Flodden Hill and Flodden Field

Excavation, fieldwalking and metal-detecting 2009-2015 as part of the Flodden500 Project

(Area centred on NT390015 636186)

On behalf of The Flodden 1513 Ecomuseum

OASIS no.northern2 -271632



Flodden Edge from the south

By
Northern Counties Archaeological Services, December 2016

Contents

Summary	1
Section 1. Introduction and background	3
Section 2. Flodden Hill: The Excavations	8
Site 1. The Scot's Camp	12
Site 2. Cropmark enclosure	30
Site 3.	39
Section 3. The 'Battlefield': test pitting and trial trenching for mass graves	46
Flodden Field 2012: Test Pits and trial trench in Field 19	46
Flodden Field 2013: Trial trenches in Field 15	54
Battlefield investigations - Discussion	57
Section 4. Finds	59
Section 5. Fieldwalking and Metal-detecting: Flodden Hill and Branxton	72
Section 6. Overall Conclusions	99
Sources	102
Appendix A: Piper's Hill discovered – a Flodden myth. Appendix B: 'Battlefield' finds reported prior to the Project Appendix C: Military Finds. Dr. D.H. Caldwell	107 109 114

Flodden Hill and battlefield: report on the archaeological investigations

Summary

The fieldwork element of the Flodden500 Project (hereafter referred to as the Project), which began in 2009, was set up to archaeologically investigate sites associated with the eponymous battle of the 9th September 1513. However, seven fields on the registered battlefield were metal-detected by the Battlefields Trust under Dr Glenn Foard in 2007 as part of 'Remembering Flodden'.

The Project was designed by Dr. Chris Burgess, joint County Archaeologist for Northumberland, as a community-based archaeological project administered by a Steering Group with representatives from the local landowning community and regional archaeological curators. The objectives of the fieldwork were to seek archaeological evidence through artefacts and radiocarbon dating for the events of September 1513, and confirm that sites traditionally ascribed to the time of the battle – particularly the 'Scots Camp' - were actually of that period. It was also hoped that the route taken by the Scottish army from its camp to its battle positions, and indeed the locations of both armies in the field and the sites of heaviest fighting, would be identifiable through artefact scatters.

This report is concerned with the Project's fieldwork on Flodden Hill and Flodden Edge, where the Scottish army reportedly encamped, and across the broad area presumed to have been the armies approach to and site of the battle. Part of this area is defined as the site of the battle of Flodden in Historic England's Register of Historic Battlefields. The Register conveys no statutory protections or controls over this area, though the Monument erected in 1910 is a Grade II listed structure. None of the sites on Flodden Hill and Edge currently have any statutory protection.

Prehistory has left a strong imprint on this area, ranging from Mesolithic flint scatters (10,000-5000BC), potentially Neolithic pit alignments (4000-2200bc), to rectilinear enclosures of the Iron Age/Romano-British period. For some six hundred years, from at least the 12th century, this was a landscape regularly crossed by and predated upon by armies and war bands from both sides of the border. It was also a landscape continuously inhabited and worked throughout the medieval and post-medieval periods. The last two and a half centuries have seen an intensification of human impact through enclosures, drainage, increased arable and animal husbandry, and estate improvements.

In this context, the eighteen days of the Scottish invasion in the autumn of 1513 and its culmination in the battle of the 9th September, has perhaps exerted an influence on the landscape disproportionately great in relation to its duration.

Shortly before the final season of archaeological investigations on Flodden Hill, in May 2015, Dr. Burgess suffered a serious illness which prevented him for seeing the Project carried to its conclusion. This has fallen to a small number of professional archaeologists previously involved with the fieldwork, and specialists, who have compiled or contributed to the production of this report. The opinions expressed, and conclusions drawn here, are theirs alone.

Acknowledgments

The Northumberland Archaeological Group provided the digging equipment for the excavations from 2009 to 2012. Initially volunteers from this group (NAG) and Coquetdale Community Archaeology formed the core of the digging team with the addition of members of the local community who later, in 2011, formed their own organisation TillVAS.

Thanks are also due to landowners and tenant farmers who gave access for the fieldwork to take place: Lord Joicey and Ford and Etal Estates; George Farr, Pallinsburn; Alan Rogerson, Blinkbonny; Robin Neill, Branxton Hill; T and J Neill, Callerburn; I Ainslie, Branxton Moor; Mr. Mair, Kypie; Hettonjact, Hetton Estate (holders of the shooting rights to Flodden Hill).

SECTION 1. Introduction and background.

This report is principally concerned with the archaeological investigations carried out from 2009 (before the Heritage Lottery Funded project began) to 2015. During these seven years excavation, field-walking and metal-detecting took place on and around Flodden Hill, and particularly on accessible parts of the designated battlefield. The report includes reference to previously reported finds and observations, particularly the archaeological investigations carried out in 2001 for BBC's 'Two Men in a Trench' television series, and metal-detecting by the Battlefields Trust in 2007.

The writers' involvement with the Project was initially as volunteers and members of Northumberland Archaeological Group and later of Till Valley Archaeological Society. As working freelance archaeologists our role developed into that of area supervisors and assistants to the Flodden 500 Archaeological Manager (Dr. Burgess). For administrative purposes in 2013 we were 'seconded' to The Archaeological Practice Ltd. for that single season's fieldwork in Field 15. With Dr. Burgess' illness in 2015, shortly before the start of the final season of fieldwork on Flodden Hill, we assumed full responsibility for these excavations, and subsequently undertook, at the request of the Project Steering Group, to report on the seven years work on the Hill and 'battlefield'.

No formal desk-based study of the Project area was undertaken prior to its commencement. The Projetc assessment was concerned with recorded and presumed military activities and movements associated with the ba\ttle, rather than the evolution of the landscape itself. This is unfortunate as Flodden has long been perceived as a 'single event' landscape. Fostered by the romantics – particularly Scott - the events of 1513 have grown to mythic status, colouring interpretation of finds and features to the exclusion of preceeding millenia and succeeding centuries of continuous landscape use and exploitation.

As part of this report some archival research has been carried out to broaden the perspective, but this cannot be regarded as a detailed desk-based assessment in the accepted archaeological sense - time and resources are lacking. Some aspects of the excavations, finds and accepted 'Flodden lore' have however been reassessed, and some new thinking, or rethinking is included in this report. One of the major achievements of the Project has been to demonstrate that this is a time-deep

landscape, and it is hoped that this may encourage more critical and wider ranging approaches to the history and development of this area of Northumberland.

This report is primarily concerned with the project fieldwork, not with a detailed review or consideration of events leading up to, during, and after the battle on the 9th September 1513. These, like tactics and weaponry, have all been described, analysed and discussed exhaustively elsewhere. However a summary of the historical setting is given to provide some context for the investigations described in the report.

Setting: topographical and geographical.

The area defined as the Flodden battlefield by English Heritage (now Historic England) is shown on Fig.1. The battlefield is included within the Register of Historic Battlefields because of its special historic interest (List Entry No. 1000011, first registered 6th June 1995), though this conveys no statutory protection. The registered battlefield extends into parts of the parishes of Branxton, Carham and Ford.

Geologically the high ground of Flodden Edge (Flodden Hill, Kings Chair and East and West Flodden Hills) are Lower Devonian andesitic volcanics (visible in the numerous quarry pits which scar its slopes), overlain by drift boulder clay. North of Branxton Hill is an outcrop of the Lower Carboniferous Cementstone Group. (Rose and Nathaniel 2000).

The present appearance of the battlefield, indeed all the surrounding landscape, has significantly changed over the last 500 or so years. In 1858 the seventy-year old churchwarden of Branxton, Andrew Rankin, who reportedly discovered a mass grave during ditching in 1810, stated that

"The battlefield...was all open moor in his youth...The hedgerows by which it is now all crossed in all directions, he had himself assisted to plant". (Arch. Ael. N.S, 3 (1859), 162).

Significant enclosure and division of the common land, including new roads, began in the last quarter of the 18th century, and in the first half of the 19th century arable agriculture steadily encroached on the slopes of Flodden Edge. The early archaeological survey Henry MacLauchlan noted in 1858 the traces of sites on the north and south sides of the hill which were 'fast disappearing under the plough'.

Setting: historical

Prehistory.

The ridge of high ground known as Flodden Edge, comprising Flodden Hill, Kings Chair, and East and West Flodden Hills and ranging in height from 155.24m to 591m, is part of an ancient landscape. Prehistory has left a strong imprint on this area, evidenced by finds from the Project's fieldwork which include Mesolithic flint scatters dating to10,000-5000BC and possible Neolithic pit alignments (4000-2200BC) visible as crop-marks on aerial photographs.

Rectilinear enclosures, either of known or presumed Iron Age/Romano-British date, dot the ridge and southerly slopes of Flodden Edge (Fig. 2 and 5). One, on the south-

P691 4 34 Flodden Hill 3 32 E Q 35 က 25 8 24 9 FH 3 FH 2 0 King's Chair 2 25 Mardor 51 33 62 52 56 38 8 27 64 68 Branxtonmoor 28 **(%)** 31 00 9 **29** 37 67 4 pallins Burn 99 Branxtonhill 63 A 697 23 16 **A** Branxfon 61 **₹** Branxton Steac 28 Monument 7 27 15 FF12 Figure 1: Field and excavation overall location plan 20 Crookham Westfield 41 45 42 field-walked and metal-detected <u>-</u> FH 1 - Flodden Hill Site 1 (2009, 2012-15) FH 2 - Flodden Hill Site 2 (2010-11) FH 3 - Flodden Hill Site 3 (2014) outline of registered battlefield fields metal-detected in 2007 not covered in the project Crown Copyright Ordnance Survey. East Monylaws 43 Areas of excavations shown thus: FF12 - Flodden Field 2012 FF13 - Flodden Field 2013 1/2 mile metal detected 500 m. field-walked Æ 4 All Rights Reserved Field numbers: B

eastern slope of Flodden Hill (HER N1830 at NT391982 636040) was excavated in 2000 and found to be late Iron Age/Romano-British, possibly 'slighted' at the time of the Roman withdrawal from the Antonine frontier (Passmore and Waddington 1, 241-2). Two more were investigated during the Project (Sites 2 and 3, q.v.) and these again were shown to be of Iron Age/Romano-British date – also suggested in this report as the origin of the 'Scot's Camp' or Site1. Sites of similar form and, probably, period, are known near North Flodden (HER N1835 at NGR NT392240 635410) (Gates and Palmer 2004) and north of West Flodden (HER N19667 at NGR NT391478 634912). Another apparently double-ditched enclosure appears faintly on an aerial photograph some 177m south-west of Site 3 at NT3910510 6351994 [RAF 1945], while a 'double chevron' cropmark visible on Google Earth in the field 183m south of Site 1 (NT391361 635510) may be part of yet another. The modern A697 which passes the eastern end of the Flodden ridge has even been suggested to broadly mirror the course of a Roman road through the valley (Passmore and Waddington 1, 224).

Medieval-Sixteenth century

Branxston is recorded as 'Brankeston' as early a 1195, and means Branoc's 'tun' [ibid. 61]. Branxton appears frequently in archival sources from the 13th century onward, with nine taxable heads of households listed for '*Branckiston'* in the Lay Subsidy Roll of 1296 (Fraser 1968,121, Hodgson 3, pt.2.147-8). However no record of the placename 'Flodden' is known prior to 1513. Ekwall suggests it comprises the Old English elements *dun* 'hill', and perhaps either the OE '*flode'* - 'a channel, a stream' or '*floh'* 'fragment, a bit of stone' (ibid. 181-2). Contemporary (ie within a short time of the battle) accounts of the battle such as the 'Trew Encounter' refer vaguely to 'a *high hill'* and 'a *grounde bye, callid Floddon'*. Only in later chronicles does the 'high hill' become 'the hyll, called Floddon hyll' (Hall 1548) or 'a *great Mountaine, calld flodon'* (Stow, 1580).

The Flodden-Brankston area, and particularly Flodden Edge, occupy a strategic location in relation to Anglo-Scottish routeways. The eastern end of the ridge overlooks the modern A697 which as noted above may have Roman origins. Another former route can be traced following the modern road north-west from Milfield via West Flodden crossing Flodden Edge between King's Chair Hill and East and West Flodden Hill, and continuing partly as a bridleway across Branxton Moor to East Learmouth and the area of the Lees Ford on the Tweed (Fig. 2).

Because of these route-ways it is likely that the Flodden-Brankston area, including Flodden Edge, saw considerable military activity particularly during the Anglo-Scottish wars of the late 13th and early 14th centuries – the manor of Ford was wasted in 1314, and suffered again in 1340. In August 1497 (Hunter Blair, 8) James IV brought an army, supported by artillery, across the Tweed, laying siege to Norham. During this incursion the tower of Branxton, as well as those of Twizel, Tillmouth, Duddo, Howtel, and Castle Heaton were destroyed (Goodwin, 21). In August 1513, shortly before the battle of Flodden, a major Scottish incursion under Home - the III Raid - was routed at *'a brome fielde called Mylfeld'* (Hall 556).

August-September 1513.

All sources agree that the Scots crossed the Tweed into Northumberland on 22nd August 1513, their artillery having left Edinburgh just over a month earlier (18th-19th August). Norham castle was besieged, surrendering on the 28th/29th. The capture of

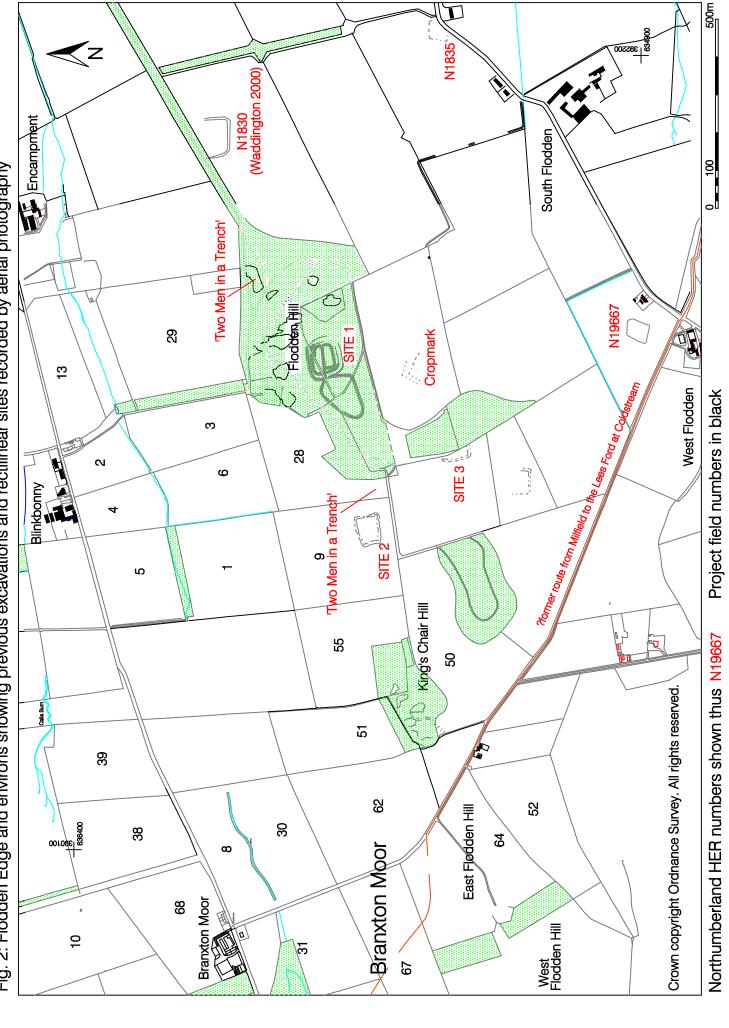


Fig. 2: Flodden Edge and environs showing previous excavations and rectilinear sites recorded by aerial photography

Wark, Etal and Ford then followed, James baseing himself at the latter. The Scottish king still seems to have been at Ford on the 5th September (Fergusson, 18) when his acceptance of Surrey's invitation to battle was sent by the Scottish Herald, Islay, but he moved shortly after to what contemporary accounts called a 'high mountain' or 'hill' – subsequently named in *post*-1513 sources as Flodden. This appears to have been the position of both James and his army from the 6th to the 9th September 1513, though there is no indication in contemporary sources of when the Scot's army first occupied this high ground. It has been suggested that the army based itself there from the outset of the campaign [Burgess], but there is no hard evidence. Their occupation before the 9th September could have been as long as 17 days, or as little as 3 days.

The Scots' position was described in contemporary accounts as being 'more like a fortress', enclosed on three sides by mountains and guarded on the fourth by the train of seventeen pieces of artillery and 'othir dyvers small ordenances'. No account mentions defensive works being undertaken: the inference is that the high ground was itself like a fortress (see below: Flodden Hill, the excavations). Topographical details of the movements of the English army before the battle, and of the engagement itself, are scarce in contemporary or even later sixteenth-century sources. It is often just 'the hill' which is spoken of (and there are many hills around Branxton). Perhaps even the assumption that reference to 'the hill of Bramstone' is synonymous with Branxton Hill should be treated with caution. Much of the later chroniclers' accounts almost certainly borrow details from each other, and it may be suspected that some are confused.

The day following the battle a large force of Scots attempted to recover their train of artillery, but were beaten back. The captured artillery was carried first to Etal, thence on to Berwick. The English ordnance was carried directly to Berwick. James' body was found and taken to Berwick for embalming and shipment to London.

There was further military activity in the area of the battle in 1523 and 1524, when houses in Branxton and elsewhere were burned. In 1528 a force of 300-400 Scots under Dan Carr Of Ferniehirst and the Sherrif of Ayre were attacked and defeated near Branxton (Hope Dodds, 105-6; Ridpath, 358). On two occasions, in November 1542 and September 1545, English armies rendezvoused at 'Crookam Moor Stone' or the 'Standing Stone on Crooke a More' – later known as the King's Stone - for punitive raids into Scotland (CSP Henry 8, 629). Branxton tower reappears in lists of 'holds': 'At Braggarstone being three myles from the said River of Tweed the strong towre the inheritance of Thomas Haggarstone and it is in reasonably good reparacions', and again in 1541 'Brankestone – in it is a little tower without a barmkyne...newly repaired by John Selby, Gent'.

The Seventeenth and Eighteenth centuries

On the 20 August 1640 at the start of the second 'Bishop's War', a Scottish Covenanter army under General Leslie, some 20,00 strong with a train of sixty pieces of artillery, crossed the Tweed at Coldstream. Their first intended campsite was 'it is said' to be at Flodden [CSP Domestic 1640, 592], before marching through Northumberland to confront and defeat a hurriedly raised English force at Newburn on the 28 August 1640. No skirmishes are recorded during the Civil Wars of 1642-51, though the area must have seen considerable military movement - Ford castle was plundered by English troops in 1648. Later in the 17th century the peace was

disturbed by Covenanters: in July 1672 a non-conformist conventicle was held at 'Flowden Field', at which weapons were carried, and six years later the so-called Crookham Affray led to a shoot-out near the village in which one man was killed. The During the 1745 Jacobite Rebellion the Pretender's army by-passed Northumberland, heading for Carlisle, though a detachment of the rebel army which raided Wooler for horses may have passed through the battlefield area.

Modern and romantic interest in the battle of Flodden developed in the 18th century. In 1716 Warburton illustrated a Roman intaglio 'found on Flodden hills' which Horsley suggested might have been lost at the battle, Defoe visited 'Floden-field' with a local guide, describing the site in his *Tour Through the Whole Island of Great Britain* (1725) as

"a large plain, flank'd on the north side, which must be the Scots right, and the English left, by Flodden-Hills, and on the other side by some distant woods; the River Till being on the Scots rear, and the Tweed itself is not far off." His guide seems to have taken him to Milfield Plain!

Agricultural improvements in the second half of the century produced detailed surveys some of which which marked sites locally reputed to be associated with the battle: the 1780 enclosure plan of Branxton Common in 1780 marks the Project's Fields 38 and 39 as 'Battle Bush where was fought the hottest part of Battle of Flodden'.

In part the growth of interest in the battle during this period may have been spurred by agricultural improvements which, from the mid-18th century, in the view of the writer, significantly changed the 'battlefield' landscape (see below, Excavations on the Battlefield). It must be said however that it has been frequently stated that Flodden is little changed, and is a relict 1513 landscape. Former open moorland was enclosed and drained, and cultivation encroached onto the slopes of Flodden Edge. Roads were 'turnpiked', diverted to respect new field patterns, and newly-constructed and new farms appeared – Encampment, Blinkbonny, Branxton Moor, Branxton Hill and Branxton Steads.

19th - 21st century

Popular interest really took off with the publication of Sir Walter Scott's Marmion in 1808, following which

'so great was concourse of admiring tourists to Flodden field, that a certain canny Northumbrian thought he might do worse than open a small house of "entertainment for Man and Horse" in the middle of that classical moor.

In the 1820s Sir David Smith referred to the Projects Field 38 and 39 as 'Battle Bush' where the principal fighting took place saying 'partly in proof of which, fractured helmets & broken pieces of Armour are occasionally turned up', and says that the south-east corner of the field was called 'Bloody bush Nook' (Duke of Northumberland Alnwick Castle Archives).

Battlefield 'guides' combining historical accounts with reported finds were published by Robert White in 1859 and the Vicar of Branxton, Rev. R. Jones, in 1864. The latter in particular did much to publicise the battle - helped by having as his churchwarden Andrew Rankin, who had allegedly found a mass grave on the battlefield in 1810. Jones' credentials as a historian are questionable, not least since he thought James'

body had been buried with the fallen on the battlefield, and he was responsible for the 'identification' of Stock Law, opposite his church, as the Piperd Hill where - according to Stow - James IV was killed (see Appendix a). This ultimately led to the erection of the present Monument in 1910 by the Berwickshire Naturalists Club, on land belonging to J.C. Collingwood of Cornhill, descendant of the Henry Collingwood on whose land the 1810 'body pit' was discovered.

Subsequently a number of books about the political and military aspects of Flodden have appeared, frequently containing detailed extrapolated descriptions of the battle itself, and more recently also attempting to explain the cause of the Scottish defeat. The accuracy of some of these accounts is variable. Archaeology has come late to the table – the only known interventions before the Flodden500 Project being Clive Waddington's excavation of an Iron Age/Romano-British enclosure on the south-east side of the hill in 2000, excavations and metal-detecting for the BBC television series 'Two men in a Trench' in 2001, and some metal-detecting by the Battlefields Trust in 2007.

SECTION 2 Flodden Hill: the excavations

The seasons of investigation were distinguished by the prefixing code FH (excavations on the battlefield were prefixed FF). The Sites are shown on Fig. 5.

