glass and industrial residues, and were scanned using a magnet for ferrous fragments. The flots were examined at up to x60 magnification for charred and waterlogged botanical remains using a Leica MZ7.5 stereomicroscope. Identification of these was undertaken by comparison with modern reference material held in the Palaeoenvironmental Laboratory at Archaeological Services Durham University. Plant nomenclature follows Stace (2010). Habitat classifications follow Preston *et al.* (2002).

Selected charcoal fragments were identified, in order to provide material

suitable for radiocarbon dating. The transverse, radial and tangential sections were examined at up to x600 magnification using a Leica DMLM microscope. Identifications were assisted by the descriptions of Schweingruber (1990) and Hather (2000), and modern reference material held in the Palaeoenvironmental Laboratory at Archaeological Services Durham University.

The works were undertaken in accordance with the palaeoenvironmental research aims and objectives outlined in the regional archaeological research framework and resource agendas (Roskams and Whyman 2007; Hall and Huntley 2007; Huntley 2010).

KNOTT'S GILL

Results

The bulk samples contained varying quantities of fragmented (often <4 m) charcoal, which was generally in good condition. Selected identifiable fragments from the bulk samples were either hazel, alder or birch. The same species occurred in the hand-recovered material, with the addition of oak sapwood noted amongst the cobbled surface of the yard (006) <4>. Many of the identified charcoal remains are small calibre branchwood or twigs. Fragments of charcoal from the clay lining (029) of a pit were too small to identify.

Charred plant macrofossil remains occurred in two samples. The fill (028) of a clay-lined pit contained a barley grain, a fragment of hazel nutshell, and seeds of redshank and grass (*Phleum/Poa*-type). A larger grass seed (retained in the 1 mm sieve fraction) was present in the area of

burning/accumulated charred material (015) in Trench 2. Diagnostic finds were absent from all samples. A concentration of amorphous iron-rich material was present in deposit (015).

Discussion

The palaeoenvironmental assessment provides limited evidence for the disposal of domestic waste, and suggests that barley and possibly wild-gathered food were used at the site. Diagnostic material was absent. Identified charcoal remains indicate alder, hazel and birch were readily available.

No further analysis is recommended, although the sample from the area of probable burning in Trench 2 (015) contained enough identifiable charcoal to provide additional information regarding the exploitation of woodland resources, which may be of interest.

BLAYSHAW GILL

Results

The samples, taken from the fill and lining of a clay-lined hearth, comprised a concentration of iron-rich stones and varying quantities of fragmented (<10 mm) charcoal and burnt clay. The charcoal remains were in good condition, with similar assemblages in both samples predominantly comprising birch stemwood and lower quantities of alder stemwood, oak sapwood, hazel branchwood, traces of ash and willow or poplar twigs. Growth rings indicate that these twigs were cut after two and three years.

The charred plant macrofossil assemblages were also comparable between the two samples and included evidence of wheat and barley (grains/chaff). A wheat grain present in the hearth fill (006) had the oval shape and parallel-sided morphology typical of spelt wheat (*Triticum spelta*), as summarised by Jacomet (2006). Diagnostic chaff confirms the presence of this species. Where good preservation allowed, the barley grains were identified as

the hulled variety and the chaff indicated the species was six-row barley (*Hordeum vulgare*). Both samples contained small fragments of nutshell (hazel), grass-type monocot stems and weed seeds comprising redshank, docks, sedges, pale persicaria and tiny grasses.

Discussion

The palaeoenvironmental assessment provides limited evidence for the disposal of domestic waste and the use of spelt wheat and hulled six-row barley at the site. The occurrence of chaff may indicate the local production of these cereal crops. Spelt wheat first appears in England during the middle to late Bronze Age, but is more commonly associated with Iron Age and Romano-British sites (Greig 1991). The presence of weed seeds and low numbers of charred monocot (grass-type) stems may suggest some of this hearth material represents the remains of gathered hay used for fodder or bedding, or they may represent the burning of manure.

Fragments of charred hazel nutshell suggest wild-gathered foods were also utilised at the site, although their presence in low numbers possibly reflects a minor use of this particular food source. The common occurrence of identified birch charcoal may reflect the predominance of this taxon in the local landscape. The range of species identified in the charcoal assemblages perhaps represents the random selection of woody taxa. No further analysis is recommended for the samples from Blayshaw Gill.

COLT PLAIN SOUTH

Results

A bulk sample taken from the fill of the roundhouse's central hearth (016) contained fragmented (often <4 m) charcoal and a large quantity of modern roots, reflecting the shallow nature of the feature. Finds were absent. The condition of the charcoal was generally poor due to

abundant mineral inclusions, which often prevented identification. Selected charcoal fragments were predominantly hazel branchwood with traces of alder and the genus cherries, which includes blackthorn, and wild and bird cherry. Further identification of cherries to species level was not possible due to vitrification and radial cracking, which changes the structure and cleavability of the charcoal.

A small number of charred plant macrofossils occurred in the hearth fill, including cereal grains and chaff (wheat), nutshell fragments (hazel) and grass seeds. The cereal grains were often degraded, preventing more detailed identification. Where identification is possible, wheat grains had the oval shape and parallel-sided morphology typical of spelt wheat (*Triticum spelta*), as summarised by Jacomet (2006). The presence of diagnostic spelt wheat chaff (glumes and spikelet forks) confirmed the use of this cereal crop at the site. The small grass seeds (retained in the 1 mm sieve) are *Avena*-type and may be wild or bristle oat (*Avena fatua/strigosa*).

Hand-recovered charcoal from the hearth fill comprised additional species not noted in the bulk sample. These include fragments of Salicaceae (willow or poplar), from samples <4>, <5>, <6>, <7> and <8>, a piece of oak branchwood (small calibre) from sample <3> and birch charcoal from sample <7>. Also present in sample <7> was small calibre hazel branchwood.

A bulk sample taken from a buried soil horizon in Trench 2 [12] comprised a small quantity of modern roots, but archaeological material was absent.

Discussion

Hearth fill deposit (016) contained evidence of domestic activity at the site and indicated the cultivation of spelt wheat and use of wild-gathered food. Spelt wheat first appears in England during the middle to late Bronze Age but is usually associated with Iron Age and Roman settlements in England (Greig 1991; Hall and Huntley

2007). Identified charcoal remains indicate a range of woody taxa were exploited.

COLT PLAIN NORTH

Results

A small bulk sample (< 0.5 litres) taken from the fill of a possible stakehole (018) contained a small quantity of fragmented (mainly <4 m) charcoal and traces of modern roots. Finds were absent. The charcoal was poorly preserved due to abundant mineral inclusions, making identification difficult or in some instances impossible. Despite the poor condition of the charcoal it was possible to identify a few fragments of alder and charred heather. The alder remains show a sparse vessel arrangement and curled growth, characteristic of reaction wood. Indeterminate fine 'twiggy' material was also noted amongst the charcoal remains. A small number of charred plant macrofossils occurred in the bulk sample. These included cereal chaff (wheat and barley) and a dock nutlet. The condition of the barley rachis fragment and wheat glume base is too poor for further identification, although the glume base is possibly from spelt wheat (*Triticum spelta*).

Hand-recovered material from the probable stakehole fill comprised poorly preserved alder and Salicaceae (willow or poplar) charcoal. The identified fragment of willow or poplar is from small calibre branchwood with three annual growth rings, but abundant mineral inclusions prevented further interpretations for the alder.