2009 - FH09: Site 1 (The Inner Enclosure).

2010 – FH10: Site 2 (Field 9, north slope of the hill)

2011 - FH11: Site 2. (Ditto).

2012 - FH12: Site 1 (The Inner Enclosure).

2013 – FH13: Site 1 (The inner Enclosure)

2014 - FH14: Site 1 (The Inner Enclosure) and Site 3.

2015 – FH15: Site 1. (The Inner Enclosure)

2.1 Background

The first known appearance of 'Floddon Hill' on a map is Christopher Staxton's *Northumberland* (1583), which also marks 'Brankeston'. Flodden Hill appears again on Speed's *Northumberland* (1610) as a stylised hill or mountain with a tent surmounted with a pennon to the north (a symbol which Speed appears to use to indicate a battle); 'Brakeston' is shown to the north-west. Before the 18th century, maps show little other topographical detail - Blaeu (1646) for example just marks 'Floddon Hill'. John Warburton's map of 1716 marks 'Floddon Hill' as two craggy eminences, below which is the single caption *'the Kings Chair'*, divided by what appears to be a small rectangle, with a possible crown symbol to the east. Just to the north the name 'Floddon' appears, with a sword. Kitchen (1750) repeats Warburton's captions. Curiously, Horsley/Cay (1753) who marks the sites of battles on his map with crossed swords, shows no such symbol near either 'Brankstone' or 'Flodden'.

More detail appears on Lieut. Andrew Armstrong and Son's *A Map of the County of Northumberland*, published in 1769. This shows two eminences – a small one to the west surmounted by what appears to be a crown, captioned 'King's Chair' - a larger hill to the east, captioned 'Floddon', is crowned by a rectangular feature with openings on all sides and short 'spurs' projecting from each corner (Fig. 3). This is simply the Armstrong's convention for depicting Roman (or what they considered to

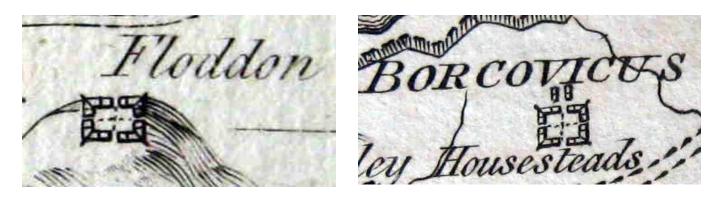


Fig. 3: The Armstrongs' representations of Flodden Hill and Housesteads

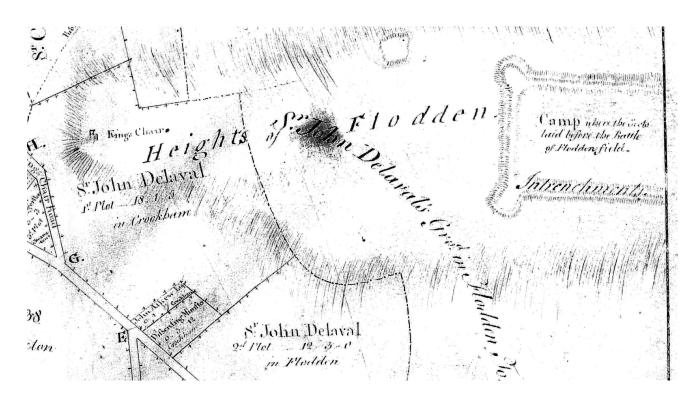


Fig. 4: Extract from Richard Richardson's 1780 Enclosure Plan

be Roman) forts/camps and is repeated all along the Hadrian's Wall section of their map (native sites they show in the form of 'doughnuts') - but has led to serious misinterpretation:

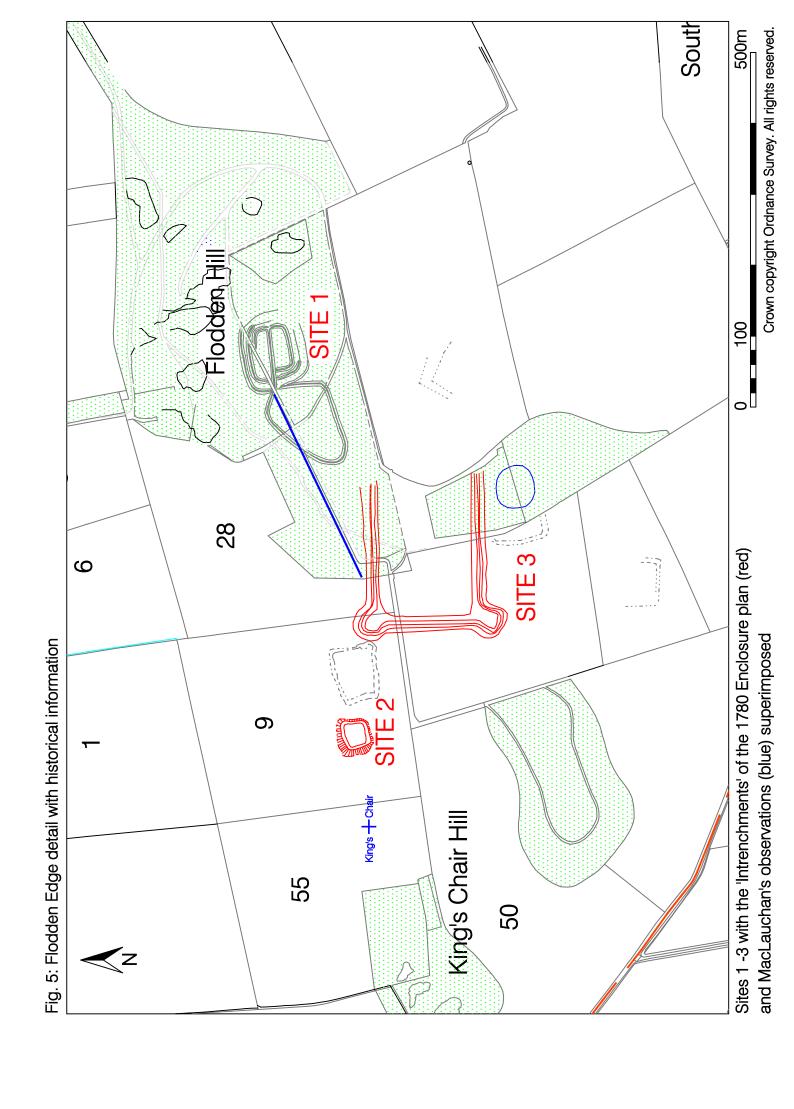
"Early maps by Armstrong clearly show a feature which very much resembles a small fort or sconce, having pointed bastions at each corner and covering roughly 2 ½ acres (1 hectare) of ground...Small forts, or redoubts of the type indentified at Flodden were not thought to have been a feature of field defences in Britain for another generation or so but we must always bear in mind the number of continental advisers in James' train." (Sadler and Serdiville, 222).

To the north, in the angle formed by Encampment Lane, Blinkbonny (marked but not named), and the side road to Branxton, the Armstrongs have the caption *'Here was fought ye Battle of Floddon in 1513'*. They show the line of the modern A697, but not the side road running north-west past Encampment Farm and Blinkbonny to Branxtonmoor. In its present form is the product of late 18th century turnpiking.

The first known reference to any extant physical remains explicitly stated to be from the battle of Flodden is by Ridpath in his *Border History* (1771), which describes how the Scots had erected a battery of cannon near the foot of the eastern declivity of Flodden-hill bearing full on the bridge of Ford. According to Ridpath the vestiges of the entrenchment for this battery "still remain". From his description it seems probable that the battery was in fact the late Iron Age-Romano British rectilinear enclosure HER N1830, still at that date visible as an earthwork..

The next evidence for an earthwork on the Hill being explicitly associated with the battle is a plan of 1780 (NRO ZDE 17/1), prepared for the division of Branxton Moor by Richard Richardson, surveyor of the the Dean & Chapter of Durham's estates (Fig. 4). Richardson shows part of an apparently rectilinear feature extending beyond the eastern edge of his survey, labelled 'Entrenchment' and 'Camp where the Scots' lay before the Battle of Flodden'. The north and south angles of this feature are depicted with projecting curved 'bastions', and there is a suggestion that the connecting banks were ditched internally and externally. Transposing Richardson's plan onto modern Ordnance Survey mapping (Fig. 5) shows the former to have a high level of accuracy in its roads and field boundaries. On the hill part of the survey, the north-western 'bastion' of the 'Camp' is close to a sub-square enclosure which matches well with Site 2 investigated in 2010 and found to be a well-preserved Iron Age settlement. This places Richardson's 'Camp' considerably further west than the present earthworks of Site 1.

Given the accuracy of Richardson's survey beyond the hill, and even allowing for a degree of error when surveying on steep gradients, his 'Camp' cannot be Site 1 – at least not in its entirety. Had Richardson simply wanted to indicate the existence of a 'Camp' on the hill further east, would he have drawn it onto his survey at such scale that it was truncated by the frame of his plan? Regrettably, there does not appear to be any similar survey from Ford Estate showing the eastern side of Flodden Hill at this date, which may already have been under trees. Certainly a 'plantation on Flodden Hill' existed in 1788, when a poacher's dog was shot there by John Delaval's Keeper (PSAN 4I).



Some forty years later Sir David Smith Bt., property manager to the Duke of Northumberland, made a 'survey' of Flodden Field. He identified the remains of four 'Intrenchments' on the hill

"...in which it is said the scotch army was encamped before the battle – they appear to have consisted of a centre field work, with a Redoubt to flank it, on the E and W where it was most exposed, the hill sides protecting it more closely to the N & S".

Smith's plan (Fig. 6) shows Site 2, which he calls the Western Redoubt, and an Eastern Redoubt - apparently Site1. Between the two is a linear feature with apparently one or two rectangular enclosures on its southern side. From the east end of the hill, said Smith, the the Scottish artillery fired some shot at Ford bridge "& the balls have since been found close by."

In 1858, when the Society of Antiquaries of Newcastle upon Tyne visited the area, they were taken onto Flodden Hill where Lord Waterford's gamekeeper, Richard Dunn, showed them what he

'took to be the entrenchments of the Scots, but which may possibly be of earlier date – (for it is a country of ancient camps).'

The following year Robert White, in his account of the battle, stated 'a square line of defence was thrown up round the camp, the traces of which are still visible'. This appears to be the rectangular enclosure marked 'King's Camp' on the map (drawn by the Rev. Robert Jones) accompanying White's account (AA NS 3 (1859), 210).

Henry MacLauchlan, in his *Notes on Camps in Northumberland* (1867) gives the first detailed description of the earthworks on the hill:

"The earthworks thrown up by the Scotch in 1513, on Floddon Hill, are nearly obliterated, with the exception of the Camp, or Redoubt, on the summit, which was the east end of the line of entrenchment. The form of the interior rampart is nearly right lined, and approaches closely to the shape of a rhomboid, with the longest parallel side towards the west; the intrenchment appears to have stretched towards the west from this summit about 500 yards, and was flanked at the west end by a redoubt nearly similar in form and size to that on the east. The figure of these two works does not differ much from a square, with a side of 70 yards. The western one is very nearly obliterated by the plough, but the eastern is in good preservation, and is surrounded by two other ramparts, which, although broken up, and altogether discontinuous on the south side, have much the appearance of being more ancient than the inner; as if an old earthwork of two ramparts, nearly circular...had existed there, and the new rampart had been constructed within".

MacLauchlan's interpretation appears to have been heavily influenced by Smith's survey, which he referenced. Like Smith he was a military surveyor, and may have interpreted the rectilinear enclosures in terms of 18th-19th century fortification.

That these were early sixteenth-century features does not seem to have been subsequently questioned, and taken with the Ridpath's 'battery' may have influenced

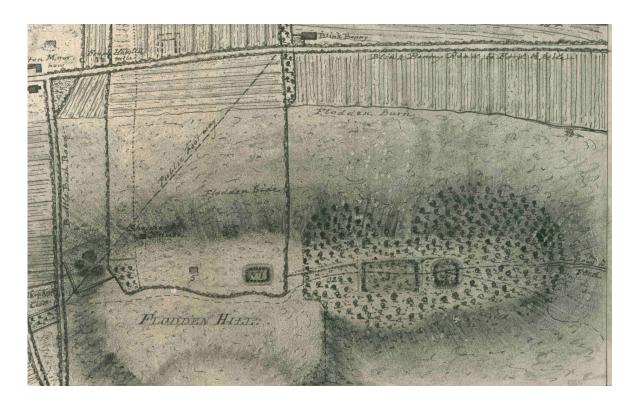


Fig. 6: Extract from Sir David Smith's sketch plan of 'Flodden Field' Collection of the Duke of Northumberland, Alnwick Castle, DNP Ms 187A/8



Fig 7: Lidar image of Flodden Hill

later writers. Mackenzie (1931) wrote of the approach to the hill from the front "at the foot a ditch had been dug over the scarp of which appeared the Scottish cannon", and Gervase Phillips (1999) "the naturally strong defensive position along the crest of Flodden Edge was enhanced by field fortifications, in which was located the powerful Scottish artillery". Pollard (2002) says of the Scot's position 'the sole line of approach toward them was defended by entrenched cannon and men' but qualifies this statement with "there is some disagreement among scholars as to the nature of the Scottish army's position on Flodden Hill...some writers infer it was strongly fortified, with the guns placed behind purposely constructed entrenchments...others merely state that the hill itself was like a natural fortress" [Pollard & Oliver 2002,129, 138]. Goodwin (2013) says of the Scots' position that it was 'impregnable', adding (without reference) 'to the naturally strong defensive mound of Flodden Hill had been added field fortifications'. Goodwin too has the guns 'based on Flodden Hill' and 'on the side of Flodden Edge' - both statements are again unreferenced.

The King's Chair and Flodden Hill became the property of Lord Joicey, who bought Ford from the Waterfords in 1907. In 1913 he added Flodden Edge, allotted to Lord Tankerville in 1779, to the estate (BNC 22, 308).

2.2 Previous archaeological interventions on Flodden Hill.

In 2000 excavations took place on the rectilinear cropmark site HER N1830 on the eastern flank of Flodden Hill, bisected by the carriage drive running up to the Hill from the A697 at Flodden Lodge, centred at NGR 391983 636040. The remains of this feature wwere still partially extant as late as 1860 [OS1]. The results suggest a late Iron Age date for its construction, with deliberate destruction in the early Roman period (Passmore and Waddington, 241-2). More extensive interventions took place on the north-eastern and north-western slopes of the hill in 2001 as part of the 'Two Men in Trench' television series. The only available report of this appears in a 'popular' publication (Pollard and Oliver 2002): detailed location plans, trench plans, and finds reports were unavailable. Interestingly the published account does not mention the 'Scot's Camp' – the Project's Site 1.

The principal site investigated in 2001 was a 'hollow' on the north-east slope of Flodden Hill centred at NT3916093 6359187 (Fig. 5 and 7). This was 'in places surmounted by a lip and earthen bank which immediately told us that this was no quarry scoop'. A section across a bank on the north side of the hollow in which there was a gap, showed it to be earthen with a steep scarp of stones to the 'inside' mixed with the soil, suggested as giving it strength. The north face of the bank, which sloped downhill was less steep and contained no stones. The absence of stones was interpreted as allowing the soft earth to absorb the impact of in-coming shot:

"It was making sense, coming together as a structure built to serve the specific function of protecting the Scottish guns from incoming English cannonballs" (Pollard and Oliver, 2002, 148).

The gap in the outer bank of the 'emplacement' was suggested as being broken through to get the guns out when the English outflanking manoeuvre was observed.

A low gravel and earth bank were interpreted as the possible remains of a lean-to shelter built into the back slope, and suggested to be the Scottish gunner's domestic arrangements. Associated finds evidence appears to be a single sherd of redware pottery described as being a type in common usage at time of Flodden, and a

square-sectioned square-headed nail - only one is actually mentioned - interpreted as being handmade and thus of the 'right' period. The excavators were clear on their interpretation:

"We had found one gun emplacement, evidence enough that James had fortified the hill" (ibid, 151).

The site is visible on Lidar (Fig. 7) and was examined by the writer in the winter of 2015-2016, when the undergrowth was down. It has all the appearance of a quarry scoop and little different to a number of others which scar the slopes of the hill. Unlike the other quarry pits it is *not* marked on the 1^{st-} 3rd editions of the Ordnance Survey despite being a highly visible on the ground, suggesting it is relatively recent. The 1st edition shows a track running south from Field 29 which appears to coincide with the quarry's eastern edge, perhaps accounting for its straightness and suggesting that quarry respected, or post-dates, the track.

Flodden Hill Site 1. Investigations on 'The Scot's Camp' 2009-2015.

Setting.

The site, now known as the 'Scots Camp', lies at the highest point of Flodden Hill, just above the 500' contour and engulfed in Floddenhill Plantation. The name is applied specifically to a single-rampart rectilinear enclosure surrounded by the degraded ramparts of an earlier bivallate 'hillfort', and is hereafter referred to as the Inner **Enclosure.** The indistinct appearance of the 'hillfort' ramparts, particularly on the east and south sides, may be a result of being robbed for material to build the Inner Enclosure. This measures c.70m east-west by c.53m north-south and the banks forming its 'ramparts' survive to a height of between 0.71 - 0.86m. The ramparts and interior are extensively overgrown with mature pines and scrub. Near the north-west angle of the rampart, the enclosure is cut by the track over the crest of the hill, made between 1860 and 1896-7 (OS 1 - 2). A gap in the centre of the east bank has been shown to be an entrance. Another in the western bank may be associated with forestry operations. The northern end of the Inner Enclosure is crossed by a low embankment which runs west-east along the northern crest of the Hill from the 'saddle' between King's Chair, enters the Inner Enclosure close to the western gap, and exits through the gap of the east entrance, is almost entirely within a post-andwire Release Pen for game birds, and to the west is a large ovoid, banked, enclosure, the relationship between this and the bivallate 'hillfort' is unclear.

Areas of the Inner Enclosure were the subject of five short seasons of excavation, in 2009, 2012, 2013, 2014 and 2015 (Fig.8). In the first season Trenches 1 – 8 were opened. Unfortunately there is no overall survey data with which to locate many of these, though Tr. 2, 3 and Tr. 5 were subsequently re-opened enabling their original extents to be identified. Trenches 3 and 5 were reopened and extended in 2012 and again in 2013 when new trenches – Tr. 9 -15 were investigated. In 2014 only Trench 5 was excavated, but in 2015 there was further investigation of Trenches 2 and 5 and two new trenches - Tr.16 and 17, were opened.

Recording methodology and limitations on the record.

Apart from limited use of a JCB for some opening-up and backfilling, all excavation was manual, using hand tools. Context recording used pro-forma sheets designed by Dr. Burgess. Plans and sections were drawn principally on permatrace. Apart from

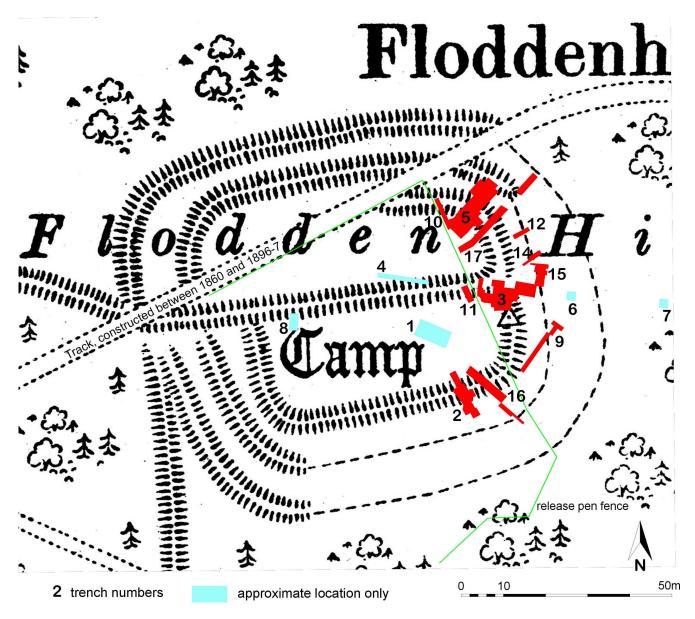


Fig 8: Flodden Hill Site 1 trench locations superimposed onto 3rd Edition Ordnance Survey (1924) map

2009, trench edges were surveyed using a total station and related to extant landscape features, principally fencelines. Regrettably there has been no modern topographical survey of the Inner Enclosure and its environs. Published large scale Ordnance Survey maps showing the earthworks are lacking in detail now identifiable on the ground by which the trenches to be accurately located, and the trigonometrical point shown on the 1st - 3rd editions just inside the Inner Enclosure rampart cannot be located. Limited total station survey in 2015 of the south-east corner of the Inner Enclosure has been used to try and position the trenches against the Ordnance Survey.

A digital photographic record was maintained throughout the fieldwork but unfortunately this component of the site archive, for the 2009, 2012, 2013 and 2014 seasons, was not available for writing this report. Nor was there any locational data for the 2009 trenches, though Trenches 2, 3 and 5 for that year could be positioned relative to their subsequent re-openings or extensions.

Levels were taken for all trenches in all years and related to temporary bench marks (TBM). The principal TBM was first established for Trench 3 in 2009 on a tree-stump south of the trench and given to notional height value of 1000.00m. It is not known if this was used for other trenches in 2009, but all subsequent levelling at Site 1 was related to it. Probably because of the distance from and difference in height between the nearest benchmark (Blinkbonny Farmhouse, value 299.5m/91.287m AOD) and the crest of Flodden ridge, the temporary benchmarks were not tied to Ordnance Datum.

Samples were taken from deposits which appeared either stratigraphically significant or appeared to have carbon content. Unfortunately by the time these were processed for datable carbonised material by Project volunteers some sample bags had split, and because of the risk of contamination these were discarded. The flots which were obtained were wrapped in kitchen paper towelling which when reviewed for possible C14 dating in 2014 had become mildewed and stuck to many of the extracted carbon samples. Consequently a further number of samples had to be discarded.

The excavations.

Note: Context numbers are given in squared brackets thus [1]. Finds numbers refer to the catalogues.

Trench 1 (2009).

No precise location for this trench is available. This was a large area (8m east-west by 4m north-south) sited in the south-eastern part of the inner enclosure. Loose dark brown peaty soil [1] came down onto [7] a firm but moist silty clay overlying natural andesite bedrock [8] at its east end, which had the appearance of a platform which had been extended by a 'dump' of small stones in the centre [3]. Overlying the natural rock at this point was soft grey-brown silty clay [7] interpreted as subsoil. The site 'daily update' for 31st May notes the only finds were a few fragments of brown glass, described as 'probably medicine bottle'.

Towards the north-west corner of the trench were lenses of silty clay [17 & 18]. The single plan for this trench is schematic and difficult to interpret without site

photographs, though it appears to show part of a raggedly curving groove 0.6m – 0.8m wide cutting the natural rock and continuing beyond the trench edges. This seems to correspond to the description of context [20] in the site record as *"?Foresters cut"*. The groove was filled with yellow-brown sandy soil and fractured andesite [19] and was investigated in two sections, which showed the feature to be a maximum of 0.29m deep. Possibly this was part of a shallow ring-groove from a round-house. Apart from the bottle glass, no other finds were recorded from this trench.

Trench 2. (2009 and 2015) (Fig. 9 and 10)

Initially this was a 1.3m wide and 12.4m long north-south section across the southern rampart, west of the south-east angle of the Inner Enclosure. In 2009 it was enlarged by small extension areas on its east and west sides. The topsoil [2] was peaty silt.

In the southern half of the trench, topsoil [2] came down onto loose grey-brown silty clay with stones and rounded pebbles [4/9] which overlay natural rock [5/83] and grey-brown clay silt with rounded pebbles [6/12]. The latter, which contained a sherd of Iron Age pottery (Finds, 2), overlay friable yellow-brown clay silt [27] abutting the face of the boulders forming the outer (south) revetment of the rampart [15], and compact yellow clay [13] with pebbles and quartz fragments 0.45m deep, filling the area between the outer rampart face and a less substantial central revetment termed the middle or 'parapet wall' [16]. This survived to a height of 0.4m. This constructional sequence seems to equate to what is described elsewhere in the site record as an 'earthen bank' [48] laid up against the 'outer bank wall' [15] and faced with stones to support it – the latter presumably being the central or 'parapet' wall [16]. A 'fill' of yellow-grey-brown silty material [59] similar to [12], was also noted between the outer rampart facing [15] and the earthen bank [48]. A shallow cut [91] containing charcoal was apparently recorded on the top of the rampart. Topsoil [2] also overlay a loose, dark brown-black, silty material [78] with small stone and quartz fragments, which filled a shallow pit. Four finds were recorded from this pit - a broken 'polishing stone' (SF36) and a piece of pitchstone (SF39), both subsequently identified as natural, and two pieces of worked agate (Finds, 86).

When the compact clay [13] was sectioned, what appeared to be a thin buried turfline was noted in the east section between outer rampart face [15] and central wall [16]. This was cut by a rabbit burrow and by a silt-filled feature at an angle of 45° interpreted as a post-hole. The possible turfline appears to be the same as the 'black material' [89], which was sampled (Sample 10 on the context sheet - though in the sample list this is contexted as being from [81]. A sketch section shows a number of horizontal and vertical 'lines' in the section, suggested by the excavators as either the result of root action or possibly decomposed turf lines. Also below [13] was a roughly square cut [42] with a very loose silty fill [43] and a possible packing stone, suggesting this may have been a post-hole. A similar feature [46], filled with [47] appears to have cut [13], though both seem to be shown on the same plan cutting the material between the outer and 'parapet' walls. These features cannot be dated. If they were post-holes it is always possible that they were comparatively recent, perhaps associated with an earlier form of Release Pen fenceline. Both features had been disturbed by animal burrowing and may not even be man-made (P1).

Also below [9], and overlying and north of [16], was more brown stony clay silt [14] forming part of a *glacis* slope to the interior of the Inner Enclosure. Below this was a

black, rooty, material [40], also described as being below the 'parapet wall'. Below [40] was a firm brown stony clay silt [41] which overlay the inner rampart facing and sloped down northward to lense out onto natural rock [39/97]. Context [41] was probably the same as [64] and [90]. Below [41] was loose, orange, sandy gritty material [82 and 92]. A sketch-plan in the site record seems to show that [41] also filled a narrow cut or step into [82/[92], in which the inner rampart revetment (unnumbered) lay. A similar feature was noted in 2015.

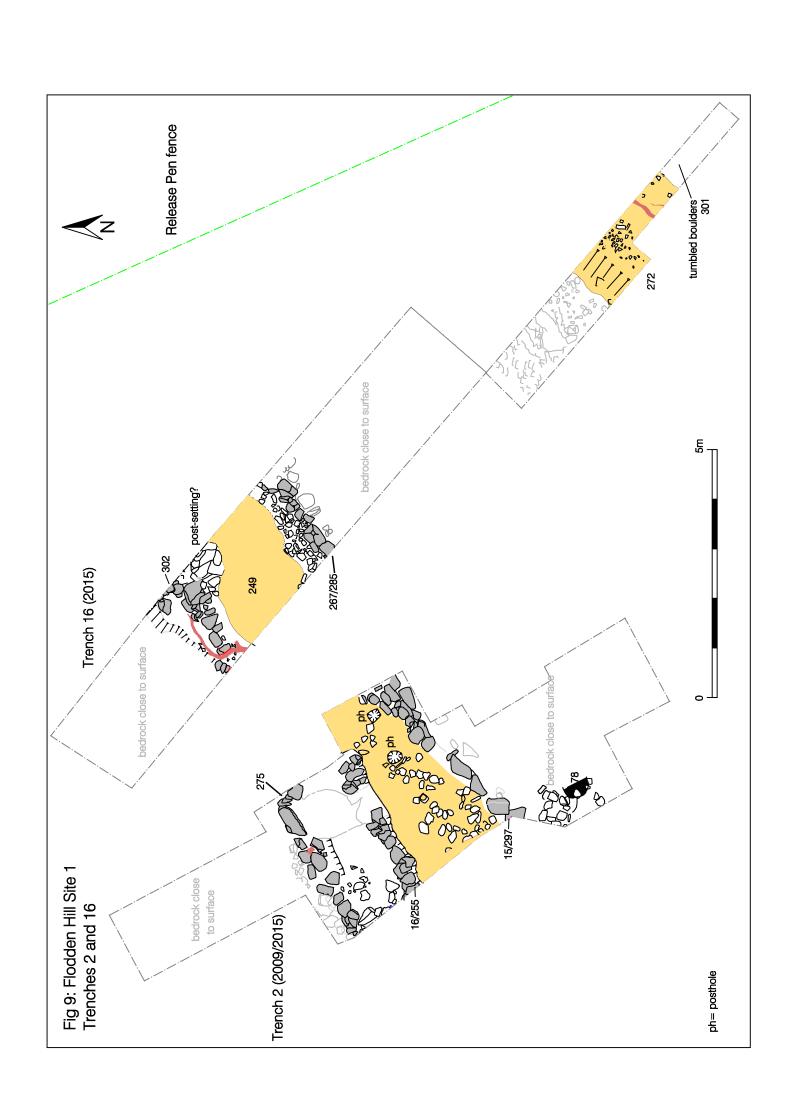
Below [9] (and presumably also below [41]) a thick deposit of stone rubble [58]/[81] 'at least 4 stones deep' abutted the north face of the inner rampart and spread northward into the Inner Enclosure. A sherd of Iron Age pottery came from this deposit (Finds, 3). Below [58/81] were more stones [96] which appeared to run under the inner rampart, and overlay the natural rock [39/97]. Seven 'utilised' stones were recorded from this trench (SF 19, 22, 23,28,36,37,38), but after cleaning and examination none showed any evidence of wear-marks or damage from use and consequently all were discarded.

In 2015 part of Trench 2 was re-opened to accurately locate the original trench (there was no overall survey data from the 2009 season), and partly to sample a possible buried soil surface or turfline which had been noted within the rampart. The re–excavation eventually located the 2009 east and west trench edges.

Turf and root-mat [254] overlay loose black soil [253], mostly backfill from 2009 but with firmer, previously undug, areas around the edge of the trench. A retouched flint flake (Finds, 88) and a sherd of Iron Age pottery (Finds, 4) came from this deposit. When this was removed the outer (south-facing) revetment [15/297] the central or 'parapet' wall [16/255], and the inner revetment [275] were exposed again (P2). Between the outer and central 'walls' was a 'bank of orangy- brown clay silt [258], presumbly upcast natural and equal to [13] in 2009. On the east side of the 2009 sondage, there was a thin deposit of gritty orange clay silt on the top of the 'bank' over a dark-grey silty lense [269], both overlying [258]; it was unclear if these were insitu deposits, or the remains of the 2009 backfill.

Behind the inner rampart face [275] and butting the face of the central 'wall' was dark brown-black silty soil [259], containing two joining sherds of Iron Age pottery (Finds, 5). The deposit was sampled and yielded a calibrated C14 date of 196-47BC (at 95.4% probability). This came down onto a lighter brown/grey-brown silty soil [263]. When this was removed, a line of stones [268] emerged, behind the inner rampart face [275], with another dark silty soil deposit [274] between it and the central 'wall'. Enough carbon was recovered from [274], which contained a sherd of Iron Age pottery (Finds, 6), for C14 assay, which returned a calibrated date of 44BC – 76AD (at 95.4% probability). Below this was another deposit of dark brown-black soil [276] overlying loose rusty orange-brown gritty material [295/296] on top of the natural rock.

Unfortunately it was not possible to confidently re-identify the suggested buried turfline, which may have been a silt-filled animal burrow. Despite serious tree-root disturbance (a stump had to be removed) the central or 'parapet wall' was shown to be founded at a lower level than previously thought, and effectively on the natural rock. When dismantled, it appeared to be laid against the face of a sloping cut into the upcast natural subsoil forming the outer 'core' of the bank. A sherd of Iron Age

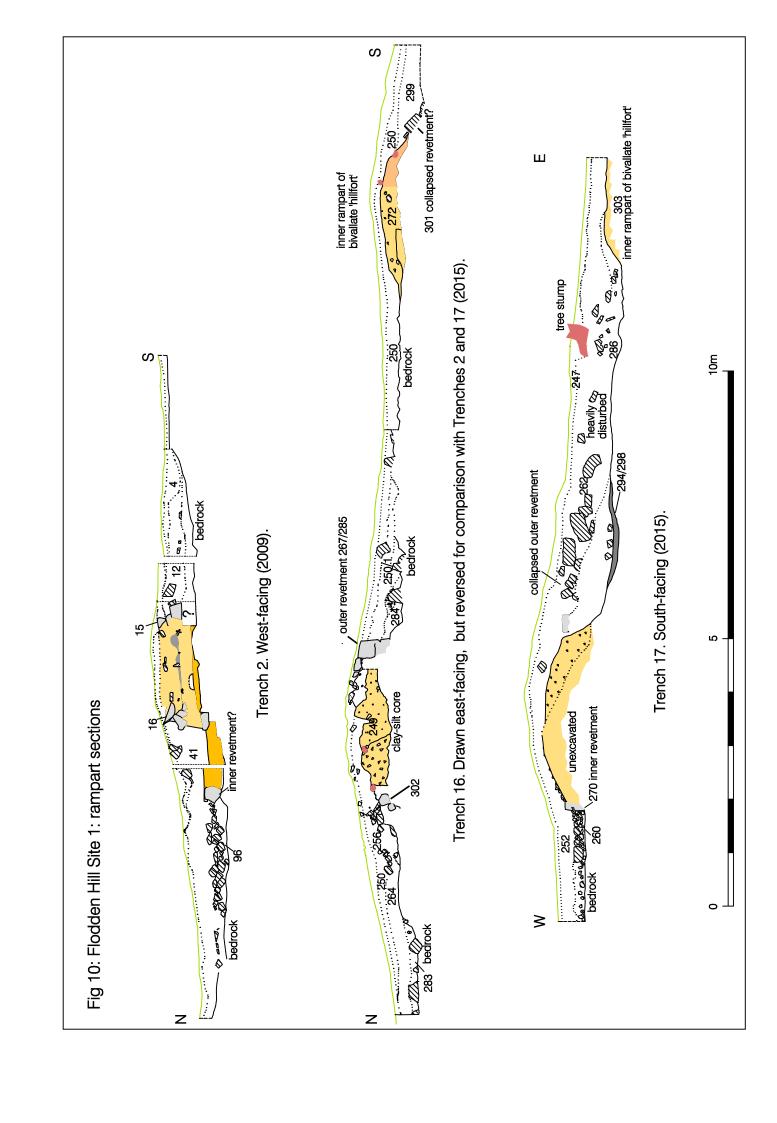




P 1: Flodden Hill Site 1, Trench 2, top of rampart in 2009 looking east. (Photo Gordon Moir)



P 2: Flodden Hill Site 1, Trench 2 in 2015 showing revetments



pottery appeared to lie below the masonry, though it is possible that the revetment stones had been displaced outwards by animal/root activity, giving the appearance of overlying the sherd.

Trench 3. (2009, 2012-15) (Fig. 11, P 3 and 4)

This trench began as a rectangular area c.6m east-west by x 5m north-south, with a 1m wide western extension between standing trees. It was sited over a gap in the eastern bank of the Inner Enclosure which appeared to represent an eastern entrance, and took in part of the outer slope of the rampart to the south. It was reopened and subsequently extended in 2012-15.

Topsoil comprised up to 0.2m of leafmould and forestry brash [10/150], which overlay grey-black silty soil [11/108/151] with flecks of charcoal, and contained a flint scraper (Finds, 90). On the crest of the Inner Enclosure rampart context [11] overlay a firm, yellow-brown silty clay [25/35/109] identified as redeposited natural, overlying and among tumbled andesite rubble [28/189/196]. Both were interpreted as collapsed and degraded corework from the rampart, heavily disturbed by tree-roots, and both produced sherds of Iron Age pottery (Finds, 8 -11).

The latest archaeological feature was a line of small-medium andesite boulders set in yellow-grey stony silt [45/57], running through the entrance gap and continuing northeast beyond the north section of the trench. This appears on Lidar to be apparently a continuation of the dyke which Smith and MacLauchlan interpreted as a 'line of entrenchment' erected in 1513, running from near Site 2 (their 'western redoubt') up the spine of the hill to Site 1 (their 'eastern redoubt'). Lidar shows that after passing through the eastern entranceway the dyke veers north-east to join another boundary dyke on the eastern edge of the hill. This feature was also investigated in Trench 8 (2014) and Trench 11 (2013) (q.v.). At the easternmost extent of the 2013 excavation what appeared to be another linear alignment of small-medium stones [201] was found, entering the trench from south and running down into the 'hollow way' of the eastern approach. Here it became fragmentary but could have continued beyond the north edge of the trench. Possibly this was a blocking across the entranceway or a later stone boundary feature like [45/57].

Below the dyke described above the entranceway passage through the rampart was thoroughly blocked with rubble [28/189/196] over 0.5m deep. When this was removed the southern side of the passage was found to be revetted by medium-large boulders [85] surviving up to three courses high. The southward return of the revetment along the inner face of the rampart lay below the Release Pen fenceline and was inaccessible for excavation. The north side of the entrance passage could only be investigated in a narrow trench between the Release Pen fence and a standing tree. Here a double line of boulders [214], surviving one course high, retained a 'core' of small rubble [204]. This appeared to be an addition – or possibly two phases of addition – to the original northern rampart facing [215], reducing the c. 2.7m-wide entrance passage by some 1.2m. The top of one large boulder of the original facing was just identifiable among tree roots, retaining yet more small angular andesite rubble [216].

The south revetment to the entrance passage continued east as a line of mediumsized andesite boulders [85], partly sealed by the tumbled corework [25/35], and formed a 'kerb', or low or truncated revetment. This defined the southern side of a partly rock-cut hollow way some 2.5m wide approaching the eastern entrance. The revetment, which had the appearance of having been robbed, survived to a maximum of two courses high east of the Inner Enclosure rampart where another ragged stone alignment [37/146] was noted a little behind (to the south). East of the entrance the revetment appeared to be founded on a 'step' or ledge cut into the natural rock (2012) echoing the form of construction of the inner rampart face in Trench 2. On the step, where [85] had been robbed, was a roughly 0.19m square intrusion [147] c.0.1m deep in the bedrock showing signs of having been 'pecked'. possibly a post-socket. It was not possible to determine if this predated the revetment, was part of its construction (timber laced?), or was a later intrusion which had not been recognised at a higher level. At the eastern end of the trench as extended in 2013, the southern revetment degenerated into a fragmentary line of stones, at the eastern end of which was a stone-packed post-hole [213] c. 0.24m deep, filled with stones and dark silty soil [217]. This was contained within a curving row of flattish stones [219] set on edge in soil [218]. The latter was sampled, by produced no viable material for dating.

On the outer slope of the Inner Enclosure rampart, south of the entranceway, the scree of tumbled rubble [28] overlay [85] and a firm, moist, dark-brown clay soil containing frequent small to medium stones [101] behind it. This in turn overlay a more compact stony yellow-buff silty clay [84] and a dark brown-black charcoal flecked silty soil [139] butting the inner face of [85]. Below these deposits was the remains of an east-facing rubble revetment on a north-south alignment. The relationship between this and the southern revetment had been destroyed by tree-root disturbance, consequently it was not possible to establish if this feature was the remains of the outer facing to the rampart or a stabilising wall within it, or if it was earlier than, contemporary with, or secondary to the south revetment to the eastern entranceway approach,. Further east, [85] retained retained small fractured andesite fragments [38] mixed with clay similar to [25]. In the south-east corner of the trench [101] also overlay a group of stones [106] in a shallow depression with black, occasionally gritty, silty soil [105]. It was unclear if the latter were deliberately placed, or were simply tumbled stones which had accumulated in a hollow of the bedrock.

On its northern side the 'hollow-way' was defined by a similar revetment of a single course of large boulders [123]. A short stretch of this was exposed in an extension to the trench in 2012, and apparently on the same alignment as [215] in the entrance passage itself. Excavation in this area was however severely constrained by standing trees. Apparently sealed by a gritty deposit [60], the boulders lay on a firm reddish clay silt with frequent small stones [132], possibly a natural glacial deposit overlying the bedrock. They retained a mass of small rubble in a matrix of brown silty clay soil [124], possibly equivalent to [38] behind the southern revetment. At the easternmost extension of the trench, in 2013, a large boulder [216] was found which appeared to lie on the projected line of the northern revetment [123]. An alignment of smallmedium angular stones [216.1] ran northward from it, and appeared to underlie the boulder. Possibly these were a continuation of [179] from Trench 14. Some 2m further east, and again off the projected line of the northern revetment, was a small oval pit or post-hole c.0.30m by 0.40m (un-numbered) cut into the bedrock. These features are assumed to be part of a continuous northern edging to the hollow-way approach running east from [123], but standing trees and limited spoil storage space precluded this being demonstrated by excavation. It seems probable that [216.1] was part of the east (outer) revetment of the inner of the two bivallate 'hillfort' ramparts,

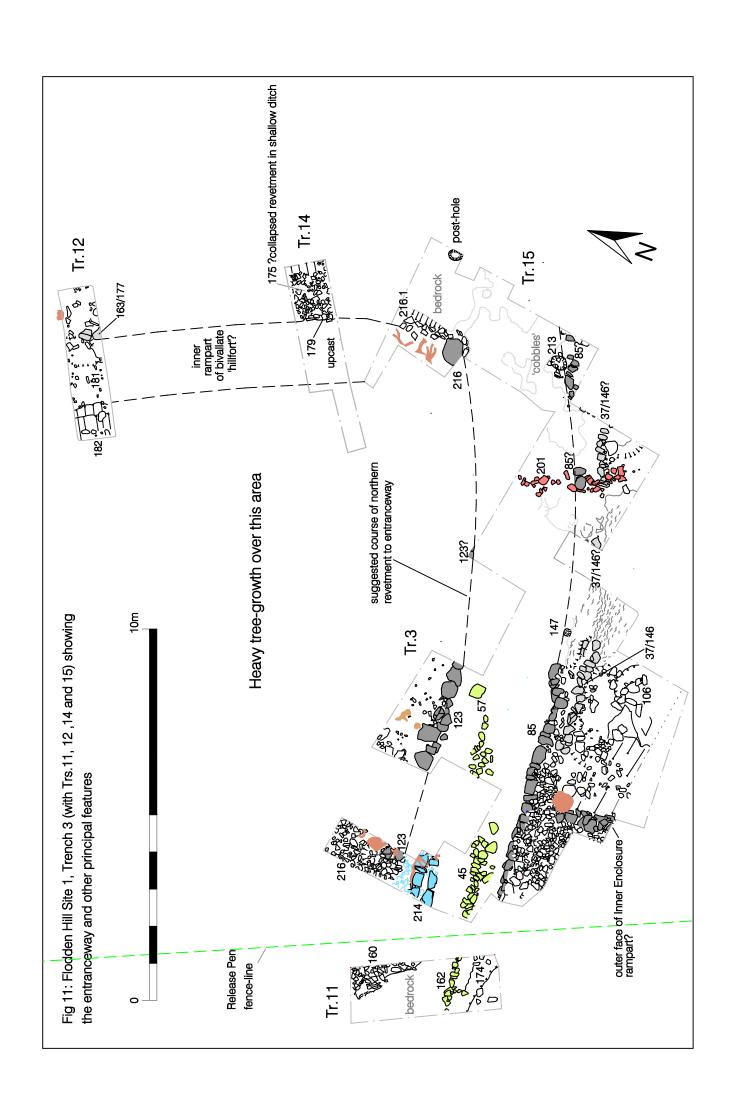
represented by [122] in Trench 5, [163/177] in Trench 12, and [179] in Trench 14. If so it is possible that the large boulder [216] marked a terminus to that rampart, and is evidence for an earlier manifestation of the eastern entrance. However as the boulder overlay small rubble which was apparently part of [216.1], it may have been part of the northern hollow-way revetment, and the latter had intruded through the earlier central rampart.

Between the north and south revetments and below [11], the approach to the eastern entrance of the Inner Enclosure was covered by dark brown silty, soils, charcoalflecked on the surface, with some particularly concentrated patches [30/34/155/156/157/158/176/186]. The charcoal appeared to be pine and, like that in [11], was probably the result of burning forestry brash (see Finds, 90, 98, 99, 100). A band of silty clay [31] visible on this horizon, running from the north section to a mass of small rubble [44] was probably tree-root disturbance, bringing up the underlying yellow-brown clay deposits [25/35]. The latter was contaminated by tree-roots, and contained an Iron Age pot sherd (Finds, 9) and broken flint flake (Finds, 90). Below [25/35] was a grittier silty soil [60] cut by [75], a feature apparently capped by the small to medium-sized rubble [44] and filled with loose, dark brown-black, humic material and roots [61/62/63/74/76/77]. The feature was not obviously man-made and may have been a natural fissure in the bedrock like [170], deliberately-infilled filled with stones, or [207] which was filled with probably naturally-deposited orange glacial clay. Other 'features', [159] and [206], were filled with orangy clay and dark brown silty soil and may have been tree-throws.