Discussion

Poorly preserved charcoal and charred plant remains recovered from the fill of the probable stakehole (018) are characteristic of fuel debris, probably from hearth waste sweepings. Diagnostic material is absent, although the possible presence of charred spelt wheat chaff would be consistent with a later prehistoric or Romano-British origin (Greig 1991; Hall and Huntley 2007).

9. THE NIDDERDALE SITES IN CONTEXT

LOCATION AND DISTRIBUTION

All the sites investigated through the course of the project are set on the western side of Nidderdale and sit between *c.* 220 and 260 m OD; they are all close to or immediately adjacent to water sources and occupy locations which are reasonably well sheltered by the surrounding topography, though the Colt Plain North group is perhaps more open than the others. It is possible to interpret these commonalities in location in purely functional or environmental terms: the prevailing weather patterns come from the west, and even during excavations – with the modern open moorland landscape largely free of tree cover at two of the sites – the difference in exposure between the sites and the flatter moor tops even 50 m further upslope, was noticeable. There are, however, a number of potential identification biases which must be noted in terms of the location and distribution of the sites discussed. Firstly, the selection of sites was largely based on initial walkover survey as part of the *Our Farm Heritage* project, which was reliant on the availability of farm holdings to survey and the permission of landowners to support such work. This is, however, considered to be less of a potential bias than some factors, given that land holdings in all parts of Nidderdale were subject to walkover survey by the same team. Once all results of this survey work have been compiled, we will be in a stronger position to assess how representative the excavated sites are in terms of location and extent.

Secondly, and more significantly, the extent of Iron Age and Romano-British settlement activity at lower levels in the dale is not – and may well never be – accurately

known, due principally to the extent of historical and modern agriculture truncating any such remains. This is a problem common to upland landscapes in all parts of the country, where high pasture and unimproved moorland provide good conditions for the preservation of extant archaeological sites, despite introducing other issues of preservation depending on the local geology, soil and modern land-use. Despite these caveats, extensive walkover survey by the author around a considerable amount of the Nidderdale moorland, as well as in other parts of the Pennine Dales, has located only a few other sites of potentially similar date and form to those discussed here, and none which are as extensive or well preserved as the Knott's Gill complex or the Colt Plain field system. Until sites comparable in number and scale are identified on the eastern side of Nidderdale or at different altitudes, then the similarity of location should be noted as of interest.

FORM, SEQUENCE AND DATE AT KNOTT'S GILL

When initially surveyed, the Knott's Gill complex was identified as being the most 'traditionally Iron Age' in its form, principally due to the irregular, curvilinear form and seemingly organic development of the enclosures which follow and make use of the natural topography. In terms of local analogies, perhaps the best known is the almost honeycomb-like complex at Burton Moor in upper Wensleydale. This site is considerably larger than Knott's Gill, with up to 14 possible phases of development in the arrangement of enclosures (Fairless 2004, 99), but despite this disparity in size,

Figure 47 View across
the stone-walled field
system at Fortress
Dike on Kirkby
Malzeard Moor

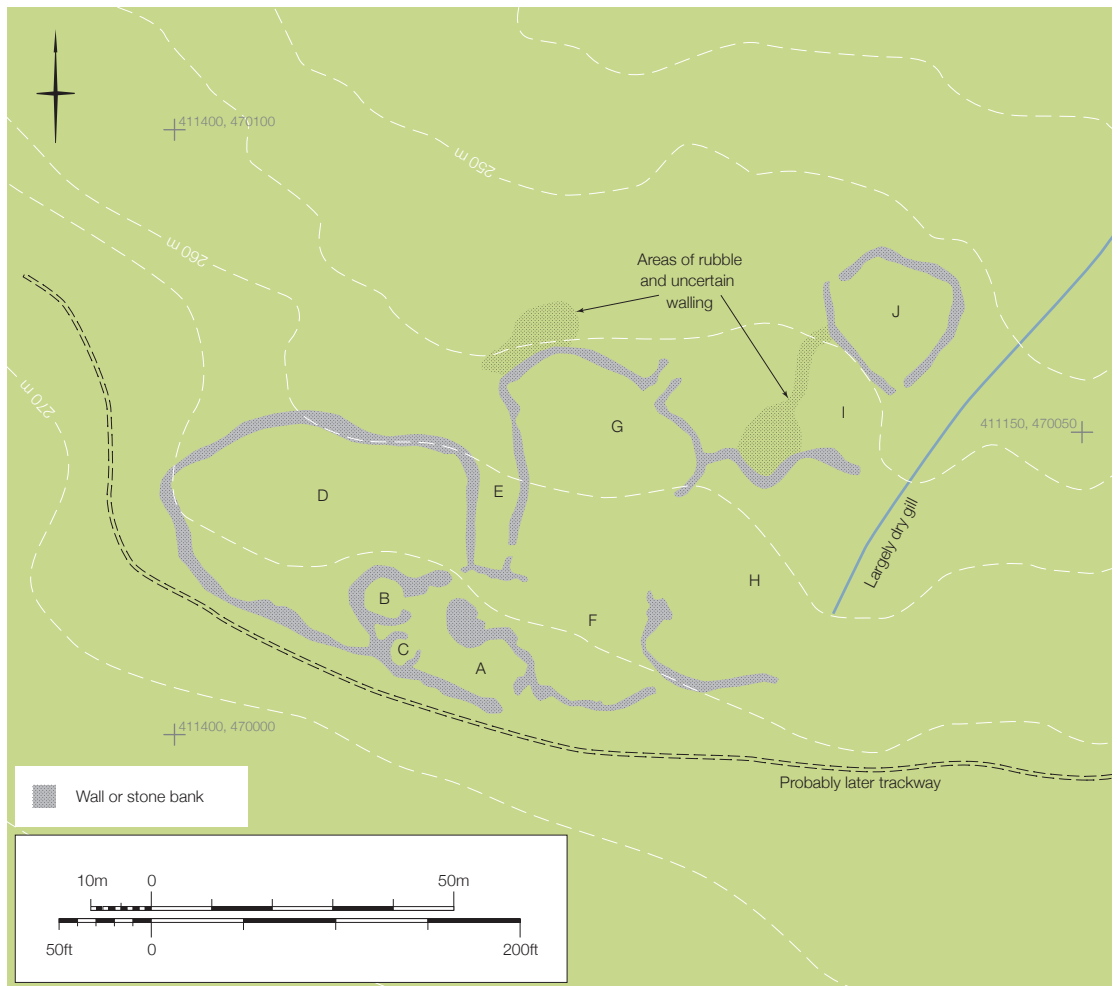


the structural form of the walls and the overall arrangement of the complex are relatively close. A closer example, both geographically and in overall size, is the field system at Fortress Dike, previously known but surveyed by the author during walkover survey on Kirkby Malzeard Moor c. 7 km to the north-east of the Nidderdale sites (Brightman 2014). Although no identifiable roundhouses are associated with this small system, the site sits on a west-facing slope by Carlesmoor Beck around the 260 m contour and is defined by walls which are a mix of orthostat and stone dump construction.

Whilst the Colt Plain field system (see below) is more extensive, the Knott's Gill complex appears to be the most complete of the sites investigated. Given the form and layout of the complex, it is possible to make some comments about the development of the enclosures and how they may have functioned (over and above that given in Chapter 3 above). It is admitted, however, that these interpretations are tentative and based on assumptions about the contemporaneity of some of the elements.