Context [60] overlay the small-medium sized angular and rounded rubble choking the eastern entrance passage and spreading east across the entrance passage [28/98/103/189/196]. The rubble was presumably corework from the Inner Enclosure rampart, collapsed after the outer facing stones had been robbed. This overlay a compact, moist brown silty soil [100] and a similar deposit containing more rubble [104]/[107]/[125], which abutted the north face of revetment [37]. Below [104]/[107]/[125] was another deposit of rubble in clayey silt [127]. All these deposits post-dated construction of the revetment, and appeared to represent several episodes of collapse/robbing. Below these spreads of soil and small stones, which were some 0.65m deep, the largely bedrock surface of the entranceway passage [149] appeared. Inequalities in this and along the eastern approach 'hollow way' were patched and levelled up with small gravel and cobbling [202/205], between which upstands of the bedrock appeared worn and/or 'hammered', suggesting some considerable period of use. As in 2009, the only datable artefacts recovered from the layers of collapsed corework and rubble within the hollow way were prehistoric.

Trench 3b/4. (2009)

Located within the Release Pen, west of the eastern entrance to the 'Inner Enclosure' this trench was orientated east-west and 12m long by 1m wide. It was laid out on the north side of a line projected through the pen fence from the north edge of Tr.3, but the distance between the two was not recorded. The topsoil was leafmould [24], which overlay compact yellow-grey silty clay [21-23] below which was brown stony subsoil [26]/[36]. This came down onto natural rock at only 0.2m bgl at the west end, but at the eastern end the bedrock was cut by an irregular feature [33] partly under the north section, containing black peaty soil, tumbled stones [29] and a number of fragments of dark-green bottle glass. This feature, which may have been a small quarry pit or tree-planting hollow, was bottomed at 1.2m bgl.





P 3: Flodden Hill Site 1, Trench 3 looking south showing hollow way and revetment



P 4: Flodden Hill Site 1, Trench 3, revetment on south side of entranceway

Trench 5. (2009, 20012-15) (Figs. 12 and 13)

This trench was sited over the north-east angle of the Inner Enclosure. Begun in 2009, in 2012 it was partly re-opened and expanded to investigate a feature found in the first season, and subsequently reopened and extended again in the three seasons 2013, 2014 and 2015. The approximate area excavated is shown on the plan together with the main features found. Some elements of interpretation are included in the narrative as they have a bearing on the decisions that were made relating to re-opening and extending the area.

In 2009 a trench 11m long east-west by 1m wide was laid out with the aim of establishing whether there were any structures at the corner of the enclosure. The topsoil [49] came down onto brown silty soil with occasional small stones [50] which was heavily disturbed by tree-roots. Below [50] was a compacted stony clayey soil [51]. In the eastern part of the trench and apparently visible at this level was a band of very compact stony material [56], similar in composition to [50]. The softer soil on both sides was excavated until [56] formed an upstanding 'bank' c.0.3m high. When sectioned this overlay a thin layer of looser orange-brown gritty material [68].

The trench was extended north of this section (Fig. 12), where a spread of loose orange-brown silty soil [79] 'surrounding' small-medium stones was uncovered. This spread of stones, aligned south-east/north-west, was initially interpreted as one side of a pointed 'bastion'. About 2m from the west end of the trench a few medium to large stones in dark brown silty soil [94] appeared to mark the outer face of the enclosure bank. Further down the slope, near the start of the extension was another 'linear' patch of smaller stones in dark brown soil [95].

In 2012 the original trench, but not the extension, was re-opened and extended southwards into a 'mirror image' of the 2009 extension with the aim of picking up the other corresponding side of the 'bastion'. The western end of the trench was also doubled in width. At the eastern end of the 2012 trench topsoil came down onto compact dark brown soil [99/102] possibly equal to [50/51], which contained a burnt flint (Sf. 42). No corresponding bastion wall was uncovered instead beneath [99] there was a roughly north-south aligned revetment wall of angular rubble [122], up to three courses high, with a bank of compact light brown soil containing many pieces of small fractured andesite [121] behind. This bank dipped markedly towards the west section where there were large stones in the dark brown soil [114]. Beneath these was dark silty stony soil [141] in a linear north/south spread. It was thought that this might have been filling the hollow of ditch. It could be traced right across the trench (see plan), where a small worn sherd of probably Iron Age pottery was recovered (Sf.46).

In the centre of this eastern section of the trench a roughly circular patch of stoney, ginger-coloured clay silt with decomposed wood and root [120] disturbed the bank [121] referred to above. This was eventually interpreted as a tree-throw and it was concluded that the 2009 'bank' [56] and [68] were part of this disturbance.

At the west (upper) end of the 2012 trench a patch of small to medium-sized (0.20 - 0.25m diameter) stones [129] extended under the south and west trench edges. Another stoney patch [130] ran under the south edge of the trench. Further east an area of medium to large stones was a continuation of 2009 [94] although it was more

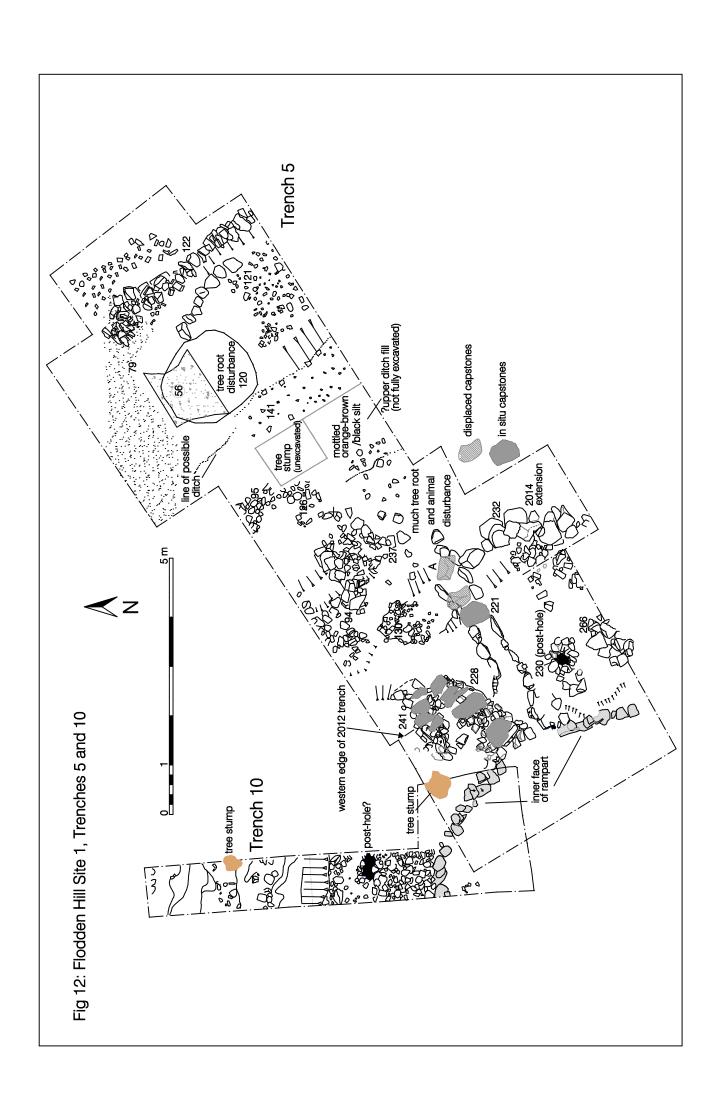
extensive. Further east again down the slope was another patch of small/medium stones [126] which appeared to be a continuation of 2009 [95]. A piece of possible iron-smithing slag (Sf.45) came from this area. All these areas of stones were separated by relatively stone-free areas. Unfortunately a tree stump prevented excavation here continuing through to link up with the wider eastern section of the trench. Neither the flint nor the piece of ferrous slag are chronologically diagnostic.

In 2013 the eastern part of the trench was partly re-opened to further examine revetment wall [122] and the area behind it, with an extension continuing the south edge of this area westwards over the top of the enclosure bank in the hope of establishing a complete section through the rampart and down over the possible ditch. The revetment [122] was traced for another 1.2m southwards. Against the north edge of the trench the revetment was sectioned showing that it was founded on a natural gritty/stoney orange deposit [172] overlying bedrock. A slightly curving line of large stones was uncovered behind (west of) the revetment (Fig 11). There was no indication that it had continued in either direction. Time and resources prevented a fuller excavation of the possible ditch feature observed in 2012, but in a small area against the section at the south side of the trench a layer of dark silt was seen to underlie the stoney deposit [141] before a pinkish-orange gritty, probably natural, deposit was reached.

Initial cleaning of the newly opened strip below turf [167] produced a fragment of redbrown flint (Finds, 106) and an iron object (Sf.53), probably a bucket handle of relatively recent date. A flint flake (Finds, 107) was also recovered but context information was not recorded. Below the dark brown topsoil [168] on the top of the rampart was a spread of small to large stones [171] embedded in compact brown clay silt [173] while at the east end of new strip was a moderately firm mid-brown silty soil [169] with stones. On the outer (east) side of the rampart a layer of soil in shades of brown came down onto successive deposits of stones [185/195], some very large. The brass cap of a 12-bore cardboard shotgun cartridge-case (Sf.71) was recovered from a depression on the east side of the large stone marked A on the plan. Animal disturbance in this area became increasingly evident as holes and soft patches appeared. Two other finds were recovered: a small piece of burnt bone (Sf. 62) and a flint bladelet (Finds, 106).

Eventually a stone-built feature [221] running east-west and *c*.1.80m long emerged. It comprised large stones on edge forming the sides and a single surviving *in-situ* capstone. However, on looking back at the earlier plans of [185] and [195] it was realised that at least two other capstones had been present only slightly disturbed (shown hatched on Fig. 11). Running west from the capstone across the rampart the edges of a cut [222] were visible, suggesting that the feature had been inserted into the rampart.

At the west end of the 2013 trench a line of stones [198] appeared to mark the inner side of the rampart. Abutting these, and within the enclosure, was yet more firm brown silty soil [197] which contained a piece of Iron Age pot (Finds, 15) and small flakes of hammerscale (Sf.70). This overlay [208], a deposit of angular pieces of stone in brown soil, possibly collapsed rampart material. Pieces of fired clay with a slag layer adhering, possible hearth lining (Sf.76) were recovered from this deposit. Beneath this was natural bedrock. The stone line [198] proved to be somewhat insubstantial and by the end of the season a more convincing inner face to the



rampart had begun to emerge. The only broadly datable finds from 2013 were the shot-gun cartridge (possibly as late as the 1970s) and the Iron Age pot.

Further investigation of the stone feature [221] was the primary objective for the 2014 season. An area approximately 7.5m east/west and 4m north/south was laid out. This took in the western part of the areas of Trench 5 excavated in 2012 and 2013 and also included part of Tr.10 (2012). The new trench took in two previously undug areas - on its north side, an irregularly-shaped area on top of the rampart, and a narrow strip down the southern side of the trench.

Excavation of the cut running across the rampart revealed more side stones [240] but no further capstones. The tops of the side stones were found to be overlain by material indistinguishable from the 'rampart' material forming the sides of the cut. This suggested that the cut was not related to the original construction of the feature but to the removal of the missing capstones. The stones forming the south side of [221] appeared to continue, although possibly disturbed, through to the inner side of the rampart, giving a surviving length of *c.*2.30m. On the north side there were only three side stones. A small piece of burnt bone was found in the fill [238] of the feature. A sample from the fill of feature [221] yielded a C14 date of 47BC to 70 AD (SUERC1). Further excavation of the stones on top of the rampart (see 2013 [171]) revealed a stone-lined post-hole [230], material from the fill yielded a date of 358 - 280 BC (SUERC1). A large piece of Iron Age pottery (Finds, 16) was recovered from the tumbled stone in front of the inner face of the rampart.

Excavation of the previously untouched area on top of the rampart to the north of [221] uncovered two very large stones set about 0.40m apart with the space between filled by smaller angular stones in dark soil [236] (P 5). Some pieces of slag, not closely datable in themselves but possibly indicative of small scale metal-working (both ferrous and non-ferrous) in this part of the site in the Iron Age (Sf.3/2014) were recovered on the north side of the large stones whilst excavating the stoney dark-brown sandy deposit [223] below the topsoil.

East of the two large stones more flattish stones, somewhat smaller and evidently disturbed, continued a short distance down the outer side of the rampart ending just within the area opened in 2012. These stones were the capping [228] of a feature similar to [221]. The feature was defined, like [221], by side-stones along its length [244]. The relationship between the two features was unclear, though the south side-stones of the new feature appeared to be converging with the remaining stones on the north side of [221](P 6). Under the westernmost capstone smaller stones were packed in in an apparently random fashion. Further along its length the fill was a soft dark-brown silty sand [239]. A small piece of copper-alloy, possibly casting waste, (Sf.8/2014) was recovered from this as well as some more pieces of slag, possibly fuel ash slag, (Sf.9/2014) and a small worn sherd of Iron Age pot (Finds, 18). A sample from feature [228/244] yeilded a C14 date of 164 to 128 BC (SUERC1).

Converging with feature [228/244] at its east end was another similar stone feature [241], though built on a somewhat less substantial scale. Two capstones of this third feature were removed to take a sample of the fill [242], but it was not systematically or completely excavated. The sample yielded a C14 date of 360 to 271 BC. (SUERC1). The C14 obtained from all three features suggest that the fills derive from disturbed Iron Age/Romano-British deposits.



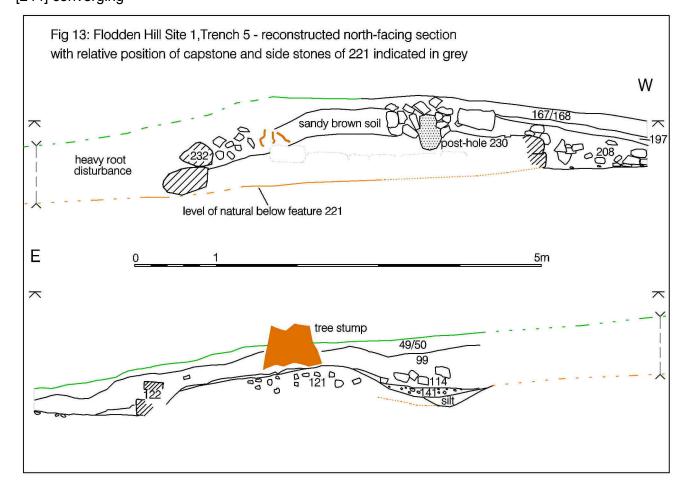
P 5: Trench 5, capstones [228] from the north

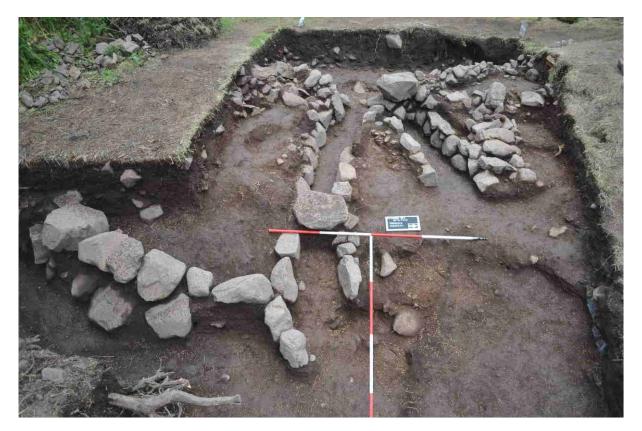


from the east



P 6: Trench 5, Feature [221] looking north with side stones [244] converging

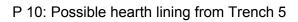




P 8: Flodden Hill Site 1, Trench 5 from the east showing outer revetment and 'fox earth'



P 9: Shotgun cartridges from Trench 5





Further work on the slope down the outer (east) side of the enclosure bank revealed more of the deposit of medium to large stones originally numbered [94]. The extended deposit was numbered [237]. Again the stone-free areas between the various stoney deposits was noticeable (P 7) However, no structure was discernable as [94]/[237] was excavated. Unfortunately time and resources prevented a more through investigation of this area which was very disturbed, particularly on the south side adjacent to the eastern end of stone feature [221]. On the last full day of digging a shot-gun cartridge endcap (Sf.11/2014) marked 'Eley No. 12 London' was recovered at some depth very close to where one had been recovered the prevous year.

A two-metre square extension was laid out on the south side of the trench adjacent to the east end of [221], where similar large-sized stones appeared to extend beyond the edge of the 2013 excavation. This whole area was very much disturbed by tree roots and animal burrows. The large stones [232] continued diagonally across the extension, running on into its south-west corner forming a rough revetment two or three courses in height (P 8). Smaller rubble in dark soil was banked up behind these. A small fragment of Iron Age pot (Finds, 17) was recovered from the extension.

Some limited re-investigation of the rampart structure in Trench took place in 2015. The inner face-stones [277] overlay dark brown silty soil [279] which was sampled and returned a C14 date of 61 to 218 AD (SUERC2). Behind [277] was a grittier dark grey-brown soil [281]. At the corner behind [277] and the stones on the south side [278] of stone feature [221] was a similar grey-brown gritty soil [287]. On a level with the base of the stones was a small stakehole.

Below the topsoil the body of the rampart was composed of stoney orange-brown soil [289]. A group of stones on the top of the rampart [266] had no discernable structure. The east side of the bank dipped down towards the large stone feature [232] in the 2014 extension. A small chert flake (Finds, 109) was found within the material of the rampart. An uncontexted rim sherd of Iron Age pot (Fonds, 19) was also recovered. Another shotgun cartridge (Sf.1/2015) was recovered from topsoil at the west end of the trench. Apart from the shotgun cartridges and the Iron Age pottery the finds are not uniquely datable.

Trench 6. (2009)

This was a 2m by 2m test pit east of Tr.3. Topsoil was turf and soft reddish-brown soil [65] overlying dark brown clayey soil [66]. Below this, was the natural andesite bedrock [67] at 0.37 - 0.43m bgl showing evidence for considerable fracturing.

Trench 7. (2009)

Another 2m by 2m test pit, some 20m east of Tr. 6. Topsoil [53] overlay dark brown and yellow/grey sandy clay with occasional rounded quartz pebbles [54]. Below this, at between 0.06m and 0.18m b.g.l was the natural andesite bedrock [55] showing considerable fracturing.

Trench 8. (2009)

The trench, initially opened as a 2m x 2m test pit, then extended by 2m southwards, was sited in the north-eastern part of the Inner Enclosure, to investigate the southern

side of the low linear bank – part of MacLauchlan's 'line of intrenchment' running from near Site 2 to the west and cutting across the enclosure to exit through the eastern entranceway. This feature was also located in Trenches 3 and 11 (q.v.). Below grass and bracken [70] was a compact, light-brown sandy clay with some large stones [71]. This contained a quartz fragment and agate chip (Finds, 110), and was cut by a sub-circular feature [72] between 0.8m and 1m in diameter, filled with gritty, brown, charcoal-flecked, clay silt [73] and some angular stones [69]. The 'daily notes' for 8th June speculated that this, together with 'a similar feature to the east that is visible on the surface' was part of the setting for a tripod frame for a tent or crane. Below [71] at 0.18m – 0.2m bgl, was a very compact pink-brown gravelly sand [80] interpreted as a natural glacial deposit.

Trench 9. (2012)

The trench as initially laid out was 11m east-west by 1m wide. It was subsequently extended 2m further east, with slight offset to the south, to avoid a tree.

At the western end of the trench, turf and leafmould [110/118] and black silty topsoil [111] overlay a low bank or spread of small fractured andesite and brown clayey silt [112/113] and [134/135] some 2.6m wide. West of this, brown silty soil [119] sloped downwards to the end of the trench. No natural glacial clay or bedrock was encountered, even at a depth of 0.8m b.g.l, suggesting an in-filled ditch – or perhaps a quarry pit – beyond the trench edge.

East of the bank was an area of stones and charcoal [133] which abutted a 'kerb' of three stones [148]. These appeared to form the edge to another low or truncated bank of andesite rubble and clay [136] some 4.8m wide, on the east side of which was a mass of medium-sized angular boulders [137] filling a hollow in the natural bedrock. Covered by [137], or possibly part of it, was a post-hole or pit [142] cutting the bedrock and partly under the south section, filled with angular and rounded pieces of andesite [143]. Here the natural rock was c.0.4m bgl. The low banks may represent the degraded remains of the bivallate 'hillfort' surrounding the 'Inner Enclosure'.

Trench 10. (2012) (Fig. 12)

This trench was opened across the north rampart of the Inner Enclosure, close to its north-east corner and just outside the Release Pen fence. Initially only the south side of the rampart was opened, but subsequently the trench was extended over the crest of the rampart and c 3m down its north-facing slope with the intention of obtaining a full cross-section, though this could not be achieved within the duration of the excavation.

Topsoil was composed of leafmould, bracken and forestry brash in a dark silty soil [115]. Below this, on the south slope, was a compact, very stony dark brown silty soil [116] with a possibly grittier lense below, overlying a scree of small-medium stones [128]/[140] with an apparently defined edge to the base of slope on the south, but ragged at the crest of the rampart. Here a possible post-socket [131], some 0.36m deep, was noted. This could not be dated, and it may have been associated with an earlier Release Pen fenceline, rather than a feature of any antiquity.

Below the scree of rubble [128/140], interpreted as collapsed rampart core-work, was a single course of medium-large boulders presumably representing the remains of the inner rampart facing [144]. These rested on a levelled area of firm orange-pink gritty clay, probably glacial, and bedrock, at 0.95m bgl. and 1.2m below the surviving

crest of the rampart. The clay was cut by at least two small stake-holes or post-sockets, 0.08m diameter and c.0.1m deep. Patches of small, rounded, stones filling inequalities on this levelled surface may have been glacially deposited, but could also have been deliberately laid.

On the north slope topsoil overlay a mixed deposit of rubble and lumps of buff-brown clayey silt [128.1] above loose dark silty soil and stones [138] equivalent to [116] on the south slope. This contained a large piece of Iron Age pottery (Finds, 20) and a flint flake (Finds, 111). Unlike the south slope no scree of rubble was encountered, though this may be because there was insufficient time to excavate deeply enough. The lowest point reached at the base of the north slope, and still within [138] was 1.28m below the surviving crest of the rampart. Tip lines could be seen in the west section, and there appeared to have been significant disturbance of the slope, perhaps associated with formation of the adjacent track over the crest of the hill.

Trench 11. (2013)

The trench was sited across the low linear bank - a continuation of MacLauchlan's 'line of entrenchment'- which ran diagonally across the 'Inner Enclosure' from close to its north-west corner and continued east through the blocked east entrance.

Turf and topsoil [209] came down onto friable brown clay silt with roots and small stones [210]. This overlay a ragged line of stones [162] following the same alignment as [45] and [57] in Trench 3, all representing the remains of the 'entrenchment'. The line of stones lay on firm yellow-brown silty clay [178], on the surface of which was a horse-shoe nail (Sf.65).

At the south end of the trench a shallow cut or depression in the natural rock was filled with brown silty clay [174], possibly glacially deposited. This appeared to follow the same broad alignment as the south revetment in the eastern entrance (see Trench 3). At the north end a mass of voided small-medium rubble [160] filled a similar bedrock hollow, with some larger stones visible in the east section which may have been tumble from the inner revetment to the rampart. Dark soft silty soil [211] filled a possible shallow post-hole [212/220], and three other small sockets cut into the bedrock at the southern end.

Trench 12 (2013)

Topsoil [164] was leafmould, bracken and brash from forestry operations overlying a moderately firm dark brown/black silty soil [165]. At the west end of the trench below [165] was a band of firm grey-brown silty clay [166] which extended beyond the trench edges. This overlay an orangy clay silt surface dipping west, part of a linear feature [182] which appeared to correlate to the 'ditch' in Trench 5. Toward the eastern end of the trench were two large andesite boulders butting one another [163/177]. This appeared to represent a continuation of the line of the revetment noted in Tr.5 to the north and continued by [179] in Trench 14 to the south. Behind the boulders was a bank of mixed gritty orange and brown soil [181], probably upcast, overlying a layer of stones [193] which in turn overlay a gritty orange silty clay [194] which may have been natural. The revetment and bank appear to be part of the inner of the bivallate hillfort rampart. At this point the trench had become too narrow for further excavation and was abandoned.

Trench 13. This trench number was not used.

Trench 14. (2013)

Topsoil was a mixture of patchy turf and leafmould [191]. This came down onto a black silty soil [192] and dark grey silty soil [190] overlying gingery upcast material (unnumbered) which began to dip towards the eastern end of the trench. At the point it beagn to slope down was the remains of a revetment probably equivalent to [163/177] in Trench 12. East of this, a mass of stone rubble [175] containing a flint flake (Finds, 112) appeared to be filling a shallow ditch-like depression, also apparently equivalent to that in Trench 12. The overlay, or were part of, a deposit of flatter stones [183] both perhaps collapsed revetment material. Below these a firmer gritty brown formed the base of a shallow cut at 0.74m bgl.

Trench 15. (2013)

The only recorded context were stones [203]. One small find, a broken secondary flake, was recovered, but without any contextual information (Finds, 113)

Trench 16 (2015) (Fig. 9 and 10)

Just over 2m to the east of Trench 2 this was opened across the rampart to see if the construction sequence in Trench 2 continued, or was localised. A similar sequence was seen in the new trench, though identification of the 'central revetment' was ambiguous.

Turf and leafmould [248] came down onto a 'bank' of orangy clay silt [249] with traces of stone revetments north [302] and south [267/285]. On the north (inner) side a dark brown-black soil with small and medium-large stones [250/251]. On the inner slope a mass of small rubble [256] in a band across the trench was presumably collapsed core-work. A similar scree of rubble on the south side [257] appeared to have cascaded down from the rampart when facing stones were robbed and displaced. Below [256] a 'ledge' held more black silty soil [264], below which was orangy-brown possibly redeposited natural or degraded material from the bank' behind [265].

There was evidence in [256] for both human and animal disturbance – pits [261] and [288] both contained 'Border Brewery' Codd bottles, the necks broken to extract the glass 'marbles') (P11). Pit [288] also contained a broken lithic, possibly an axe (Finds, 114) (P12). Another find was Iron Age pottery (Sf.21). More rubble on the inner slope mixed with dark silty soil [280/283].

On the south side of the rampart, brown soil [284] appeared to run under the base stones of the revetment [267]. This overlay natural bedrock, which was slightly 'dished' before rising slightly southward toward the encircling bivallate 'hillfort' rampart.

On the crest of the 'bank', just visible inside the east section, medium-large boulders appeared to be packed into a cut [291]. Against the west section a patch of loose grey-brown silty soil with some stones may, like similar features in Trench 2, have been a post-setting. This too had been exploited by burrowing animals who had dug a 'run' leading from its base north through to the inner face of the 'bank'.

The stone revetment to the north face of the rampart had suffered root damage from a tree between Tr. 2 and Tr,16, resulting in displacement of the stones closest to the west section and making the distance between it and the outer rampart face appear



P 11: Glass Codd bottle from Tr. 16



P 13: Trench 17 Inner revetment looking east



P 12: Possible stone axe from Tr. 16 (bottom) and polished stone implement from Tr. 17 (top)



P 14: Trench 17, tumble on outer side of rampart, looking west

greater than that between the outer revetment and central 'wall' in Tr.2. Considering this, it seems most likely that [302] was a continuation of the central wall and not, as at first thought, the inner revetment which may have been fully robbed at this point. However some large boulders [292] appeared in front of the possible 'parapet' wall at the very end of the excavation, and could not be adequately cleaned or investigated. Plastic sheeting was laid over this part of the trench at the lowest point reached in the excavation, in anticipation of its being re-opened and investigated further.

South of the rampart, the inner of the two outer (presumably earlier) concentric earthwork ramparts appeared to be represented by a bank of redeposited natural [272]. Small to medium sized stones [302] may have been the remains of the inner rampart revetment, or a truncated rubble core. Firm grey-green silty soil [299] and green-brown silty clay [300]. Medium stones [301] were possibly a collapsed outer (south) face.

Trench 17. (2015) (Fig. 10, P 13 and 14)

This was sited south of Trench 5, and was nominally 14m east-west by 1.50 m wide. It was intended to take a section from interior of the Inner Enclosure through the east rampart and across the line of the possible ditch. Turf and much topsoil [247] was mechanically removed in the eastern part of the trench (i.e. from the outer slope of the rampart).

On the east side of the rampart, was a considerable depth of brown soil, indistinguishable from the topsoil [247], overlying, and among, tumbled stones [262]. These had been very heavily disturbed by animal burrows and were full of voids. Below [262] at the base of the slope of the outer rampart was a compact dark brown clayey soil [294] with a patch of siltier material heavily flecked with charcoal [298] (see Fig.10). The latter was sampled and returned a calibrated C14 date of 175 – 1BC (at 95.4% probability SUERC2). Further east more loose, tumbled, stones and gravel [286] underlay [262].

Topsoil on the inner (west) side of the rampart produced the brass end of a cardboard 12-bore shotgun cartridge case (Sf. 1), and part of a polished stone implement (Finds, 117, see P 12). Beneath the topsoil here was fairly compact brown soil [252], which contained a flint blade (Finds, 115). It overlay tumbled stones [260] which butted the surviving face of the inner revetment [270], interpreted as collapsed core-work after robbing of face stones. Below the fallen stones and underlying the revetment was a small, firm patch of burned soil [271]. This was sampled and returned a C14 date of AD7-131 (SUERC2). Below these deposits was natural rock.

Discussion Site 1.

Despite (or perhaps because of) four seasons of investigation, significant issues of understanding and interpretation this site remain. The following discussion, and the the conclusions drawn, are the views of the writers of this report but not necessarily those of the Project's Archaeological Manager. The conclusions offered cannot be considered final or definitive since only a relatively small part of this site has been examined.

Seen on a Lidar image (Fig. 7) the Inner Enclosure appears almost square in outline, though the western and northern sides are possibly slightly longer creating a

trapezoidal form. In the 2009 Excavation Summary this squared form is described as 'not unheard of in the Iron Age but with the nearest examples being 50 miles to the south in the Tyne Valley'. This statement seems extraordinary in the light of fieldwork in the Milfield Basin which has revealed a number of rectilinear sites ranging in size from between 50-90m long by 30-65m wide internally. One on the south-east slope of Flodden Hill some 565m from Site 1, was excavated by Clive Waddington in 2000 (HER N1830). This had an east-facing entrance. Other examples north of the Tyne valley are South Heddon (Ilderton) at NZ 995 212 (220-240m above sea level), with sides 80m long and a north-east facing entrance placed centrally in its eastern rampart, though this site differs from Flodden Hill in having pronounced double banks. This site is dated to the Romano-British/late Iron Age [EH 2004]. A similar site at Coldwell near Kirkwhelpington (HER N10397) comprises a rectilinear, ditched and banked enclosure c.90m square, with opposed entrances in the centre of the northeast and south-west sides. In overall size and form Site 1 is similar to the demonstrably Iron Age enclosures at Sites 2 and 3, and Waddington's site on the south-east slope of Flodden Hill.

The eastern entranceway, which appears to be contemporary with the construction phase of the Inner Enclosure, is the only known original opening to the Inner Enclosure. An entrance in this position is a recognised feature of Iron Age/Romano-British farmsteads/settlements, and occurs at Site 2 and Waddington's site on the east slope of Flodden Hill. A gap in the western side may be a relatively recent breach associated with forestry operations. It is unclear if the 'hollow-way', approaching from the east originated with the earlier 'hill-fort', or was constructed as part of the Inner Enclosure, or if the flanking revetments or kerbs might have been defensive 'horn-works'. There is some evidence that the revetments may have incorporated upright timbers, unless these too belonged to an earlier phase of entranceway. Subsequent modifications to the width of the entranceway are undatable – it was first reduced by almost half, with a substantial stone blocking on the north side, and later completely blocked with rubble. It is uncertain if this was deliberate or a result of the collapse of the revetting to the rampart terminals, but if an Iron Age date for the Inner Enclosure is accepted, this may be evidence for the same episode of deliberate slighting suggested by Waddington to have occurred at his site on the eastern slope of Flodden Hill.

The 2009 Excavation Summary remarks on the absence of an external ditch as 'very unusual' in Iron Age earthworks. On the southern side of the Inner Enclosure there are traces of shallow intrusions into the bedrock, but certainly nothing deserving of the term 'ditch'. At the entranceway approach in Trench 3 the natural rock ran east without any obvious intrusions – though it is possible that 'ditch' terminals lay either side, beyond the area of excavation. At Marden (Tynemouth) the entranceway terminals were 22' (6.7m) apart (Jobey 1963, 23-4). On the eastern side there is more convincing evidence, particularly in Tr. 5 and 17, where the subsoil is a more easily-worked glacial till. However the absence of a continuous or substantial ditch is not inconsistent with an Iron Age construction date. Harding (2012, 6 and 11) observes that where the defence is a wall without any serious ditch, the cause may possibly be the difficulty of carving a deep ditch out of hard rock, and in upland areas where solid rock is close to the surface, or where loose scree provided a more ready source of building material, the ditch may be minimal or non-existent. Oswald (pers. comm) agrees, suggesting that in such conditions 'ditch' digging may have involved little more than token removal of topsoil to form a counterscarp bank – the wall being

the key feature - and that ditches are only dug where soil is deep enough to make that a relatively easy option. This could explain the ditches visible as crop-marks and as excavated features at Site 2 and Waddington's site on the east slope of Flodden Hillt, both areas where the natural subsoil is glacial till. It is also possible that at Site 1 the inner of the earlier 'hillfort' ramparts might have been adapted to form the semblance of a 'ditch', obviating any need for hacking into intractable bedrock.

The method of construction of the Inner Enclosure rampart raises particular problems of dating and interpretation. As investigations of this feature were principally confined to the north-eastern and south-eastern sectors, the data obtained may not be characteristic of the Inner Enclosure as a whole. Where the southern rampart was sampled it was a clay-cored bank, revetted with large boulders externally and smaller rubble internally. In Trench 2 this formed a rampart c. 2.5m-3m in width, inside which was a step or ledge 1.5m wide, the northern edge of which was defined by what appeared to be the base of another revetment - either the true inner face of the rampart which had been heavily robbed, or a low kerb, or perhaps even part of some separate internal structure. This sequence of features may be a very localised since only two lines of revetment were seen in Trench 16 a little further east, though this area had been disturbed in the early 20th century. Elsewhere the rampart width varied between c.3.4m (Tr.16) - 3.6m (Tr.17). A revetted rampart is also suggested for Waddington's site on the east slope of Flodden Hill (Passmore and Waddington 228. 241). In all trenches across the rampart there were indications that the clay core had been capped or pitched over with rubble, which had collapsed after the revetments retaining it had been robbed or slighted. Ramparts of this form were noted at Old Bewick [Hope Dodds 1935, 37]. In trenches across the rampart there was evidence to suggest that the outer revetment had been robbed, resulting in deposits of large voided rubble and dark soft soil filling the 'ditch' hollow between the Inner Enclosure and the inner rampart of the earlier 'hillfort'. This is reminiscent of the deposits reported by Waddington (2009, 228) filling the ditch of the late Iron Age-early Romano-British enclosure over 500m to the north-east of Site 1, which were interpreted as a result of a stone-revetted rampart having been deliberately slighted and used to level the ditch. In Trench 16 too there was a suggestion that some of the rampart facing stones had been robbed or pulled askew, though this activity cannot be dated.

The three stone 'tunnels' found cutting the rampart at the north-east angle of the Inner Enclosure also appear to represent post-medieval disturbance. The similarity in form and apparent relation to each other suggests that the three features were contemporary and functioned together, although the most northerly was on a slightly smaller scale. Although resembling flues or drains, there are no signs of heating anywhere in the vicinity and very little charcoal, nor do they 'drain' anything. A more plausible explanation, initially suggested by the Keeper for Hetton Estate which holds the shooting rights on Ford and Etal Estates, is that they form part of an artificial foxearth. Such features are now recognised archaeologically, and can date from the late 18th century to the present day. Ford estate, and the Milfield area, was important hunting country in the 18th-early 20th centuries and a supply of foxes for the chase was essential. If this identification is correct it is possible that the smaller structure may be the remains, or an adaption, of an earlier artificial rabbit warren, perhaps even one of medieval date. These features may then be evidence for a continuity of estate usage of the hill for rearing 'game' - represented today by the Release Pen for game-birds which encloses much of the site. The importance of the rabbit in the

medival and later rural economy is well attested (Williamson 2007). In 1287 Sir William Heron, builder of Ford castle, was granted a weekly market and free warren in his manor [Brayley & Britten, 220], and a 'Warren House' – perhaps a warrener's lodge - is marked on Horsley/Cay's map (1753) south-east of Ford Westfield, close to Warren Plantation (NT9430 3525) on the north-west edge of Kimmerston Bog.

Excavations in 2009 within the Inner Enclosure revealed a few largely undatable features but no 'occupation' deposits. By contrast brown-black silty soils containing small-medium rubble and fragments of Iron Age pottery were found against the inner side of the rampart, butting the internal revetment, and on the outer side of the rampart. This seems to be referred to in the 2009 Excavation Summary where it is stated that the ramparts appeared to have been constructed "using soil scraped from the interior of the enclosure - a methodology unheard of in the Iron Age". Perhaps extrapolating from this, it was also suggested that earlier occupation deposits on the hilltop were cleared in 1513 to provide material for building the Inner Enclosure ramparts and to lower the interior level so that the Scots' artillery was shielded from incoming English gunfire. This suggestion presumes that artillery was indeed emplaced actually on the hill, a view perhaps encouraged by the supposed gun emplacement excavated by Pollard and Oliver on the north-east side and supported by the apparent 'sconce' on the Armstrong's map

It is now clear, as described earlier, that the 'sconce' image has been misinterpreted, the 'gun emplacement' is indeed a quarry, and there is no *trace Italienne* bastion on the north-east corner of the Inner Enclosure or any other evidence for artillery positions. It is also difficult to reconcile the suggestion of an internal soil strip to provide material to build the ramparts with the excavated evidence – if the dark silty soils are 'occupation' deposits they would be the first to be stripped and theoretically the first to be redeposited, whereas the clay core bank was constructed first and the dark soils deposited against its internal revetment. There is also inconsistency in the depths of dark soil *outside* of the Inner Enclosure rampart which is greater at the north-east corner and in the entranceway, while there is little outside the south rampart.

The apparent absence of occupation material may be misleading since the areas excavated in 2009 constitute only some 2.4% of the total enclosed area of potentially 2, 352sq.m. And in any case a range of factors might contribute to deposit loss. It is probable that activity - human and livestock - within the enclosed area, whether in the Iron Age or later periods, would result in soil migration to the periphery, particularly when as at Site 1 the natural rock lies so close to the surface (A. Oswald, pers. comm.). The westward slope of the interior would also contribute to soil movement from the higher parts of the site. There may well have been some deliberate removal and redeposition of soil, particularly on the eastern side of the Enclosure, but there is no archaeological evidence that this took place in 1513. It could have have occurred earlier or later, and through factors other than reasons of defence. Additionally, Flodden Hill has been continuously used as a plantation for Ford Estate since about the mid-18th century, and by c.1860 Site 1 was surrounded by and covered with trees. Disturbance caused by tree-falls, managed felling, and replanting, is likely to contribute to soil denudation. Presumably it was during this period that what appears to have been an artificial fox-earth was constructed on the north-east corner of the Inner Enclosure, and this may also have involved redistribution of soft deposits to create a cover mound.

Flodden Hill 2010-11: Site 2. Cropmark enclosure

Location.

The site, which is only visible as a crop-mark, lies at the southern end of Field 9, on the north slope of the Flodden Edge ridge and in the 'saddle' between Flodden Hill and King's Chair Hill. This is part of Callerburn Farm.

The site appears faintly on an vertical aerial photograph of 1945 (RAF), and appears more clearly on oblique aerial photographs taken by Roger Miket in July 2006 (P 15). It is also just visible on Lidar imagery. The aerial photographs show a subrectangular, ditched, enclosure; on the 2006 photographs a number of internal features, including one of a circular form, are also visible. A substantial linear feature runs west from the western side of the enclosure, and a narrower one cuts across its northern half, possibly continuing east from – or cut by –its north-east corner. Close to the south-east corner of the enclosure are two linear features, one narrow the other wider, cutting across the corner of the field (HER N19708 at 391000 635620). Both linears make sharp changes in alignment at this point, suggesting some relationship between them and the enclosure.

Reason for investigation

In the Northumberland HER (N24368) this site is called 'a possible redoubt association with the battle of Flodden Field'. This identification seems to derive from Henry MacLauchlan's c.1858 description of earthworks on Flodden Hill, in which he refers to a line of entrenchment running west from the 'Scot's Camp' (Site 1) to "a redoubt nearly similar in form and size". All three features he interpreted as dating to 1513, and the distance he gave between the two 'redoubts' suggests the western one was Site 2.

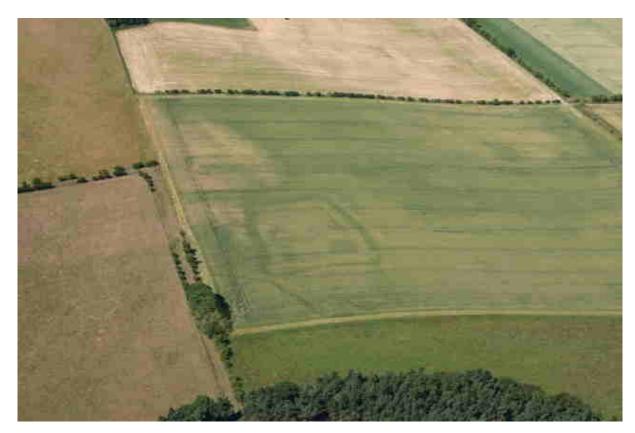
Historical background.

The earliest known evidence for this feature is an enclosure plan for Branxton Common, surveyed in 1780 by Richard Richardson of Darlington, land surveyor for the Dean and Chapter of Durham (Fig. 4). This shows an upstanding rectilinear earthwork, with part of a much larger enclosure to the east with semi-circular 'bastions' at the north-west and south-west corners, captioned 'Camp where the Scots laid before the Battle of Flodden field'. A little to the west of the northern 'bastion' Richardson shows a small, squarish, apparently upstanding feature, perhaps also an earthwork. It is not clear if the latter is 'Site 2' or another feature since ploughed out, with the north-west 'bastion' in fact being Site 2.

Some forty years later Sir David Smith Bt., property manager to the Duke of Northumberland, made a 'survey' of Flodden Field. He identified the remains of four 'Intrenchments' on the hill

'...in which it is said the scotch army was encamped before the battle – they appear to have consisted of a centre field work, with a Redoubt to flank it, on the E and W where it was most exposed, the hill sides protecting it more closely to the N & S'.