The focus of the complex is Enclosure A, at least the western end of which has a cobbled yard surface directly in front of the two roundhouses (B and C). It is possible that this initial enclosure may have had a northern extension, as the southern wall of the passage or funnel (E) appears to continue the line of the main enclosure wall. It is tempting to speculate that there may have originally been more walls at the meeting point of Enclosures F, G and H which would have aided our understanding of the development of the complex, but no clear surviving alignments could be found during the survey.

Enclosure D is demonstrably later than Enclosure A, delimiting a large area on slightly lower ground than the natural platform upon which the roundhouses stand. It is possible that Enclosure G is contemporary with Enclosure D, deliberately creating the funnel or droveway (E) as part of one coherent phase, but the way in which the west wall of Enclosure G seemingly breaks back at a slightly unnatural angle to respect the eastern wall of Enclosure D suggests it was a later addition. The northern boundary of Enclosure



H follows Enclosure G, and Enclosure I appears to have been formed through the linking of existing Enclosures H and J. In total, this suggests a minimum of five phases of development of the complex, though it is not possible to say with any certainty over how long a period this development took place.

In terms of the possible flow of movement through the enclosures, the absence of walling in the centre of the complex means a complete analysis is not possible. Based on the assumption that at least some of the enclosures were intended as livestock folds or stockades, however, there are some inferences which can be made. Perhaps the most intriguing feature is the long funnel (E), which is suggestive of arrangements

for driving livestock from the surrounding area into a fold, though – as noted above – this interpretation is tempered by the volume of broken and scattered boulders at its southern end. Enclosure A – the main enclosed ‘yard’ including the paired round-houses – has an eastern entrance leading to the level terrace behind the complex which carries the current trackway, and a steep access leading down into Enclosure F. Based on an assumption that there were additional boundaries now lost, then the movement of livestock through (E) would bring them in to Enclosures G and F. From here, there is access to Enclosure H and the adjacent gill. Enclosure D represents an entirely enclosed area with no external access; this means that despite its location

Figure 48 Plan of the Knott's Gill complex

Figure 49 Aerial view looking north-north-east over the excavations. Trench 1 and 2 are in the foreground, with the orthostats defining the rear of the larger roundhouse beyond the larger trench. Towards the back of the photograph, the northern wall of Enclosure D sweeps in from the left of shot forming the funnel or driveway (E) along with the west wall of Enclosure G. © R. Stroud



on the edge of the complex, livestock from the surrounding land would have had to be brought in through Areas E, G and F or through Areas A and F. Of these, the latter would mean bringing animals past the front of the roundhouses and down a steep and narrow access before turning sharply left into Enclosure A, and so the former seems more likely.

In terms of the construction of the stone-built roundhouses at Knott's Gill, two clear forms were evident: the smaller of the two roundhouses was the one targeted for excavation in Trench 1. It measured c. 4.5 m in internal diameter and comprised very rough stone rubble walls with little evidence of coursing or clear facing stones. A stone threshold stone was identified, opening onto rough external paving. The adjacent roundhouse (not excavated) had an internal diameter of c. 6 – 6.5 m, and the extant walls include prominent orthostat facing, in some places prominently forming a double-skin with rubble core. The initial on-site interpretation was that the two different forms of construction most likely represented contemporary or near-contemporary structures with

different functions: the larger of the two perhaps representing domestic occupation and the smaller and more roughly built perhaps more related to agricultural or storage functions. The wide gap between the two periods of use shown in the dating evidence (see below) may, however, support an interpretation that different construction forms could be from different times. It is likely that only investigation of the second roundhouse could definitively untangle this chronology.

Perhaps the most intriguing evidence from Knott's Gill is that which demonstrates the multi-phase use of the site, both in terms of the structural evidence but perhaps more starkly through the radiocarbon dating. There were two broad phases identified, though there may be multiple episodes of settlement or other activity for which evidence no longer exists or exists only in the parts of the site that remain uninvestigated. The first phase comprised a turf-walled roundhouse associated with a cobbled yard. Modelled radiocarbon dates from the truncated turf walling and truncated flooring deposit which overlay it returned dates of 160 cal

BC – cal AD 0 (95% probability) and 80 cal BC to cal AD 50 (95% probability) respectively; however, the 1 σ (68%) probability for the two radiocarbon determinations suggests a tighter bracket of 100 – 30 cal BC for the turf walling and 50 cal BC – cal AD 10 for the floor deposit. The nature of the deposits is such that they are not ideal candidates for radiocarbon dating, with the potential for earlier material to have been incorporated into the contexts potentially resulting in erroneously earlier dates.

The radiocarbon determinations on samples from the lower cobbled surface in front of the roundhouses and the discrete patch of burning against the enclosure wall returned dates of 110 cal BC – cal AD 10 (95% probability) and 80 cal BC – cal AD 30 (95% probability) respectively. As with the Phase 1 roundhouse dating, the 1 σ (68%) probability for the determinations gives a possible tighter range of 50 – 10 cal BC for the lower cobble sample and 50 cal BC – cal AD 10 for the area of burning. Again, both these deposits are not considered excellent candidates for dating, given that, with the exception of the charred wood from the patch of burnt material, the samples are not unequivocally related to the feature in question. As the samples submitted were

all hazel and alder branchwood charcoal with a maximum of four growth rings, however, there is not considered to be any additional potential bias in the results from ‘old wood effect’. Despite these caveats, the strong accordance between all the radiocarbon evidence allows considerable confidence in dating the earlier phase of activity at Knott’s Gill to the end of the Iron Age in the later 1st century BC.

The archaeological evidence clearly demonstrated at least two phases to the remains: an initial turf-walled roundhouse set within the scoop and platform followed by a second phase built in rough stone and stabilised with large stone boulders to the front edge of the platform. Two different episodes of cobbled surface and associated paving to the front of the roundhouses also supports the interpretation of multi-phase use. The identification of a clay-lined pit with an organic-rich fill – tentatively interpreted as a storage pit of some kind – was initially assumed to be contemporary with the earlier phases of activity on site due to the ambiguity of the rear wall line of the roundhouse. Radiocarbon determination on charred hazelnut shell and a charred barley grain from the fill of the feature, however, returned a date of cal AD

Figure 50 Volunteers begin to expose the paving in front of the roundhouse in Trench 1



240 – 380 (95% probability) with the 46% probability spike on the calibration plot indicating a date of *cal AD 250 – 300*. This is closely contemporary with the Colt Plain North site – described below and only 1.25 km to the south-east. The disparity between the two dated phases of activity at the site presents three possible interpretations, though until more of the site is investigated it is not possible to say with any certainty which is the most likely; they are:

- Continuity of settlement and use for at least *c. 300* years;
- A complex which is Late Iron Age in its entirety, but was opportunistically re-used in the Romano-British period
- An initial Late Iron Age complex which fell out of use and was re-occupied in the Romano-British period, with some of the enclosure development and/or different forms of structure also dating to this period.

The final evidence to note from Knott's Gill is that from the palaeoenvironmental assessment. Considerable volumes of charcoal were recovered from both the Iron Age and Romano-British deposits, but in terms of illuminating the nature of settlement at the site, the remains from the Romano-British clay-lined pit are most valuable. Although slight in number, the presence of barley and hazelnut shell suggests a mix of both arable agriculture and gathered wild resources.

ENCLOSURE AND AGRICULTURAL PRACTICE AT BLAYSHAW GILL

The Blayshaw Gill site as understood from the surviving remains is considerably simpler than either Knott's Gill or Colt Plain. The investigation of the front terminal of the bank demonstrated that it comprised a loosely compacted stone dump rather than a built stone wall, and if it was to present a barrier of any real function, then it would have almost certainly required some form of fence or palisade. The enclosure boundaries at the

other sites investigated comprised a mix of orthostats and stone dumps, and it is tempting to see the difference in form in terms simply of availability of raw materials. Whilst it is certainly the case that the Colt Plain and Knott's Gill sites have an abundance of naturally broken stone boulders and outcropping edges in the immediate vicinity, the Blayshaw Gill site is still close to available rock sources and it may be the case that the construction form is intentional rather than opportunistic.

Only one small trench at Blayshaw Gill targeted the remains of possible structures within the enclosure (presumed roundhouses), and the modern truncation of the interior of the structure means there is little which can be said with any certainty. Nevertheless, Trench 3 did reveal the truncated remains of a clay bank on the line identified as the roundhouse wall, giving us some information about the style of construction.

The most significant feature identified within the enclosure was a clay-lined hearth set hard against the inside of the enclosure bank *c. 2* m to the right of the bank terminal. Although the feature extents were largely amorphous, the considerable heat-affectation of the surrounding substrate and heavily charred nature of the fill indicates a relatively long-lived feature. The samples taken from this feature are particularly important in that they are functionally related rather than potentially representing the incorporation of non-contemporary material, as can be the case with buried land surfaces or indeterminate 'deposits'. As is described in Chapter 8, the results of assessment for both the hearth fill and the clay lining paint an intriguing picture about some of the activities undertaken at the site. Arable agriculture and the processing of grain is suggested by the presence of wheat and barley grains and chaff, including identification of spelt wheat (*Triticum spelta*) and six-row barley (*Hordeum vulgare*), and the augmentation of the occupants' diet with wild resources is indicated by the presence

of hazelnut shell. The charred wood recovered from the feature – presumably representing fuel – suggests mixed deciduous woodland or woodland pasture in the surrounding area, predominantly birch (*Betula* Sp.) alongside alder (*Alnus glutinosa*), oak (*Quercus* Sp.), hazel (*Corylus avellana*), ash (*Fraxinus excelsior*) and either willow or poplar (*Salicaceae*). Perhaps most interestingly, the majority of the identifiable charcoal had growth rings indicating that they had been cut after two to three years, suggesting active management and coppicing. As a final note, the presence of weed seeds and grass stems may also represent the burning of hay bedding or manure, indicative of pastoral agriculture or the keeping of horses.

Radiocarbon determination on single-season samples (barley grains) from the clay-lining and fill of the hearth returned dates of *cal AD 80 - 200 (95% probability)* and *cal AD 100 - 230 (95% probability)* respectively. The 1^{σ} (68%) probability for the samples tightens the possible range to *cal AD 80 - 150* for the clay-lining, and *cal AD 120 - 280* for the sample from the fill. Taken alongside the find of two sherds of Romano-British Black-burnished ware pottery (or a local derivative copy) from immediately outside the enclosure, we can be relatively confident in ascribing a broadly 2nd-century AD date to the site.

COLT PLAIN AND COAXIAL FIELD SYSTEMS

The Colt Plain complex, encompassing both the Colt Plain North and Colt Plain South sites, is the most extensive of the sites investigated and represents a third type of land enclosure. Whereas the Blayshaw Gill site is a single enclosure with potentially multiple roundhouses, and the Knott's Gill site is a coherent and developed complex of adjacent enclosures, the Colt Plain field system is a landscape of largely detached elements. The interpretational problem that this presents, therefore, is in understanding the chronology of these elements:

can they be seen as contemporary and coherent, or was this an evolving landscape representing change, addition and re-use over potentially many centuries?

Coaxial field boundaries – landscape systems covering often considerable areas – are relatively well attested across the Yorkshire Dales, as well as in the North York Moors and Cumbria. They typically comprise parallel axial stone banks divided with intermittent transverse and terminal banks or natural features and occasionally including smaller enclosures and hut circles within the overall complex. Commonly, coaxial boundaries run across the contours of a slope, effectively dividing the hillside into strips running from the high moor down to, where their course can be traced, the lower sides and base of the valley. The main examples in the area around Nidderdale are those in Wharfedale – principally around Grassington and up the eastern side of the dale – and Swaledale, though less complete or extensive systems are known from Wensleydale, Littondale and Ribblesdale (Brown 2016, 87). In terms of understanding their typical form, few detailed excavations have been undertaken of the coaxial boundaries themselves: Fleming (1998, 140) noted a well-built wall with facing stones and compacted rubble core in excavations near Healaugh, whereas a note by Raistrick (1937, 168 in Brown 2016, 206) on his work near Grassington described simple rubble banks with no evidence of coursing.

In comparison to the larger known coaxial field systems in the Yorkshire Dales, the truncated remains of the Colt Plain field system are spread across c. 14 ha, making it comfortably one of the smallest recorded, with only the systems at Carperby 2 (Wensleydale) and Low Row Pasture (Swaledale) smaller (Brown 2016, 97). Perhaps the most analogous coaxial field systems to Colt Plain – in terms of form rather than size – are the Swaledale systems, which generally display less regularity than the Wharfedale systems. The

Figure 51 A 'gateway'
between two parts of
a coaxial field system
above Fremington
Edge in Swaledale



Healough field system for example, which runs around the southern flanks of Calver Hill to the west of Reeth, incorporates a considerable number of smaller enclosures and divisions (*ibid.*, 185). A study of the Healough field system was undertaken by Laurie and Fleming as part of the Swaledale Ancient Land Boundaries (SWALB) project (see Laurie *et al.* 2010), which included the detailed field survey of the remains and the identification of relative dating and phasing within the systems of field boundaries. Where there are extensive remains, this approach demonstrated the extensive information that can be gleaned from non-invasive investigation.

As is noted above, the Colt Plain field system comprises a number of discrete elements which can be broadly divided into two categories: land divisions and settlement foci. Other than a few key examples, the main axial boundaries at Colt Plain are heavily truncated and comprise a mix of rough orthostat walling and stone dump banks, presumably reflecting the use, and clearance, of abundant local stone. One feature which appears to set the Colt Plain field system apart from many of the broadly analogous systems in the Pennines is the nature of the transverse boundaries. Where transverse boundaries are present

in the larger systems, these are primarily natural features (Brown 2016, 227). The two excavated Colt Plain examples (Colt Plain North Trench 2 and Colt Plain South Trench 3) indicate that very slight natural edges were used as the basis for transverse boundaries, but they were then considerably accentuated into stone-revetted lynchets more akin to cultivation terraces.

The Colt Plain complex includes two settlement foci and a third lone roundhouse associated with an earlier stone-revetted lynchet. In terms of constructional style, both areas of settlement comprise a single stone-footed roundhouse set within a relatively small enclosure, though the Colt Plain South example may be accompanied by other structures now only surviving as earthwork scoops and platforms. The two stone-built roundhouses are notable as they are of better-executed construction, including faced or orthostat-defined stone walls. A key feature of the Colt Plain North roundhouse (excavated in Trench 1) was its monumental entrance, including massive orthostats and stone jambs. The availability of stone around the site suggests this was not an expedient choice but rather a deliberate level of ornamentation to accent the entrance. This approach to construction was not explicitly observed

at the other sites investigated, though large fallen orthostats at Knott's Gill suggest that the Colt Plain North roundhouse entrance may not be unique in the area. In comparison, the roundhouse investigated in Trench 1 at Colt Plain South was of a much rougher construction, broadly analogous to the smaller roundhouse at Knott's Gill. It was formed from rough stone rubble with some larger boulders packed into the cut of the scoop, and making use of an earlier wall sitting to the front of the revetted lynchet. Given the clear difference in context between the two styles of roundhouse at Colt Plain, and as with the Knott's Gill structures, it is suggested that the larger and more 'constructed' roundhouse form may relate to domestic use, and the rougher, smaller roundhouse form detached from associated enclosures may be more related to the 'agricultural' use of the field system.