Smith's plan (Fig. 6) shows Site 2, which he calls the Western Redoubt, and an Eastern Redoubt - apparently Site1. Running between the two is a linear feature which he calls a 'line of intrenchment' with apparently one, possibly two, rectangular



P 15: Flodden Hill Site 2 cropmark from the east in 2006 (photo Roger Mlket)

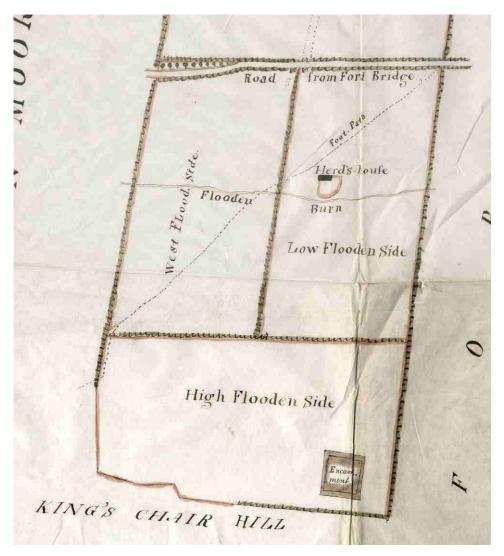
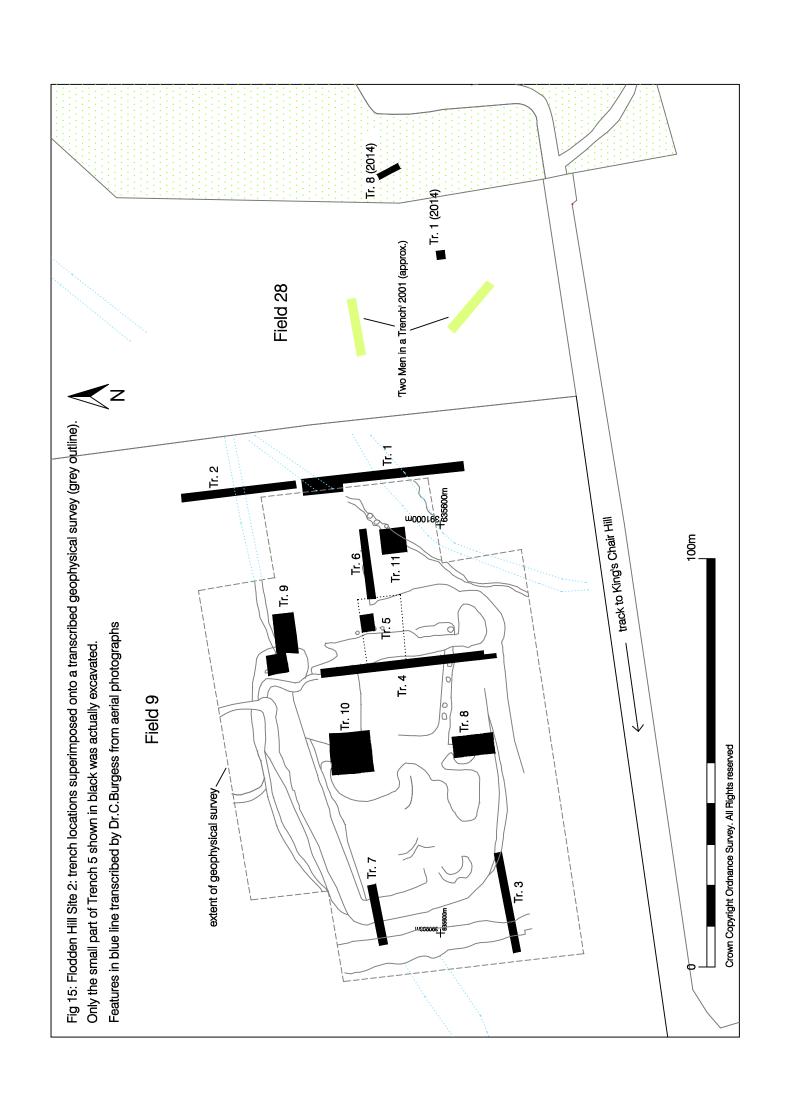


Fig 14: Plan of Mardon and Branxton, 1826. NRO 2DE 15/4



enclosures on its southern side. This may be an attempted representation of the ovoid enclosure marked by the Ordnance Survey and visible on lidar – nothing of this form is visible today.

In 1826 - by which time much of the open landscape had been enclosed - a plan of G.A. Askew's Mardon and Branxton Estate (NRO 2DE15/4) shows an sub-rectangular enclosure in the location of Site 2, marked 'Encampment' (Fig.14). The representation on the plan implies that this was still a visible earthwork, though when MacLauchlan visited the site c.1858 it was "very nearly obliterated by the plough". Enough survived for him to note that what he considered to be the western redoubt of the Scottish line of entrenchment was "nearly similar in form and size" to that on the east (Site 1), and that unlike the latter there was only one rampart. The remains must have been completely levelled shortly after MacLauchlan's visit as nothing is shown on the 1st edition Ordnance Survey map. By 1945 only a faint crop-mark was visible.

The Northumberland HER notes that this site was "partially excavated for a BBC television programme in 2001 called 'Two Men in a Trench', but this is an error. The only published reference to this investigation (Pollard and Oliver 2002) describes it as being "On a grass-covered saddle on the edge of the forest..." implying it was just west of Floddenhill Plantation, but there are no plans or photographs. The nearest grassed field is Field 28, and two infilled trenches can be distinguished here on Google Earth (2002 image). This location agrees with the recollection of Alan Rogerson, farmer at Blinkbonny. The published account refers to the discovery here of 'an arc of small stones' set in a shallow slot and 'a couple of post-holes', features which the excavators suggested to be the remains of tenting places associated with the Scottish army's occupation of the hill in 1513 (ibid.,155-156).

Methodology

Geophysical survey of the enclosure area was undertaken by GUARD, and completed on the 9^{th} September 2010. The first season of excavations took place between 8^{th} - 19^{th} September 2010 (Trenches 1-7). Unfortunately rectification of the geophysical survey data used an incorrect baseline, with the result that the geophysics plot was positioned 10m further south in the field than it should have been. Consequently the 2010 trenches were misplaced relative to the geophysical survey data. A second season of excavation took place between 11^{th} September and 24^{th} September 2011 (Trenches 8 - 11). The locations of the trenches are shown on Fig. 15, though the accuracy of some of these may have been compromised by the absence of detailed primary survey data.

In 2011 one hundred and nine 'small finds' were 3-D recorded by total station, but unfortunately only a very few were allocated to contexts making it impractical to confidently assign the majority to a meaningful stratigraphic sequence. The site photograph archive was unavailable when this report was compiled. Parts of the site, particularly Trench 8, proved too complex for adequate investigation, interpretation and recording within the timescale of the excavation.

Both seasons are considered together in the following report.

Trench 1 (2010). (Fig. 16, 17)

This was 40m long by 2m wide and aligned south-north down the slope to sample linear features shown on aerial photographs and geophysics. Ploughsoils [1, 3 and

51] overlay the natural – a gritty glacially-deposited clay [4]. Context [3] produced some small pieces of what was initially thought to be slag, but were later identified as fragments of the iron pan which overlay the natural clay in places. Other ploughsoil finds included two post-medieval pot sherds (Sf.5 and 8) and bottle glass Sf.13, one sherd of Iron Age pottery (Finds, 24), flint and agate (Finds, 118 – 121). Three 'polishing stones' (Sf 56, 58, 59) showing no evidence for wear or use were later identified as natural and discarded. A possible 'gunstone' (Sf. 57 unstratified) was also identified as a naturally-rounded sandstone pebble.

When the surface of the natural clay was cleaned a number of features were visible. At the extreme southern end of the trench was a post-medieval field drain [15], filled with rubble [25] and capped with red clay [24]. North of this were deep grooves, possibly from a chisel-plough and stone-hollows [16, 17, 18] and a shallow linear feature [14] just over 0.3m wide but widening as it reached the east section, filled with reddish-brown sand gravel [26] which contained some slag. Other cut features probably truncated by ploughing were possible post-holes [8] and [9] (fill [38], containing cinder and coal fragments), and context [26] produced some slag.

Towards the centre of the trench the line of a ditch [32] appeared, some 3m wide and running south-west to north-east. This appeared to correspond with one of the cropmark features. To the south was a spread of re-deposited natural [33], possibly the remains of an upcast bank levelled and spread by ploughing. On the northern edge of the ditch was a small pit or post-hole [55], cut into the ditch fill and containing [56]. This was sampled, but produced no material viable for C14 dating. The ditch [32] was capped by a compact grey-brown, charcoal-flecked sandy silt [47] containing a 'polishing stone' (Sf.31) later identified as natural, and a fragment of redware pottery or field drain. This overlay a similar deposit [109]. A section cut across the ditch fills showed that there were in fact two cuts, separated by a narrow baulk of natural [4]. This explained the apparent width of the feature.

The northern of the two cuts - 'ditch' [32N] - was a shallow feature only 0.17m deep, filled by [109] which spread to the south over the 0.2m-wide baulk of natural separating this from the more substantial and complex southern ditch [32S]. This was sealed by firm, light grey sandy stony clay [110] below which two possible partial recuts, or shallow secondary ditches [112/113], appeared along its northern edge and cut into its light orange-brown sandy clay fill [111]. Both followed the alignment of the main, earlier, feature [32S]. The latest 'recut' was [112], which cut an earlier one [113] filled with brown sandy silts [114 and 115] above a pinkish-grey clay [116], which the excavators suggested may have been a deliberate lining. Below [111], in the base of the primary ditch [32S] was a narrow, square-profiled channel 0.12m deep.

Further north and also cutting the natural was a band of band of dark, siltier, material [6] running obliquely downslope across the trench from south-west to north-east. Initially interpreted as a ditch, the edges of this deposit bulged outwards in three places along its exposed length and these subsequently resolved themselves into three pits [53, 79, and 118]. Part of the fill of [6] was a green-grey clay silt [39] which may have accumulated in hollow caused by settlement of the underlying fills, though could also have been the upper fill of pit [53]. Below [39] were black silty sandy soils [54]/ [57], and loose sandy silt and small gravel [54] containing a sherd of Iron Age pottery (Finds, 26). To the north of [6] was a stony clay deposit [7], possibly the same

as [34], which may represent the remains of an upcast bank, spread and truncated by ploughing.

A reddish-orange or burned patch cutting [7] and the north edge of [6], close to the eastern side of the trench, was initially identified as a 'hearth' [37]. This developed into a sub-rectangular pit or posthole [73] filled with brown silt and stones [72], which appeared to be partly overlain by a dark brown silty soil [76] with loose charcoaly silt [42/44/46] below. A sherd of Iron Age pottery (Finds, 25) came from context [42]. The latter deposits seemed to have accumulated in a hollow formed by settlement of the fills of a larger pit, feature [118], into which 'hearth' [37/73] was cut. The uppermost fill of [118] was a loosely-compacted light grey silt [43] overlying dark brown clayey silt [70]. Below this was the primary fill, compact green-grey clay with frequent angular andesite fragments and pebbles [71].

Some 2.3m south-east of [37/73] and again on the north edge of [6] was another burned patch [36], also identified as a 'hearth'. Possibly associated with this was a stakehole [35] with an *in situ* charred stake-end. This too developed into a pit or posthole [41], filled with green-brown fine gravel [40]. This appears to have overlain firm green-grey silty clay [39], interpreted as filling a settlement hollow in underlying deposits. A loose brown stony gritty soil [52] and a similar - if not the same - deposit [54] to the south-west, formed the upper fill of another large pit [53/98], containing dark brown soil and fine gravel [57] and grey-brown soils [99,100, 101 and 102] (Fig. 16). After the pit had been excavated it appeared that context [52] had been filling a semi-circular feature on the edge of the large pit, which may in fact have been cut by [53].

To the south-west, again within the band of dark silt [6], was a roughly circular pit [103] filled with dark silty and yellow-brown gravelly soils [104 -106]. This cut an area of burning and charcoal initially contexted as pit [65], filled with dark grey silty soil [64] containing a fragment of pottery or burnt clay (Sf 53) and fire-reddened stones. This was subsequently re-numbered as pit [79]. The upper fill of this feature was a dark brown-black silty soil [80]. Below this was a group of fire-reddened stones [81] and orangy stony gritty silt [121] which overlay black/dark brown stony soil [122]. This sealed a brown silty clay with pockets of charcoal/carbon [123], which overlay a more concentrated charcoal deposit [124] and what appeared to be stakeholes/carbonised stakes. Samples taken for C14 assay yielded a calibrated date of 411-357BC, placing this in the Iron Age. Below the traces of burning was a soft silty soil with occasional small stones [125/119], and then a firm grey-green silty clay [120] at the base of the pit.

North of these features, and apparently cut by them, was a firm gritty orangy-yellow clayey silt [74] with frequent medium-large stones. The relationship between this and the cut features described above was uncertain as there had been some blurring of edges by ploughing. Below [74] was a smoother surface of yellow-orange clay silt with small stones and iron pan [75], possibly the old land surface, which had been cut by the features above.

Trench 2 (2010). (Fig. 17)

This was a northward continuation of the line of Trench 1, 28m long by 2m, but separated from it by a 1.5m-wide baulk. Below the ploughsoil, which contained a utilised agate flake (Finds, 123) and towards the north end of the trench, was a

possible hillwash deposit [2] containing a possible whetstone or polishing stone (Finds, 122). This deposit overlay natural orange-yellow gravelly clay [5], which was cut by a number of features, the most recent of which were two gullies running north-south, 0.25-0.30m wide and up to 0.16m deep [19] (fill 22) and [20] (fill 23), and probably deep plough-grooves. These cut the orange-red clay capping [28] of an east-west 'rumbler' field drain [21] filled with fractured andesite [29].

The earliest feature was a ditch [49] c.2.1m wide, on a south-west by north-east alignment. This was capped by orange-red gritty, stony, clay [83], possibly the remains of an upslope bank of upcast natural, spread by ploughing. The ditch was filled with mid-dark brown compact clay [50] containing a fragment of Iron Age pot (Finds, 27) over reddish-brown gritty silt [51] below which and along the centre of the feature lay a hard gritty deposit [58] probably iron pan. This suggested the underlying fill of the ditch [82 and 83] had settled, leaving a shallow gully on the surface in which water had ponded. The underlying fill [82] was a brown silty clay overlying a firm orangy-red gritty clay [83], which may have been formed by slippage/erosion of the ditch sides after it was first cut. (Fig.17). This feature seems to have continued west, reappearing as Ditch 183 in Trench 9 (2011).

Trench 3 (2010).

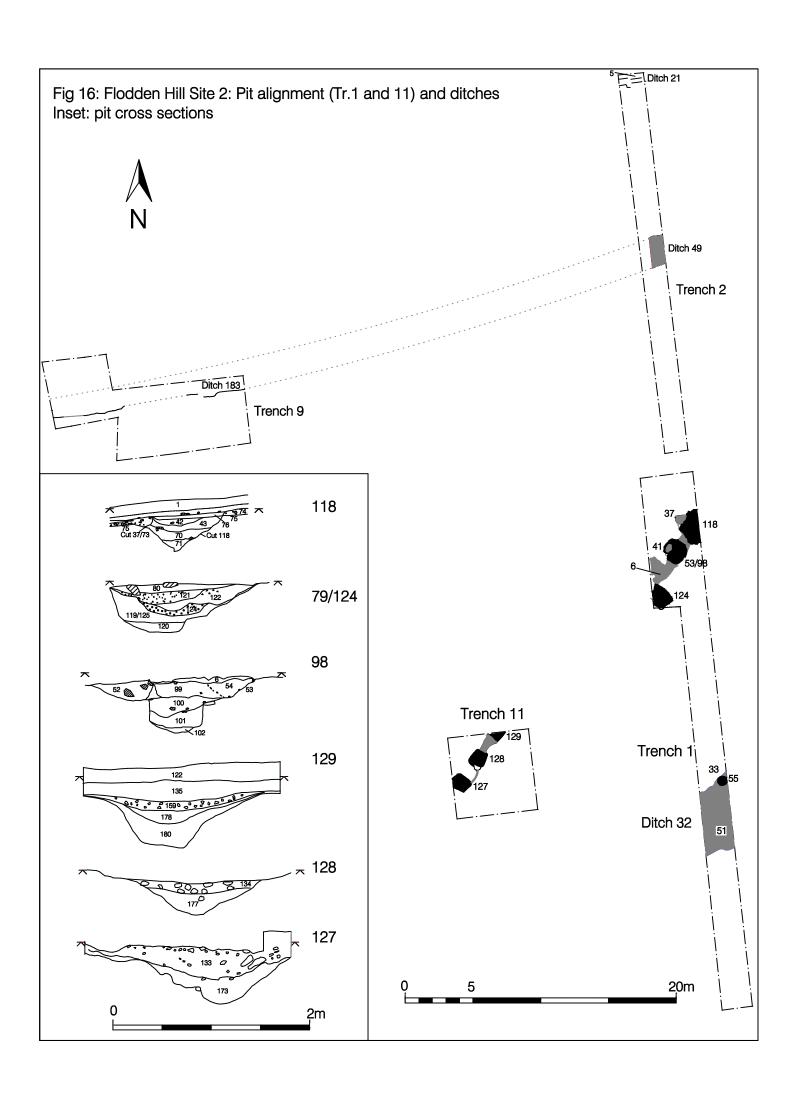
This was laid out to sample what the geophysics suggested was the western ditch of the enclosure, c.5m wide. After stripping the ploughsoil it was realised that the trench had been wrongly positioned, and as no other features could be identified it was abandoned. The only context recorded was ploughsoil [12] which contained fragments of slag or cinders.

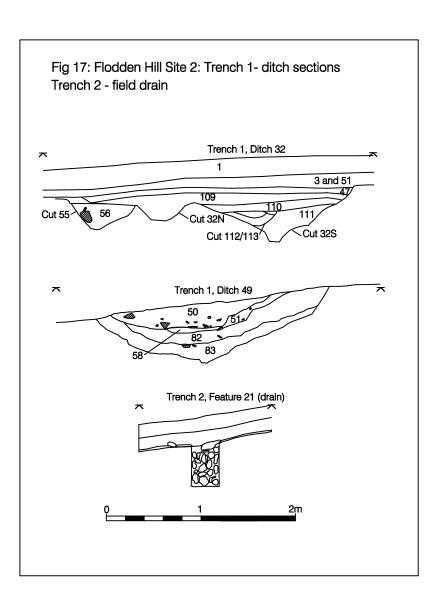
Trench 4 (2010)

The trench was 40m long and 2m wide, running over two geophysical features interpreted as platforms and visible on the surface as a shallow scooped area. Ploughsoil [13] was 0.2m - 0.3m deep, overlying a compact red-brown clay silt [30] containing fragments of Iron Age, medieval and post medieval pottery (Finds, 28; Sf.30,45-49), a possible fragment of polished stone tool and a struck agate flake (Finds, 124-125), lithics later identified as natural (Sf.20—23, 25-26, 43-44) and slag (Sf. 28, 52). This deposit was between 0.1m and 0.2m deep, and overlay compact gritty ginger clay [31] containing Iron Age pot (Finds, 30). At the southern end of the trench stones forming a 'wall' [86] seemed to overlie a spread of cobbles [85]. The south ditch of the enclosure was also identified [66] (fill 67), beyond which was a small stone-filled feature, perhaps a pit [68] (fill 69).

Trench 5 (2010)

Measuring 15m east-west by 5m north-south, the trench was designed to take in part of the eastern entrance to the enclosure as transcribed from rectified aerial photography, but as laid out it was slightly to far south. Some features were however located, described in the daily site update as small areas of irregular packed cobbles and a carbonised post or charcoal-filled post-pipe In the western side, the cobbled surface seen in Tr.4 ran extended east and appeared to underlie a north-south revetment wall [94] at the junction between Trenches 4 and 5, which appeared to define the eastern side of the southerly platform in Trench 4. In the centre of the trench a dark brown-black soil [97] was shown to be the fill of a ditch [97.1]. No finds were recorded from this trench.





Trench 6 (2010)

This was an eastward extension to Trench 5, 17m long and 2m wide, was opened to investigate low-resistance features shown by geophysics outside the enclosure entrance. Again the problem of correlating the geophysical survey with the aerial photographic rectification meant this trench was mis-positioned. Consequently it was not excavated, and generated no contextual information or finds. It was metal-detected, but without 'significant results' (site update 16th September).

Trench 7 (2010)

This was intended to locate the western ditch of the enclosure. Topsoil [48] containing a small piece of slag and flint flake (SF 32, 34) came down onto natural glacial clay [78] in which it was difficult to distinguish any cuts. One north-south linear [60] was defined, filled with compacted light grey-mottled orange sandy clay [59]. A second cut [63] to the west had an stony upper fill [62] containing pieces of cinder. This overlay, and may have been the same as, context [77], which overlay a firm, grey, clayey sand with some rounded pebbles [107] filling a cut [108], with a concave base. Together, the two features corresponded to the width of the 'western ditch' as shown by the geophysical survey.

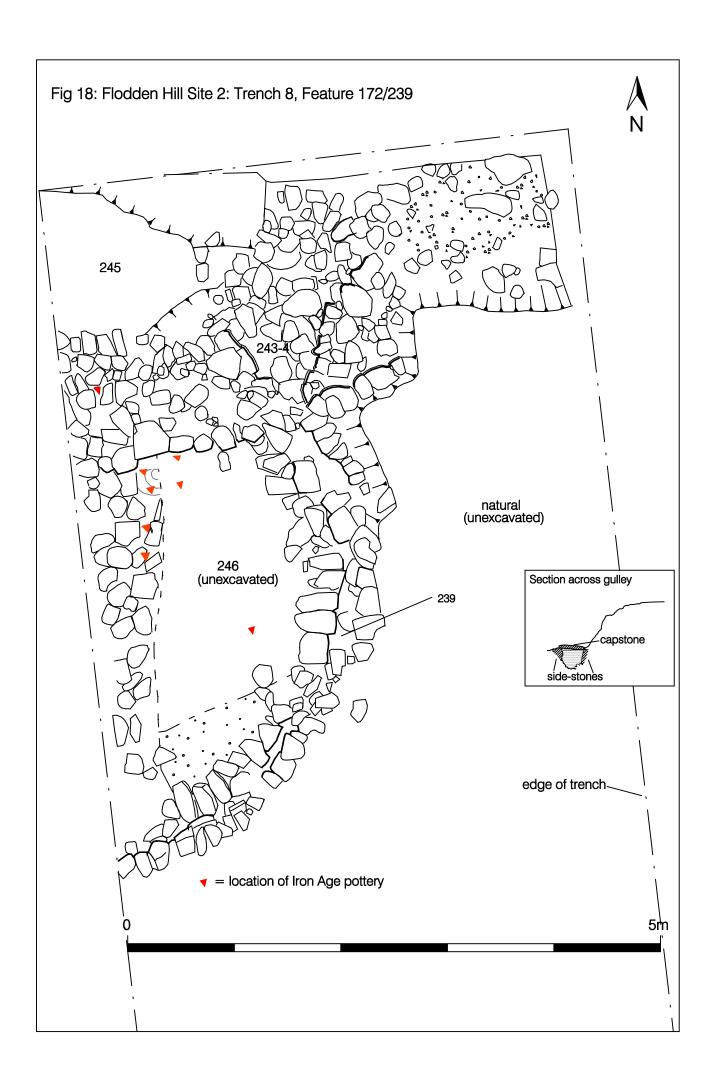
Trench 8 (2011) (Fig. 18)

Ploughsoil 121/137 was some 0.24m deep, and contained a flint flake and hammerstone (Finds, 126). The ploughsoil overlay several stone-hollows (depressions left by stones pulled out by the plough) and seven presumed cuts: [138] (fill139); [140] (fill 141); [144] (fill 145); [160] (fill 161); [164] (fill 165); [168] (fill 169); and [170] fill 171). Cutting the natural subsoil [242] were two possible stake-holes [198] (fill 199), and 200 (fill 201). Two 'lithics' on the subsoil surface (Sf.168 and 169) turned out to be natural.

Also below the ploughsoil was part of a curved stone-built feature [172] which lay in a cut [174] described as 'grey brown' (presumably meaning the colour of its fill). Associated with [172/174] were sherds of Iron Age pottery (Finds, 31-51). Deposits of charcoal [212 and 213] within the arc of this feature were sampled (No.17&18), as was a charcoal deposit [220] described as being below the stones of [172].