Establishing a chronology for coaxial field systems is problematic for the reasons outlined above. In addition, very little excavation work has been undertaken on the sites within Yorkshire, despite the extensive aerial and ground-based

survey establishing their extents. The only radiocarbon dates obtained for a coaxial boundary were part of an excavation on Harkerside in Swaledale which indicated a construction date for that element of the boundary of around 300 cal BC, supported by pollen core evidence showing contemporary woodland clearance (Fleming 1998). The interpretation of the radiocarbon samples and their excavated contexts is considered problematic however, and as stated by Brown, the result is 'only representative of the circumstances of a relatively small portion of that particular axial boundary and cannot be confidently extrapolated' (2016, 223). The prevalent thinking on the dating of the Yorkshire coaxial field systems is based largely on the work of Fleming (1998), who argues for an Iron Age date for the main elements of the Swaledale systems (though see below for a multi-phase interpretation put forward by Laurie based on the same work). As pointed out by Brown (2016, 303), however, a general late prehistoric date for coaxial field systems is broadly reliant on morphological and typological comparisons with other landscapes.

Figure 52 Excavations underway within the roundhouse at Colt Plain North



With the Colt Plain system, where samples were taken from deposits associated with the boundaries themselves, these were from relatively unsecure contexts and did not yield any evidence suitable for radiocarbon dating. This is a consistent problem with excavation of these types of features, where the potential for functional association between sample and context (e.g. charred remains of fuel within a hearth or a skeleton within a grave cut) is very low if not entirely absent. Radiocarbon dating was obtained, however, from samples within the hearth of the Colt Plain North roundhouse and the stakehole beneath the floor of the Colt Plain South roundhouse. Two samples from the Colt Plain North hearth fill were modelled to indicate a date for use of the structure of *cal AD 250 – 380 (95% probability)*. The 1σ (68%) *probability* indicates a tighter date range of *cal AD 260 – 340*, with the principal spike in the probability distribution between *cal AD 260 – 300 (46% probability)*. The fill of the stakehole at Colt Plain South has been interpreted as evidence of a possible earlier phase of construction preceding the stone-built roundhouse. The results obtained from the fill of the feature dated it to *cal AD 130 – 230 (95% probability)*, with the main spike in the probability distribution at *cal AD 140 – 200 (59% probability)*.

Two key interpretive points can be made from these dates: firstly, the likely span indicates activity at the site separated by *c.* 100 years, reinforcing the notion of the field system as evolving and changing. Secondly, the occupation or use of the structures is firmly rooted in the Romano-British period, with the well-constructed roundhouse at Colt Plain North largely contemporary with the later phase at Knott's Gill. The disparate nature of the elements within the Colt Plain field system means we cannot readily extrapolate from the structural remains to the field boundaries other than in noting a chronological relationship between the Colt Plain South roundhouse and the lynchet upon which it sits. However, the coincidence

of Romano-British dates in two separate parts of the system means there is a possibility that the Colt Plain site may be a later form of landscape organisation than that typified by the Knott's Gill enclosures.

In terms of nearby analogies, again the Swaledale coaxial field systems provide the best example given that a number of the roundhouses and enclosure tentatively associated with the coaxial field systems have been subject to modern excavation. The excavation of one of a complex of stone-footed roundhouses within a lynchetted field in the Healaugh field system by Laurie and Fleming provided evidence for settlement over four phases extending from the Late Iron Age into the Romano-British period (Fleming 1998, 133). This has been interpreted by Laurie as a late, third phase of development of the Swaledale coaxial systems, whereby the landscape arrangement developed from Late Bronze Age settlement foci, through long-term development of the boundaries in the Iron Age, to their association with enclosed farmsteads of Later Iron Age and Romano-British date (Laurie *et al.* 2010, 10).

Perhaps the most thoroughly investigated site within one of the Swaledale coaxial field systems is at The Hagg, Fremington, excavated over a number of seasons (and ongoing) by the Swaledale and Arkengarthdale Archaeology Group (SWAAG). Excavations at The Hagg Site 103 have revealed remains of an extensive settlement of Romano-British date including a fully-paved stone-built roundhouse, extensive paved yard areas, a group of associated earthwork platforms potentially hosting other structures and a considerable enclosure wall and embankment (Liddell 2014; Bastow and Nicholson 2017).

ROUNDHOUSE FORMS

One of the outcomes of the project has been to note a number of broad categories of roundhouse across the sites investigated. While falling somewhat short of a 'typology', there are nevertheless certain



Figure 53 The paved front edge of the Colt Plain North roundhouse interior with the orthostats and fallen stone door jamb to the left of shot

commonalities which can be described. Firstly, it is worth noting that at Knott's Gill, the first phase of the smaller of the two roundhouses appears to have been turf walled, perhaps similar to the glimpses of clay bank footing observed in Trench 3 at Blayshaw Gill. Such structures may have been prevalent, though it is likely that little of these structures survives where they were not replaced by later stone-built structures. Extensive field survey in Nidderdale, and more widely, has often recorded isolated and grouped scooped platforms as surviving earthworks. The preparation of the ground for the construction of the roundhouse observed in Trench 1 at Knott's Gill suggests that some of these earthwork sites may have been turf-walled roundhouses, though this could only be confirmed through excavation.

Two broad construction styles of stone-built roundhouse were observed during the work, and it would probably be possible to identify both types through non-invasive survey. The smaller roundhouses tended to be more ad hoc in their construction, using rough stone dumps with little evidence of facing stone or coursing; these are typified by the excavated roundhouses at Knott's Gill and Colt Plain South. It was considered during

excavation, that the rougher roundhouses may have a more 'agricultural' character and use, though this is obviously a tentative hypothesis that would require more study. The Colt Plain South roundhouse – divorced from any surrounding enclosure and apparently related to its surrounding field system – would seem a good candidate for an agricultural structure, perhaps slightly analogous to more recent farming systems that employ isolated barns. The presence of the clay-lined pit in the Knott's Gill roundhouse would seem to preclude a completely agricultural character, and it might be that rather than 'agricultural', the term non-domestic would be a better fit. The larger roundhouses, tentatively characterised as more domestic in character, have well-built walls often including orthostats and/or facing stones; these are typified by the unexcavated roundhouse at Knott's Gill, the unexcavated roundhouse in a defined enclosure at Colt Plain South and the excavated roundhouse in its enclosure at Colt Plain North, the last of which also featured a monumental entrance.

One roundhouse feature noted during excavations, was the paving of the front quarter to a third of the platform, most notable at the Colt Plain North structure, though truncated paving to the exterior

and interior was also revealed around the entrance of the Colt Plain South roundhouse. This is of relevance given recent excavations by the Iron Age Nidderdale group and the author at Clocken Syke near Dacre c. 12 km to the south on the western side of lower Nidderdale during an earlier phase of the *Prehistoric Nidderdale* project. At Clocken Syke – an area including known Iron Age structural remains and evidence of contemporary metal-working (Brophy and Hovell 2010) – a platform was excavated which included a front edge revetted with large boulders and paving to the front third of the level area (Barker 2018). During excavations, the lack of material culture and structural remains, coupled with the nearby evidence of medieval land-use, meant that the platform was interpreted as medieval or post-medieval in likely date and probably related to industrial processes. In light of the discoveries during this later excavation work, it may be pertinent to reinterpret the Clocken Syke platform as the remains of a turf-walled or timber roundhouse, the structural element of which has now been lost.