Feature [172] overlay what appeared to be a stone-lined drain following the same arc and covered with cap-stones [239], which sat in a cut [240] into the natural [197/242/243]. This feature was c.0.18m wide and 0.19m deep (Fig. 18). In the absence of site photographs the plan and context record is difficult to interpret. Deposits containing charcoal [232, 244] from what was perceived to be the 'entrance' at the north end were also sampled, as was the soil [241] filling the feature. This was not viable for C14 assay. The sample of fill material returned a calibrated date of 154-140BC (SUERC1), in the pre-Roman Iron Age. Large fragments of Iron Age pottery were found close to the 'drain' in association with more charcoal [237] which was sampled but not assessed as viable for C14 dating, and a brown sandy silt [246]. It is possible that these were the ten sherds listed in the site record but not assigned to any context. An un-contexted fragment of blue glass bangle (Sf. 151) may have been associated with these. Re-deposited natural [245], apparently cut by the features above, lay in the north-west corner of the trench.

In the east side, a patch of cobbles [230] butted a fragmentary, possibly robbed, revetment [229] in a cut [228]. Context [230] is probably what was described as a



'surface of stones' which included half a (broken) top-stone of a rotary quern of gritstone, of Iron Age type (Finds, 127). North of the cobbles was a tumbled mass of stones [231]; the relationship between the two was not established.

Ploughsoil [137] also overlay [153], a compact, stoney orange brown clay silt, which site plans indicate extended across much of the trench. It may have been the spread remains of an upcast bank. This overlay a cleaner orange [173], and natural subsoil [196/197/202] on the west side of the trench. Below [153] at the south end of the trench two sondages were excavated into a ditch. Three fills were recorded: a dark brown soft clay silt [150], a dark brown clayey silt with some stones [151] and a grey-brown stony clay [152]. This feature, which does not appear on a plan, is recorded as 'possible ditch' in the site record, but the on-line Site Report for 14th September identifies it as the enclosure's southern ditch.

Uncontexted finds from this trench were a stone disc (Sf.155) which may have been a pot-lid, and four 'polishing stones' (Sf. 99, 123, 144, 156), all of which were later identified as naturally worn pebbles.

Trench 9. (Fig. 19)

Opened as a rectangular trench 10m x 8m to investigate the northern ditch of the enclosure this was subsequently extended at the north-west corner. Below the ploughsoils [252/253] was a subsoil-cut 'rumbler' field drain [148] 0.7m deep filled with stones [147] and capped with clay [146], running across the contours of the slope from north-east to south-west, and cutting a number of earlier linear features. As the drain was still carrying water it was not possible to excavate immediately adjacent deposits lower than its active level.

On the north side of (and cut by) the field drain was a dark brown, stony, silty clay [254]. This was also cut by an east-west ditch [183], the southern edge of which lay c.0.9m inside the north edge of the trench, and which appears to have been a continuation of Ditch 49 in Trench 2 (2010). This feature was filled with dark brown, stony, clayey soil [186] over dark grey-brown silty soil [182] which was sampled, but not assessed as producing any viable material for C14 dating. Below was a yellow-brown silty clay soil [184] which in turn overlay orange sandy gritty silt [185]. At the base of the feature was a moist yellow-orange sandy silt [187] possibly eroded from the sides when the ditch was open.

A shallow linear feature [155], orientated south-west to north-east was identified, filled with dark brown-black silty soil containing occasional stones and flecks of charcoal [154]. The relationship between this and another shallow linear, running north-south [157] and filled with similar material [156] was unclear. The latter appeared to cut ditch [183], though the relationship between the two features was not proven.

The eastern edge of another north-south ditch [208] containing loose, gritty, silty soil [207] appeared close to the west section of the main trench, and may have been the east ditch of the Iron Age enclosure. At the time of excavation this appeared to have been cut by an east-west ditch [248] to the north, which appeared to have a rounded terminal also cutting into the fill of ditch [183]. Ditch [248] was suggested to be a recutting of the northern ditch of the Iron Age settlement. An alternative interpretation, which finds support in the aerial photographs, is that the southern edge of [248],

which was recorded only in the extension, was actually a continuation of [183] and the latter cut the north-east angle of the Iron Age enclosure ditch formed by [208] and [248N]. Unfortunately the critical relationship came at the junction between the main trench and the extension, and was confused by the post-medieval field drain [148].

A mass of small, medium and large rubble [218] on the south side of the suggested re-cut, which spilled down into the ditch, may represent a rubble-cored rampart disturbed by either the suggested 'recut' or by 183. Rubble [218] may have been the 'stones' which contained a retouched flint (Finds, 128). North of drain [148] the upper fill of the 're-cut' was a dark grey, gritty, silt [190/191] apparently overlying pale yellow-brown clayey silts [188/189] possibly the same as a soft greenish brown silty clay [192]. These overlay dark stoney soil [195], below which was a dark organic looking silt [209], which in turn overlay a line of stones [247]. Below [209] was firm, grey, clayey soil [219] which may have been the natural glacial till stained by standing water.

Four contexts had no record sheet, relationships or location: aspread of charcoal [181], a group of stones and possible slag (or iron pan) [193], a group of small to medium stones [194], and hard orange-yellow subsoil [255].

Trench 10. (Fig.20)

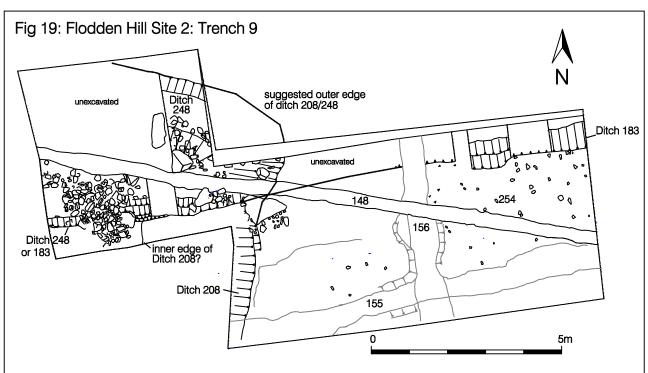
A 10m square trench was laid out over two geophysical features near the north-east corner of the enclosure, *c*.14m west of Trench 4 (2010). The trench was subsequently divided into quadrants, not all of which were excavated to equal depths due to insufficient manpower.

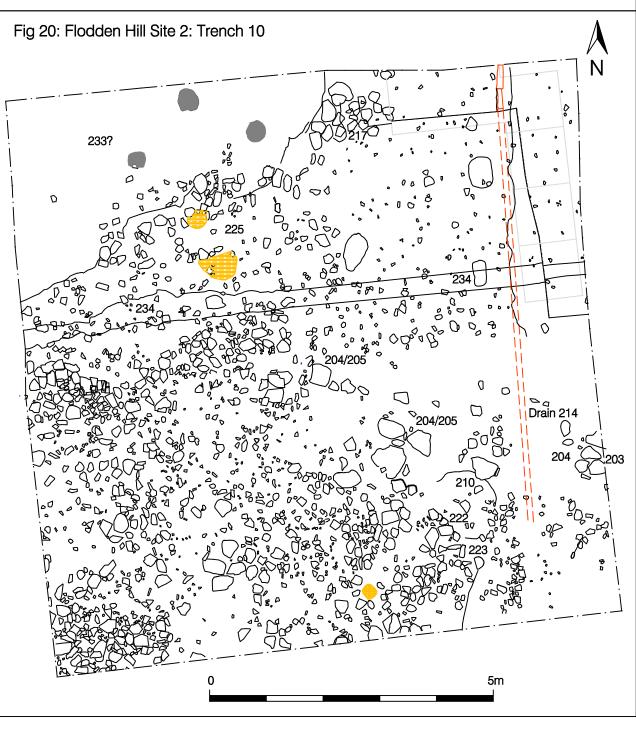
Ploughsoil [124] varied in depth from 0.17m to 0.46m, being deepest on the east side, and particularly the north-east corner. This contained a burned flint and a possible hammer stone (Finds, 129-130). Below this were two post-medieval field-drains, one a 'rumbler' running west-east [234] filled by [235], which was cut by another ceramic pipe running south-north [214] fill [215/249]

Below ploughsoil in the south-east quadrant, was a small area of stone slabs [203], laid flat and overlying a sandy deposit [251]. Nearly 2m to the north was what appeared to be a stone revetment [204/205], running east-west and retaining a brownish-black silty clay [216] (sampled). Associated with these was a chip of utilised quartz (Finds, 131). The revetment and other deposits and features, were cut by a post-medieval field drain [214/215]. An unstratified sherd of Iron Age pottery came from this area (Young b. Cat 52).

West of [204] was a patch of charcoal and small stones [210], some of which were blackened, but there was no obvious indication that these had been burned *in situ*. This may have been redeposited fire-waste. The full extent of the charcoal was not established, but certainly continued further north. A sample was taken, but was not assessed as viable for C14 assay.

In the north-western quadrant was a 'platform' of natural glacial till [233] with a shallow curving edge dipping toward the south-east. Apparently set against the edge of the clay were large stones [217] possibly forming another revetment. To the south and west was a formless spread of stones [225/236] then an area of stone paving [226] which produced a possible sharpening stone or whetstone (Finds, 136). Below





these stones was soft brown-black silty clay [221] and [250]. A sherd of IA pot (Young b. Cat 73, SF 161) from this quadrant came from same vessel as SF 104.

The sandy deposit [251], revetments [215] and [217], and the charcoal [210], overlay a spread of small cobbles [204/206/211]. These were shown, in an 0.8m wide sondage along the north-east angle of the trench, to continue beyond the trench edge. Because of constraints on time and manpower these cobbles were recorded by overlapping 'vertical' photographs taken through a 1m-square planning frame, with the intention that they could be drawn up subsequently, but unfortunately no site photographs were available at the time of writing this report.

Another possible revetment wall [222] ran south-east to north-west and retained a deposit of burned stones. The relationship between the wall and cobbles [206] and charcoal [210] was not resolved. The wall and charcoal [210] also overlay a roughly circular patch of soft grey pebbly clay [223] apparently filling a pit [227] cut into the natural [233].

Finds not firmly assigned to a context from this trench were 24 sherds of Iron Age pot (Finds, 52-76), three pieces of utilised flint/chert (Finds, 132-135) and four fragments of Romano-British glass bangle (Finds, 180-184).

Trench 11. (2011) (Fig. 16)

Ploughsoil [122/123/135], which contained a possible broken whetstone (Finds, 136), overlay gritty, orange-red natural glacial till [131]. This was scored by a post-medieval plough furrow [125] and cut by two features [126] filled with [132] and [130] filled with ploughsoil [136]. These may have been hollows left by stones caught by the plough.

Also visible as cuts in the subsoil was an alignment of three pits running south-west to north-east. These appeared to be 'linked' by a shallow linear gulley. The southernmost pit [127] was only partly visible, emerging from the south section. It was some 2m across, filled with dark brown silty clay [133] over a dark grey gritty material [173] containing a piece of red ochre (Finds, 138), and with stones [179] in the base. A deposit of dark brown stony soil with fragments of burnt stone [149] may have been part of the upper fill [133]. This overlay [158] which was a moist dark grey, gritty soil with angular fragments of andesite, and yielded a sherd of Iron Age pottery (Finds, 80).

Pit [128] was sub-square and c. 0.3m deep. The upper fill was stones [134] overlying a gritty grey silt [177], below which were more stones [178]). This feature contained a flint flake (Finds, 137) and a piece of Iron Age pottery (Finds, 79). Partly below the north section of the trench was a similar-shaped pit [129], c.0.25m deep and 1.5m across, with fills of dark grey gritty silty soil [159] over a yellow-grey clayey silt [176], with stones [180] at the base. Context [159] which contained an Iron Age pot fragment (Finds, 81) was sampled for C14 assay, and yielded a calibrated date 515-380BC placing it in the early Iron Age. Two uncontexted sherds of Iron Age pottery also came from this trench (Finds, 77-78)

Discussion of Site 2.

The two seasons of investigation demonstrated that this is a well-preserved and complex site. The rectilinear form, dimensions (c.80m east-west by c.60m north-south), and possible eastern entrance, are suggestive of an Iron Age/Romano-British

farmstead/settlement, and this appears to be confirmed by pottery and the two C14 samples which returned calibrated dates in the second half of the 1st millenium BC. The curving 'drain' in Trench 8, speculatively suggested at the time of excavation to be a flue in a corn-drying kiln, is reminiscent of the 'small, intermittent channels' which Jobey noted immediately within the inner face of walls of round-houses at West Longlee and Bridge House (AA 4, 38 (1960), 10-11).

There were indications of re-use in the medieval and possibly later periods. However no evidence was found to support MacLauchlan's view that this site was an early 16th century 'redoubt', constructed by the Scots prior to the battle of the 9th September 1513, and forming the western end of a line of entrenchment running from Site 1.

The pit alignment sampled in Trenches 1 and 11 showed some intriguing differences. The three pits investigated in Trench 1 had traces of burning within or close by – this was not noted in Trench 11. Possibly the 'hearths' were the remains of a more extensive burned area which had been later removed by ploughing, leaving 'pockets' in the hollows of partly-infilled features. The only viable C14 sample suggests the this burning episode took place in the early Iron Age. The stones found in the bases of all the pits may represent the remains of packing for timber uprights, and the shallow 'gulley' linking them perhaps vestigial evidence for whatever linear barrier/feature ran between the (presumed) uprights.

In the light of the 2010-11 investigations, it might be suggested that the 'arcs of small stones' found by Pollard and Oliver in 2001 to the east, are more likely to be prehistoric or Romano-British than anything associated with 1513.

Flodden Hill 2014. Site 3.

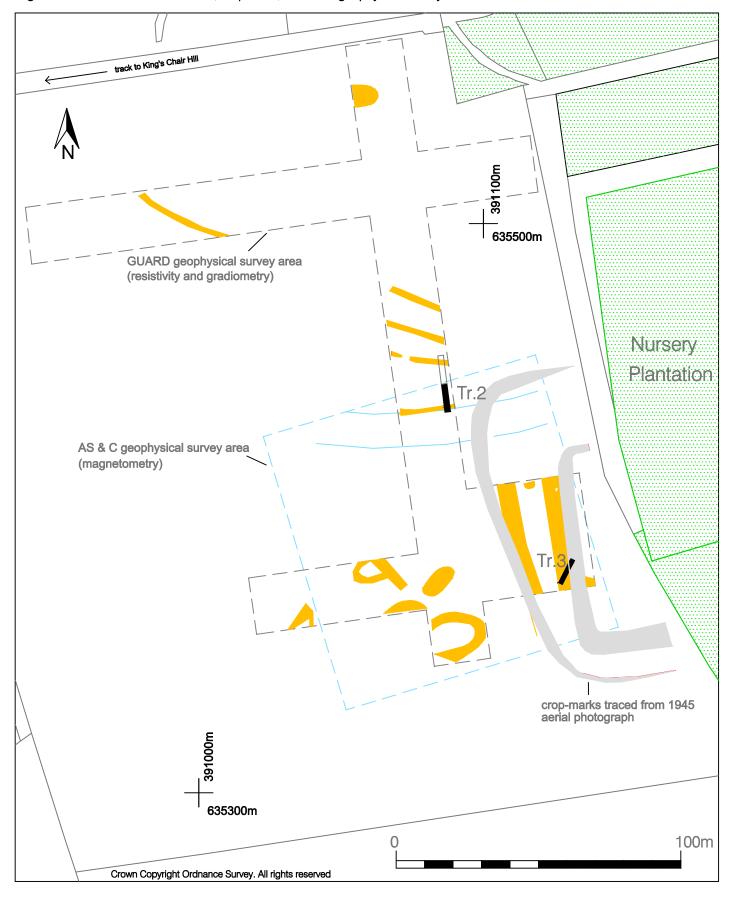
Location.

The area initially designated Site 3 was principally a pasture field – not given a Project field number - on the south side of a 'saddle' on the Flodden Edge ridge, between Flodden Hill and King's Chair hill, belonging to Kypie farm. Permission to excavate was kindly given by the farmer, Mr. Mair. An adjunct to Site 3 was a single trench (Trench 1) on the north side of the 'saddle' in Field 28, belonging to Blinkbonny Farm, and Trench 8 within the plantation.

Reason for investigation

A crop-mark of an apparently double ditched angular enclosure emerging from woodland called 'Nursery Plantation' appears on a 1945 vertical aerial photograph previously referred to (RAF). In size and form this is similar to Site 2 and it was considered that there was potential for this feature to have formed the south-west 'bastion' of the the Scottish 'Camp' shown on the 1780 Branxton Common enclosure plan [Richardson 1780]. Several areas within the field, including the crop-mark site, were geophysically surveyed (Guard 2014) and a number of potentially man-made features were identified for sample excavation. MacLauchlan does not mention this enclosure, but identified what he called the traces of 'a circular camp' to the east in what is now Nursery Plantation, commenting that "a person who drained the field found in the soil evidence of its existence".

Fig 21: Flodden Hill Site 3.:Trenches, crop-mark, and main geophysical survey results



Methodology

Six trial trenches were originally proposed, five (Site 3 Tr. 2-5) within the field on Kypie farm, and one (Site 3 Tr.1) in Field 28 on the north side of the ridge on Blinkbonny farm. The trenches were set out using a Leica total station. The number of trenches proved too ambitious for the human resources available and only three were opened, all by hand and all with reduced areas.

Toward the end of the season a small additional hand-dug trench (Tr.8),1.4m wide, was cut across a degraded linear bank running through the plantation to the east, considered by Sir David Smith *c*.1820 and by Henry MacLauchlan *c*.1858 to be a 'line of entrenchment' linking the east redoubt of the Scots' camp (Site 1) with the western 'redoubt' (Site 2).

Site 3 had a discrete context sequence (FH14 1-45) and small finds sequence (Sf.1-9). A digital photographic record of the excavations was maintained but unfortunately this was not available when this report was written.

Trench 1.

Sited in Field 28, some 84m east of Site 2, this was proposed to be 10m long north-south by 2m wide east-west and was intended to establish if Smith and MacLauchlan's 'line of entrenchment' in the plantation to the east had continued towards Site 2. The trench was not initially opened as volunteer numbers were insufficient but when these unexpectedly increased in the last two days of the season, an area 2m square was opened manually at the north end of the originally proposed trench to sample ploughsoil depth and the potential for survival of archaeological features.

After removing the turf [32] and the plough/topsoil [33/34] which was c. 0.1m deep, there was only time to clean and record the exposed subsoil surface. The base of the agricultural soil appeared to be very compact gritty yellow clay silt [35]. Cutting this was a band of dark soil and stones with lumps of orange subsoil clay [37], c.0.5m wide and possibly the fill of a ditch or gulley, which emerged from the north-east corner of the trench. This deposit appeared to end in a rounded terminal in the centre of the test pit, though there was some suggestion that it continued south west beyond the test pit and might have been the fill of a linear feature

Trench 2.

Envisaged as being 20m by 4m, to investigate two linear anomalies on the geophysical survey (Fig. X), low volunteer numbers meant that only the southern 10m, and only half the intended width, was de-turfed. Upper level of ploughsoil [2] was compact and very stony. Below was a grey-brown soil with pieces of fractured andesite [9] in which patches and possible alignments of small to medium stones were visible.

Because of fluctuations in the capacity of the workforce it was decided to continue investigation of these possible features in a central 1m wide strip. Context [9], which was sampled and returned a calibrated C14 date of 358-280BC, came down onto a pinkish-orange gritty clay silt, probably natural, with areas of iron pan and occasional darker patches, which were probably silt-filled stone-hollows. This was cut by two archaeological features. Both were narrow east-west orientated linear cuts, one packed with small stones [11], roughly corresponding to geophysical anomaly 'D',

and one with a capping of pinkish-orange redeposited natural clay [18]. The latter was not clearly defined in the geophysics. Both were sectioned and found to be field drains: [11] was a stone-filled 'rumbler', and [18], presumably later, contained a ceramic pipe below a fill of fractured andesite [19]. The pipe was probably of 'horse-shoe' section (broken pipes of this form lay on the field edge). Other apparent alignments of small stones were ephemeral, and probably caused by ploughing. Between drain [11] and drain [18] was a very stony area [21] and at the extreme northern end of the trench deposits of firm orange-pink clay [16] overlay similar material mixed with grey-brown soil [17], possibly filling a cut feature. The latter was sampled and produced a calibrated C14 date of 164-128BC.

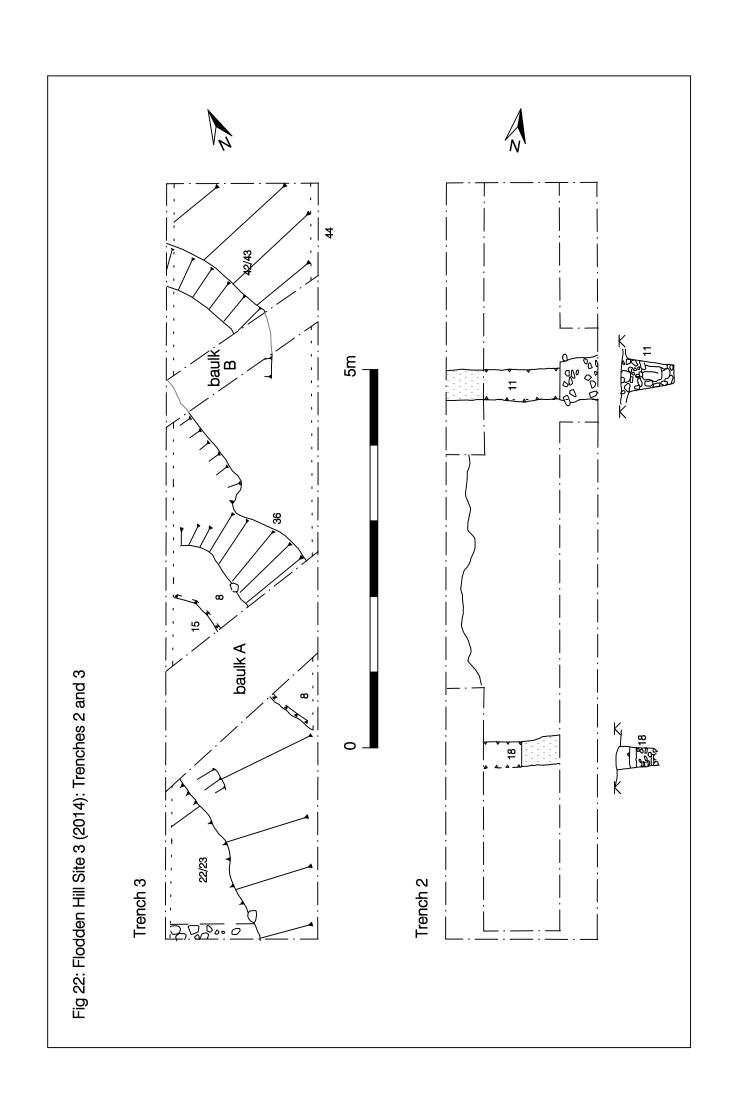
Trench 3.