THE FUTURE

First and foremost, the excavations undertaken through the course of the project have resulted in a considerable body of data to aid our understanding of the Later Iron Age and Romano-British periods in Nidderdale: a defined geographic area for which our understanding of this period falls woefully short. By analogy, this new information may hopefully also contribute more to our understanding of the settlement remains and field systems in the Pennines and the North more generally and help support the vibrant debate about the form, dating and use of such landscapes. One of the main outcomes of this work, however, has been to add to the growing body of volunteer-led archaeological projects that are making genuine and meaningful contributions to knowledge. In terms of further avenues, this work has

raised many questions, both site-specific and for wider research:

The excavation work undertaken, and the preceding survey work, has raised the possibility of identifying different styles of roundhouse construction and land-use, perhaps associated with tentative dating. Further work to test this hypothesis could take the form of more-detailed survey across sites identified through rapid walk-over, accompanied by targeted excavation on key identified sites. All the sites are on private land, and any future investigation would, of course, require the express permission of the farmers/landowners.

At Knott's Gill, the evidence has revealed multiple phases of differing types of construction and activity spanning from the Late Iron Age to probably the late 3rd century AD. The main question remaining, however, is whether the two dated periods of use are representative of 300 years of near-continuous occupation, or whether the site is part of a story of Romano-British re-use of earlier sites.

At Blayshaw Gill, the nature and extent of the potential earthwork roundhouses to the rear of the enclosure remain unexplored. Perhaps more significantly, the extent of survival and current truncation by the modern plantation is not definitively known, and the future management and conservation of this significant site may rely on better understanding of these issues. Finally, the modern land arrangement at Blayshaw Gill means that investigations thus far have focused within the plantation. Survey of the field systems and probable medieval remains on the north side of the gill has demonstrated the survival of earthworks, and a more detailed investigation of the area around the enclosure may provide vital context.

Romano-British occupation and activity seemingly associated with the coaxial field system at Colt Plain, when considered alongside the excavation of similar Romano-British settlements close to some of the Swaledale field systems, suggests value in broadening our possible

interpretations of these landscape-scale systems. The work undertaken for this project suggests that targeted excavation to refine our chronology of coaxial field systems in other parts of the Pennine uplands would contribute much to the debate.

In light of this tangled question of chronology, and as highlighted by Brown (2016, 305), future research investigating the Colt Plain coaxial field system (and similar systems more widely) should

consider the application of improved OSL (optically stimulated luminescence) dating techniques. At Colt Plain, the stone-revetted lynchets forms of the transverse boundaries have a demonstrated potential to host some depth of sealed sediment (in relation to the normally very thin cover above the bedrock), and the application of a new field process linked with OSL dating has yielded excellent results in dating cultivation terraces in Spain (Kinnaird *et al.* 2017).

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APPENDIX 1

PALAEOENVIRONMENTAL ASSESSMENT TABLES

Table 2 Data from palaeoenvironmental assessment at Knott's Gill

Sample		3	9	10	12	13
Context		15	23	22	29	28
Feature		D	D	RH	P	P
Material available for radiocarbon dating		✓	✓	✓	-	✓
Volume processed (l)		<1	<1	<2	7	10
Volume of flot (ml)		230	70	100	20	200
Residue contents						
Amorphous iron-rich material		+++	-	-	-	-
Charcoal		+	-	-	-	+
Flot matrix						
Amorphous iron-rich material		+++	-	-	-	-
Charcoal		+++	++	++	(+)	+++
Roots (modern)		++	++	++	++	+
Charred remains (total count)						
(c) <i>Hordeum</i> sp (Barley species)	grain	-	-	-	-	1
(r) <i>Persicaria maculosa</i> (Redshank)	nutlet	-	-	-	-	1
(t) <i>Corylus avellana</i> (Hazel)	nutshell frag.	-	-	-	-	1
(x) Poaceae undiff. (Grass family)	<1mm caryopsis	-	-	-	-	1
(x) Poaceae undiff. (Grass family)	>1mm caryopsis	1	-	-	-	-
Identified charcoal (✓ presence)						
<i>Alnus glutinosa</i> (Alder)		✓	✓	-	-	✓
<i>Betula</i> sp (Birches)		-	✓	✓	-	-
<i>Corylus avellana</i> (Hazel)		✓	✓	✓	-	✓

[c-cultivated; r-ruderal; t-tree/shrub; x-wide niche. D-Deposit; P-Pit; RH-Roundhouse
(+): trace; +: rare; ++: occasional; +++: common; ++++: abundant]

Sample		4	5
Context		6	15
Feature		hearth fill	clay lining
Material available for radiocarbon dating		✓	✓
Volume processed (l)		5	2
Volume of flot (ml)		450	50
Residue contents			
Burnt clay	magnetic	++	++
Charcoal		+	+
Iron-rich stones	magnetic	+++	+
Flot matrix			
Charcoal		+++	++
Monocot stems (charred)		(+)	+
Roots (modern)		++	++
Charred remains (total count)			
(c) <i>Hordeum</i> sp (Barley species)	grain	2	2
(c) <i>Hordeum</i> sp (Barley species)	hulled grain	-	1
(c) <i>Hordeum</i> sp (Barley species)	rachis frag.	16	7
(c) <i>Hordeum vulgare</i> (6-row Barley)	rachis frag.	-	1
(c) <i>Triticum</i> cf. <i>spelta</i> (cf. Spelt Wheat)	grain	1	-
(c) <i>Triticum spelta</i> (Spelt Wheat)	glume base	1	6
(c) <i>Triticum spelta</i> (Spelt Wheat)	spikelet fork	-	1
(r) <i>Persicaria maculosa</i> (Redshank)	nutlet	2	1
(t) <i>Corylus avellana</i> (Hazel)	nutshell frag.	1	2
(w) <i>Persicaria lapathifolia</i> (Pale Persicaria)	nutlet	-	1
(w) <i>Carex</i> sp (Sedges)	trigonus nutlet	1	-
(x) Poaceae undiff. (Grass family)	>1mm caryopsis	3	-
(x) <i>Rumex</i> sp (Docks)	nutlet	2	-
Identified charcoal (✓ presence)			
<i>Alnus glutinosa</i> (Alder)		✓	✓
<i>Betula</i> sp (Birches)		✓	✓
<i>Corylus avellana</i> (Hazel)		✓	✓
<i>Fraxinus excelsior</i> (Ash)		-	✓
<i>Quercus</i> sp (Oaks)		✓	✓
Salicaceae (Willow, poplar)		✓	✓

Table 3 Data from palaeoenvironmental assessment at Blayshaw Gill

Table 4 Data from palaeoenvironmental assessment at Colt Plain South

Sample		1
Context		18
Feature		Stakehole
Material available for radiocarbon dating		✓
Volume processed (l)		<0.5
Volume of flot (ml)		20
Residue contents		
Charcoal		++
Flot matrix		
Charcoal		++
Heather twigs (charred)		+
Roots (modern)		+
Charred remains (total count)		
(c) <i>Hordeum</i> sp (Barley species)	rachis fragment	1
(c) <i>Triticum</i> sp (Wheat species)	glume base	1
(x) <i>Rumex</i> sp (Docks)	nutlet	1
<i>Identified charcoal</i> (✓ presence)		
<i>Alnus glutinosa</i> (Alder)		✓
<i>Calluna vulgaris</i> (Heather)		✓

[c-cultivated; r-ruderal; t-tree/shrub; x-wide niche. D-Deposit; P-Pit; RH-Roundhouse
(+): trace; +: rare; ++: occasional; +++: common; ++++: abundant]

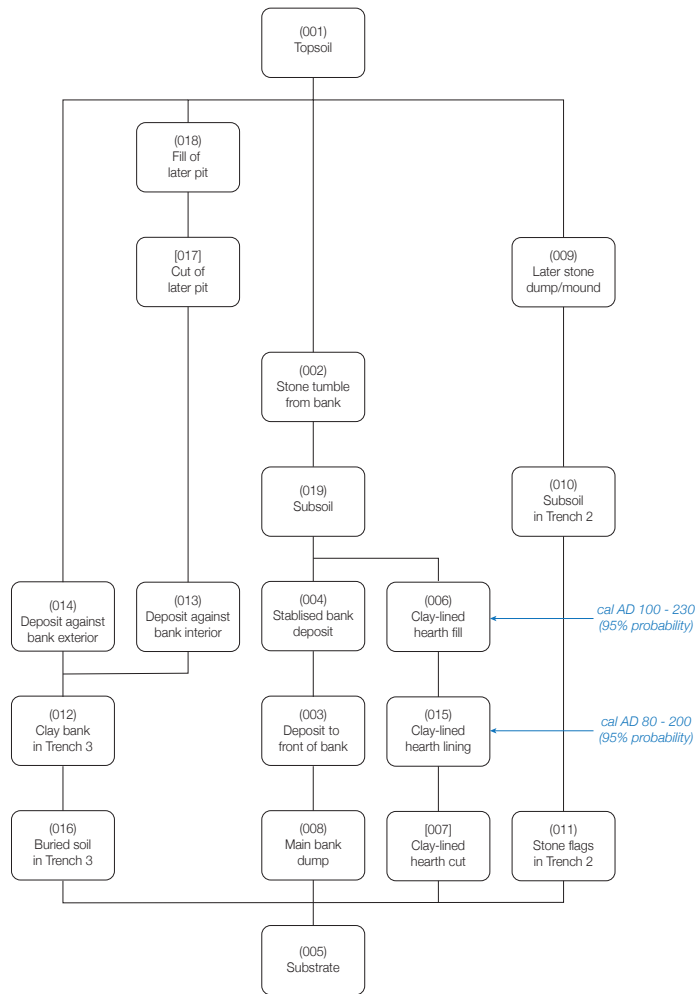
Sample		1	2
Context		12	16
Feature		BS	H
Material available for radiocarbon dating		-	✓
Volume processed (l)		3	7
Volume of flot (ml)		60	1000
Residue contents			
Charcoal		-	++
Flot matrix			
Charcoal		-	+++
Roots (modern)		++	++++
Charred remains (total count)			
(c) Cerealia indeterminate	grain	-	8
(c) <i>Triticum cf. spelta</i> (cf. Spelt Wheat)	grain	-	9
(c) <i>Triticum spelta</i> (Spelt Wheat)	glume base	-	11
(c) <i>Triticum spelta</i> (Spelt Wheat)	spikelet fork	-	8
(t) <i>Corylus avellana</i> (Hazel)	nutshell frag.	-	7
(x) Poaceae undiff. (Grass family)	>1mm caryopsis	-	5
Identified charcoal (abundance)			
<i>Alnus glutinosa</i> (Alder)		-	(+)
<i>Corylus avellana</i> (Hazel)		-	+++
<i>Prunus</i> sp (Cherries-blackthorn, wild and bird cherry)		-	+

[c-cultivated; r-ruderal; t-tree/shrub; x-wide niche. D-Deposit; P-Pit; RH-Roundhouse
 (+): trace; +: rare; ++: occasional; +++: common; ++++: abundant]

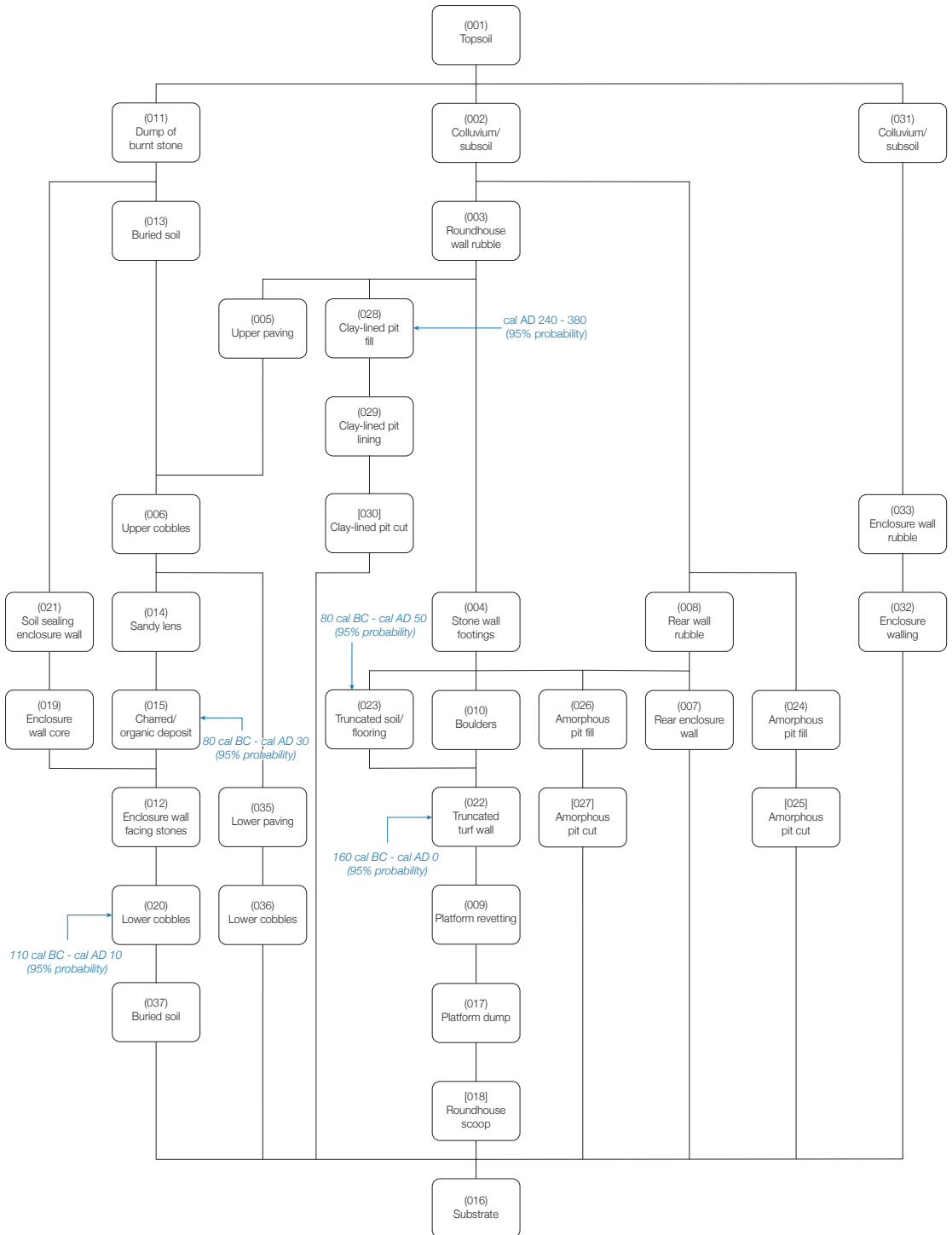
Table 5 Data from palaeoenvironmental assessment at Colt Plain North

APPENDIX 2

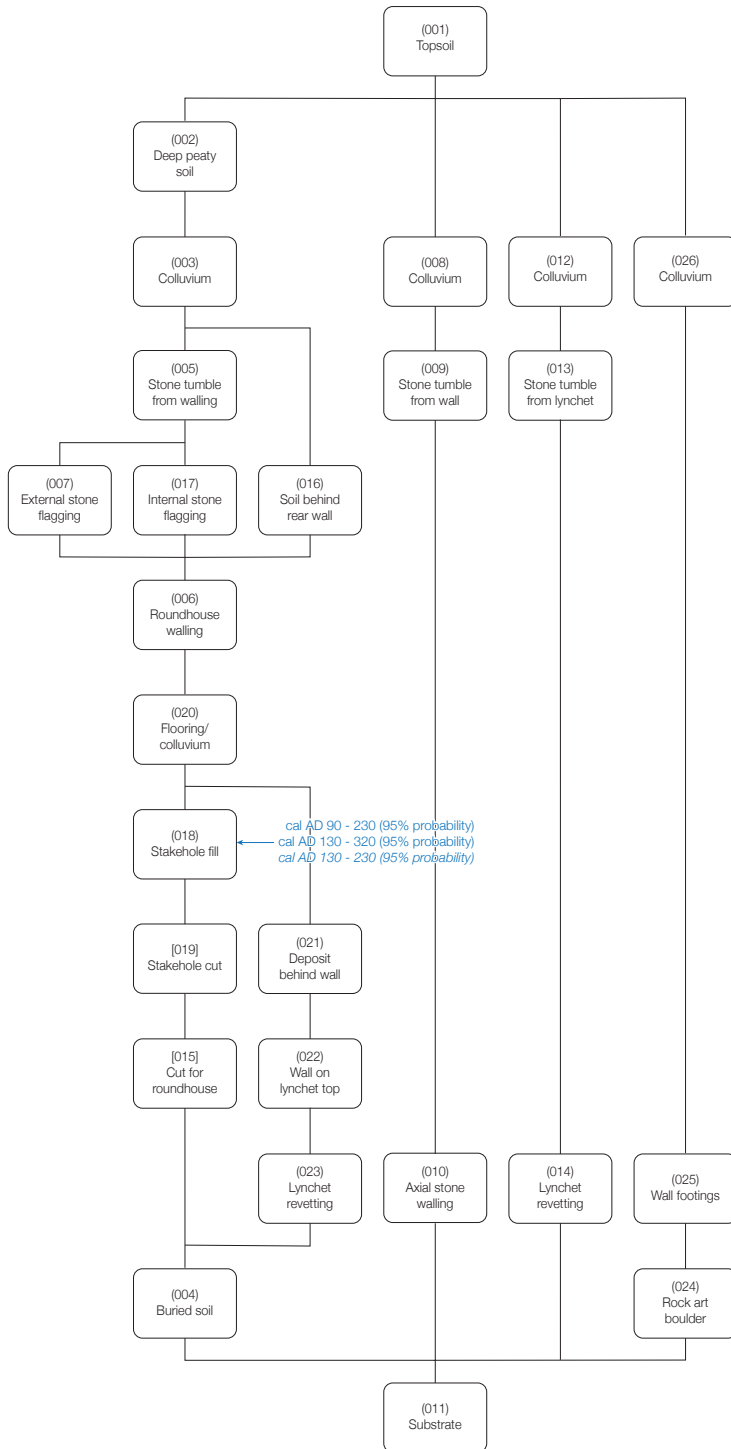
SITE MATRICES



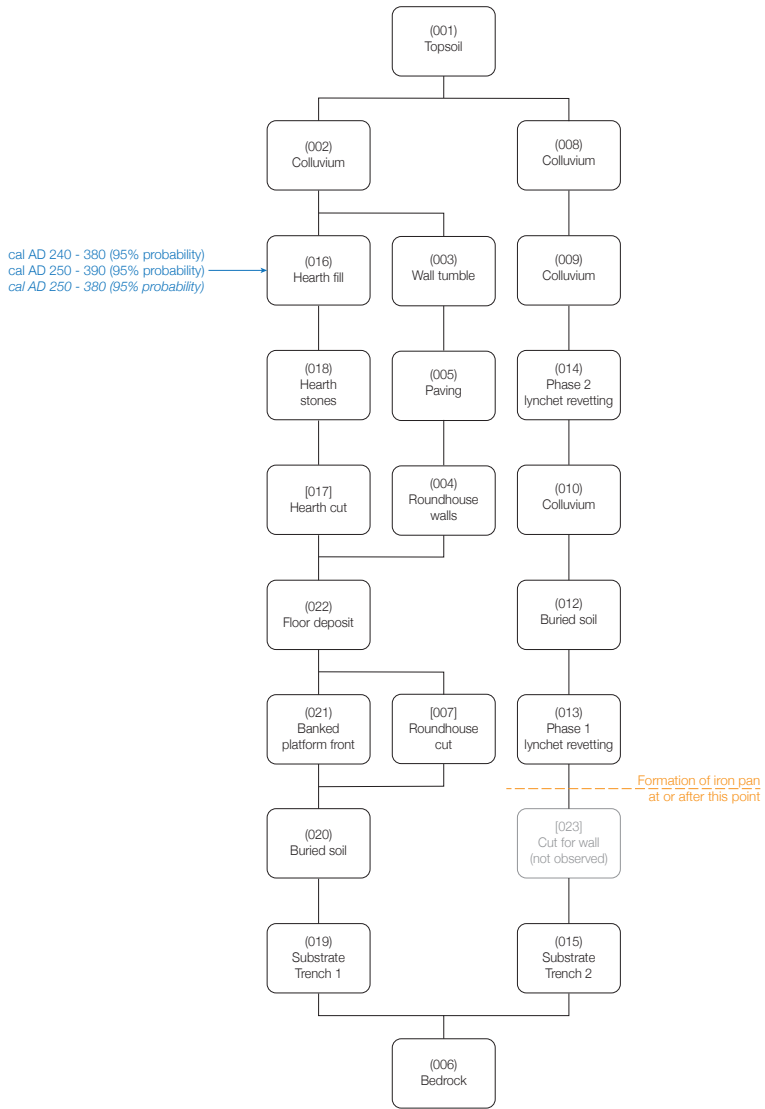
Harris matrix for the Blayshaw Gill site



Harris matrix for the Knott's Gill site



Harris matrix for the Colt Plain South site



Harris matrix for the Colt Plain North site



Among the high moors of Nidderdale in North Yorkshire, the remains of low stone banks and walls have hidden for millennia. These farmsteads and homes of our prehistoric and Romano-British ancestors can give us an insight into how people lived in times long removed from our own. They often go unrecognised and unrecorded however, lost among the moss and bracken.

This volume describes the results of work undertaken as a partnership between the Heritage Lottery-funded Upper Nidderdale Landscape Partnership and the Prehistoric Nidderdale project. Following extensive survey work, a team of volunteers excavated four Iron Age and Romano-British sites on the upland fringe. The results were surprising, informative and hugely valuable for our understanding of a period of Nidderdale's past which is poorly understood



N Iron-Age
(Nidderdale)



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