Proposed as 12m by 2m, shortage of workforce reduced the length by 2m at the west end. The trench was sited to investigate a substantial linear geophysical anomaly which appeared to coincide with the inner ditch of the rectilinear enclosure visible on aerial photographs.

Below the turf [1] the upper ploughsoil [3] was as stony as Tr.2 but became softer and more loamy with depth. It contained a distal end of a flint flake (Finds, 139) but also fragments of ceramic field drain, roof slate, and late glazed white earthenwares. At a depth of 0.31m bgl a compact yellow-brown gritty surface flecked with charcoal and clay [4] appeared. Further cleaning in the central area exposed a firm iron pan surface [5/14] in which was a sherd of Iron Age pottery (Finds, 82-84) and a burned stone. Visible on this surface was a line of stones [13] and hard orange-red clay which appeared to define the south-east edge of a ditch-like feature [8] running northeast by south-west. This appeared to be filled with a soft stony grey-brown silt [12]. Subsequently the south-east edge appeared to be part of a larger cut feature which returned at an angle towards the south. Possibly [8] was a shallow re-cut of part of one side of a larger ditched feature, though it could also have been created by settlement of fills with the larger feature. The edge of this, still called [8], became defined by hard red clay and medium-sized stones [36].

The north-westerly area of the ironpan surface petered out towards the west end of the trench where moist, grey-brown stony clay soils [6] and [7] appeared to be the basal ploughsoil or the upper fills of ditch feature [8] disturbed by ploughing. Both contexts [6] and [7] contained small sherds of slipped red earthenware and glazed white earthenware suggesting use of 19th century domestic waste as fertiliser, as well as a sherd of Iron Age pot from same vessel as in [5] (Finds, 85) and a possible cupmarked stone (Finds, 140). A sample from context [7] returned a calibrated C14 date of 47BC - AD70 (SUERC1). Below [6] was dark brown moist stoney silty clay [15] containing a flint flake (Finds, 141) This overlay a soft moist grey-black-brown stoney silt [22]. This was equivalent to [23] which lay below [7], and contained two eggshaped pebbles (65mmx 55mm) and small pieces of burned clay or degraded pottery. This in turn overlay a firmer yellow-brown soil [24] at the west end. Context [15] also overlay a ledge of firm yellow-brown clay silt [20] which may represent a recut edge to the ditch. A carbon sample form this deposit returned a calibrated C14 date of 360-271BC (SUERC1). Below was a moist, worm-burrowed, dark grey-brown stony soil [22], its character suggesting it was a deeper ditch infill deposit...

Two baulks were left to provide reference sections, and excavation continued at differing speeds and to different depths (dependent on the capability of the volunteer



excavators) between these. East of baulk stoney brown clay silt [42] and soft moist brown silty clay [43]. Close to the southern edge of the trench, an edge to another cut feature [44] appeared, filled with very wet stoney brown clayey soil [45] and extending south of the opened area. As this lay so close tro the south edge of the trench and there was continuous water seepage, it was not possible to investigate further. This feature does not appear on the geophysics or aerial photographs - is it another ditch, or a pit within the enclosure?

After a day of torrential rain on the final wednesday the deep, western, end of the trench was too waterlogged for meaningful excavation to continue within such a narrow trench, and so was abandoned without any outer edge to the presumbed ditch or a natural base being encountered. The depth and character of the deposits here suggests the fill of a substantial feature, and the south-east edge coincides well with the inner edge of the inner ditch of the enclosure picked up by geophysics, the north-west edge may have been missed in reducing the length of the trench by 2m.

Trench 8.

This was sited across the line of a low bank running through the plantation from Site 1. Although previously identified as being of potential archaeological interest, this was not part of the proposed 2014 investigations. It was opened as an overspill area, dry enough and shallow enough to accommodate volunteers after Trench 2 was completed and parts of Trench 3 became unworkable.

Turf and topsoil [25, 26. 27] was removed by hand. This exposed a degraded sod-cast dyke [28], with ditches on both the north [29] and the south [31] sides. The core of the bank contained small-medium stones, some of which appeared to form a circle and may have been packing for a post [41].

Along the bottom of the ditches were a few similarly-sized stones [30] (north) and [38] (south), possibly eroded from the bank. On the south side the ground surface into which the ditch was dug and on which the turf bank lay, was a firm yellow-brown clayey soil, heavily flecked with charcoal [39]. On the north side the original ground surface was a more stony yellow clay [40] in which no charcoal was visible.

There were no finds. Samples of the northern ditch fill [29] and of the original southern ground surface [39] were taken for C14 dating and returned calibrated dates of 1437-1296BC and 3794 –3693BC respectively (SUERC1).

Discussion - Site 3

No features or deposits of sixteenth century date were encountered and once again the C14 dates ranged from prehistoric to early Romano-British. No evidence for the lines of intrenchment or semi-circualr 'bastion' which Richardson's 1780 plan suggested might lie within the field was found. One of the geophysical anomalies apparently coinciding with Richardson's southern 'intrenchment' line was investigated and turned out t be a field drain, as it may be suspected are the other linear anomalies in this area. It is possible that Richardson's 'bastions' were actually the Iron Age earthworks of Sites 2 and 3, still upstanding in the unenclosed and unimproved landscape of the 1780s and the lines of intrenchment apparently joining them later ephemeral sod-cast field boundaries. Richardson's northern 'line of intrenchment' may well be the same as that later seen by Smith and MacLauchlan,

which is the low bank sampled in Trench 8 – the ditches found on both sides of this bank echo the hachuring on the 1780 plan.

The crop-mark Site 3 was not adequaetly investigated due to the depth of topsoil which had to be removed by hand and very limited volunteer numbers. The evidence points to this being another Iron Age rectilinear farmstead, but the modest extent of the excavation here cannot be considered as proving there was no re-use in 1513. A question also remains as to why the ground level east of the field, within Nursery Plantation, is significantly lower, and if there are any identifiable remains of MacLauchlan's 'circular' camp. Consequently there is potential for more thorough excavation and investigation at this site.

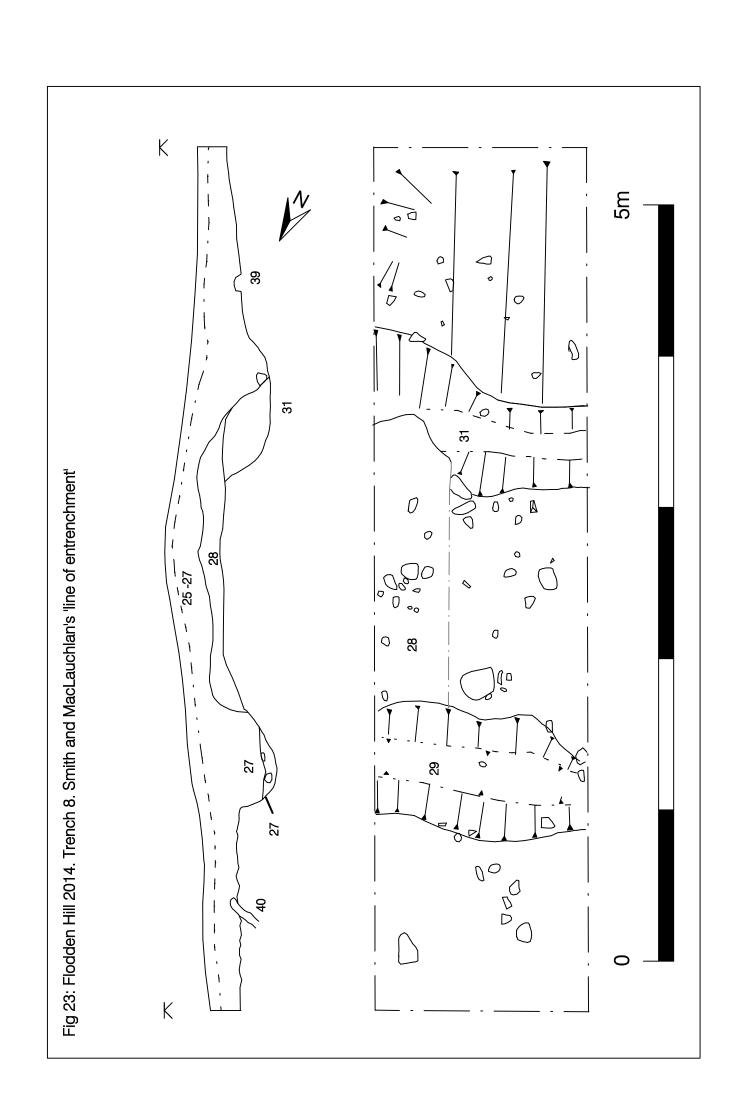
Sites 1 - 3: Conclusions

The reults of fieldwork on the hill above can be summarised in three points

- all carbon 14 samples from all three sites have returned dates no later than the pre-Roman Iron Age to early Romano-British period.
- all datable finds are either prehistoric principally Iron Age and otherwise apart from a few medieval (broadly 13/14C) sherds at Site 2, or post-medieval. Nothing is sixteenth-century.
- there is no trace Italienne bastion at Site 1, and no structures indicative of artillery positions.

Apart from a few sherds of medieval (broadly 13/14C) pottery from Site 2, the artefactual assemblages from Sites 1-3 comprise Iron Age pottery, lithics and utilised stones which range from Mesolithic to Neolithic-Early Bronze Age (or are intrinsically undatable), and material from the 18th century onwards. Regrettably though some finds from Site 1, mis-identified at an early stage of the Project, have already entered the canon of Flodden lore in print: Sadler and Serdiville (2013, 223-4) refer to finds of 'an abundance of discarded sharpening stones' as evidence for the presence of a large force with edged weapons, and 'cementstone fragments, almost certainly gunners' or engineers chalks'. Most of the 'sharpening stones' when washed and examined closely showed no evidence for use and derive from glacial/post-glacial water action, their initial identification being based purely on overall appearance. Even those that exhibit some signs of use appear to have been principally hammerstones, and are likely to be prehistoric. As the 2009 Excavation Summary makes clear, such artefacts are also intrinsically undateable and can only be interpreted in the light of associated datable finds, which for Site 1 are Iron Age or 19th-20th century, or from the scientific dating of associated deposits – which are exclusively Iron Age. Numbers of similarly-shaped stones were collected during fieldwalking on the 'battlefield'. It is also suggested that as cementstones outcrop on the Branxton Hill ridge, attributing the presence of one or two small irregular fragments on the site as 'gunners chalks' from 1513 (the term itself appears to be of later usage) is highly speculative.

On present evidence it is suggested that the Inner Enclosure is, essentially, a late Iron Age-early Romano British site. It sits almost centrally between two demonstrably Iron Age settlements (Site 2 and HER 1830), and is comparable in size and overall



form with those, and other rectilinear sites in the area. Waddington postulates HER1830 to have been part of a short-lived settlement pattern of defensible farmsteads, suggested to potentially link with early Flavian incursions to the north in c.60-70AD, which clustered along and overlooked a Roman supply route suggested by Mike Bishop to broadly follow the A697. The presumed 'slighting' is suggested as being either by Imperial decree or by the Votadini, after the Roman withdrawal from the Forth-Tyne region (ibid. 237-242). Similar evidence for 'slighting' has been found at Site1.

The long-held view that Site 1 and Site 2 were redoubts at either end of a long line of Intrenchment cannot be supported. There is no indication in contemporary sources of when the Scotish army first occupied this high ground. It has been suggested that the army based itself there from the outset of the campaign, but there is no hard evidence. Their occupation before the 9th September could have been as long as 17 days, or as little as 3 days.

It seems reasonable to suggest that in September 1513 there was activity along the whole ridge, extending from Flodden Hill on the east to East and West Flodden Hills (or even beyond) on the west, and on the southern flank of the ridge facing onto Milfield plain. It is not improbable that upstanding earthworks would have been visible at all three sites. Any or all of these might have been utilized by the Scots army, to provide some degree of shelter or as defined enclosures which could have been used or adapted to house horse lines, baggage train, troops etc.

Finally, when weighing the archaeological evidence form Sites 1-3 it is should be remembered that in no 16th century account is it stated that fortifications were constructed *on* the hill of Flodden. When the defensive capabilities of James' position are described, it is *likened* to a fortress, and the guns are invariably stated to have been placed 'at the foot of the hill'. Ridpath (1771) is the first writer to specifically mention an earthwork or 'battery' on the east slope of the hill, which as this report has suggested was probably Iron Age/Romano-British site excavated by Waddington in 2000, but his statement may have influenced later writers.

On present evidence it is suggested that the Inner Enclosure is, essentially, late Iron Age-early Romano British. It sits almost centrally between two demonstrably Iron Age sites - Site 2 and the enclosure excavated by Clive Waddington (HER 1830), and is of similar form and size to both and to other rectilinear sites in the area. Waddington postulates HER1830 to have been part of a short-lived settlement pattern of defensible farmsteads, suggested to potentially link with early Flavian incursions to the north in c.60-70AD, which clustered along and overlooked a Roman supply route suggested by Bishop to broadly follow the A697. The presumed 'slighting' is suggested as being either by Imperial decree or by the Votadini, after the Roman withdrawal from the Forth-Tyne region(ibid. 237-242). There are suggestions of similar 'slighting' at Site1.

Given the clear dating evidence from Site 2, Smith and MacLauchlan's interpretation that this was one of two redoubts, matched by site 1, at either end of an intrenchement line constructed in 1513, is clearly no longer sustainable. Nor is there any reliable archaeological (or documentary) evidence for the construction of any form of defensive earthworks on Flodden Hill at this date. It does however seem reasonable to speculate that in September 1513 there was 'military' activity along the

whole ridge, extending from Flodden Hill on the east to East and West Flodden Hills (perhaps even beyond) on the west.

It is not improbable that in 1513 existing upstanding earthworks which would then have still been clearly visible would have been utilized by James' army, to provide some degree of shelter, or as defined enclosures which could have been used or adapted to corral horses and oxen, elements of the baggage train, or even as refuges for troops. It has been speculatively suggested that remodelling of Iron Age ramparts at Humbleton was related to the Battle of Homildon 1402, though this suggestion has not been seriously entertained (Oswald et al, AA 2008,32). Re-use of a prehistoric earthwork enclosure might also have given rise to the supposition that the English army's camp in Barmoor Wood was in the East Field – where a ploughed-out rectilinear site is visible on aerlai photographs.

But at present there seems no reason to doubt the statements in sixteenth century accounts that the Scots lay principally upon the *side* of the 'high mountain' later identified as Flodden Hill – the southern flanks of the ridge facing onto Milfield plain. Even if extant earthworks such as Site 1 were temporarily appropriated, they would have been too small to accommodate the entire army, and the exposed crest of the ridge, pre-plantations, would have been offered scant shelter.

Suggestions for further fieldwork.

At Site 1, the northern, western, and south-western corner of the ramparts would repay investigation to establish if the constructional sequence seen previously are repeated. The western 'entrance' has not been investigated – it would repay examination. It is placed slightly further north in the western bank, not diametrically opposite to the proven eastern entrance. There is no visible evidence for an opeing in the south bank. The northern bank has been too greatly disturbed by cutting a track across it to be sure. There is no evidence for opposed entrances on all sides: again the representation on Armstong's map is conventional for a 'Roman' site – attribution presumably based on its rectiliniarity.

Section 3. The 'Battlefield': test pitting and trial trenching for mass graves.

Investigations on the designated battlefield were identified by the site code prefix FF (Flodden Field):-

2012 - FF12: Fields 19 and 15.

2013 - FF13: Field 15

1. Flodden Field 2012: Test Pits and trial trench.

Location.

The investigation centred on Field 19, called the 'Horse Field' in 1823 [Bell 1823], but the test-pitting also extended north into Field 12, and east into Field 15, which was called 'Gravel Hill' in 1823. Both these fields lie within the Registered Battlefield. The fieldwork took place from the $9^{th} - 17^{th}$ September 2012.

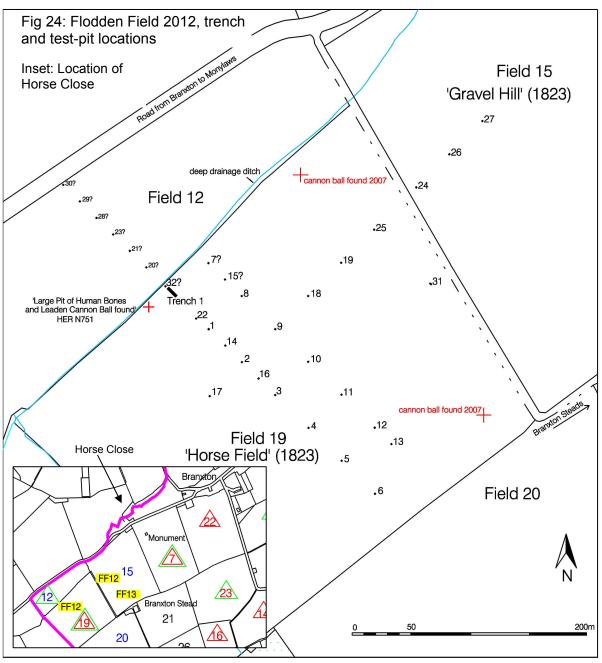
Reason for investigation.

Investigation of Field 19 was prompted by the report in 1810 of the accidental discovery of what was identified as a mass grave. The apparent location of this appears on the 1st and subsequent editions of the Ordnance Survey 6" map (sheet?) with the caption *'Large Pit of Human Bones & Leaden Cannon Ball found'*, close to the northern boundary of the field which is formed by a wide and deep drainage ditch. The site is described in the Northumberland HER (site 751) as *'Possible mass grave site, Battle of Flodden'*. Further reason for investigation was provided by the discovery of two lead composite cannonballs toward the eastern edge of the field during metal-detecting by Dr. Glenn Foard and a team from the Battlefields Trust in 2007, and an object initially thought to be a royal livery badge but subsequently identified as part of a later 17th-early 18th century bridle-boss, which was was found during fieldwalking in 2011 (see Metal Detecting and Fieldwalking Summaries; Field 19, *supra*).

Areas of investigation and methodology.

Thirty-one 1m-square test pits were excavated. Pits 1-19 were in Field 19, Pits 20, 21, 23, and 28-30 were in Field 12, and Pits 24, 26 and 27 were in Field 15. A trial trench (Tr.1) was also excavated in Field 19, intended to be on the on the presumed, as close to the site of the Ordnance Survey 'bone pit'. It was not possible to carry the trench north to the drainage ditch as the field edge here was set-aside.

All pits were hand dug, using spades, shovels, mattocks and trowels. Deposit sequences were numbered with [1] being intended as a universal context number for the active plough soil (though excavators of some pits gave different numbers to this). There was some terminological confusion in which context [3] 'subsoil' was sometimes applied to a basal ploughsoil overlying natural (glacial till), and sometimes to the till itself. Other deposits and features were generally allocated context numbers in a running sequence, though some pits seem to have 'discrete' context number which were never integrated into the full contexxt record. On completion of each excavation the pits were photographed, and the most informative section(s) were drawn at a scale of 1:10 on A4 gridded paper. Trench 1 was however recorded on permatrace. In this report a selection of pit plans and sections which showed features or complex stratigraphy, are illustrated.





P 16: Trench 1 showing one of the field drains, looking north



P 17: TP 8, cobbled surface with signs of occupation dated to late Neolithic/early Bronze Age

Photographs: Maureen Charlton

At the time of the archaeological investigations farm drainage works were also carried out in an area adjacent to the track leading to Branxton Steads and Branxton Hill Farm from the Branxton-Monylaws road. These were deep mechanical excavations monitored by some of the volunteers who noted a significant depth of 'topsoil' above the natural glacial till. The site record contains a suggestion - or rumour - that a quantity of topsoil had been imported and spread on the field in the 19th century, accounting for the lack of battle-related finds, however the farmer (Mr. R Neill) has no knowledge of this.

Limitations on the data.

Test Pits 7, 14, and 32 in Field 19, and none of the test pits in Field 12 (TP20, 21, 23, 28, 29 and 30), can be accurately located as no over-arching digital survey data could be found when writing this report. A not-to-scale sketch of the test pit layout in the site record suggests those in Field 12 were laid out on a continuation of the principal north-south line in Field 19 (from Tr.1 to TP6), but no indication is given for their interval distances.

The site photographic record, which was digital, was not available for writing this report. The images shown in P. 16 and 17 were supplied by one of the volunteer excavators, Maureen Charlton.

Levels were taken for all excavations using the tops of nearby fence-posts as temporary bench marks. Unforunately it does not appear that these were ever tied to Ordnance Datum, or that there any record of which posts were used was made, and consequently none of the levels taken can now be related to Ordnance Datum. Depths can thus only be given as 'below ground level' (bgl).

Test Pit results. (Fig. 26)

- **TP 1.** The ploughsoil [1], 0.3m 0.4m deep, contained a bent nail-shank, a sherd of medieval whiteware, a lump of slag and three pieces of burned coal. This overlay mixed deposit representing the interface between the ploughsoil and subsoil [4]. A peice of possibly burnt flint (SF11) was found on the surface of this deposit. This was taken down to a maximum of 0.58m bgl in sondage in north-west corner, where natural glacial till [3] was encountered.
- **TP 2.** Plough soil [1] was some 0.2m deep, overlying the natural glacial till subsoil [3] at c.0.3m bgl. This was cut by two roughly north-south orientated linear features [7] and [8], possibly field drains, both filled with dark soil assumed to be equivalent to [1]. Two other slighter grooves [10] and [12] appeared to be plough-share furrows.
- **TP 3.** Ploughsoil [1], 0.3m deep, yielded a small round ferrous object, either a hollow-form button or more likely a washer, and a fragment of Cistercian-type ware which could be early 16th century. Below this was an 'interface' deposit of mixed plough soil and natural clay subsoil [4]. At a depth of 0.52m bgl, cutting the subsoil, was a stone-filled 'rumbler' field drain [5] 0.3m wide and 1m deep, orientated east-west, and filled with large water-worn pebbles [6].
- **TP 4.** Ploughsoil [1] was 0.65m deep, overlying the top of the plough/subsoil 'interface' [4]. At this point excavation ceased. There were no finds.

- **TP 5.** Ploughsoil [1] was 0.24m deep, over an interface [4] of 0.15m. This contained a small sherd of glazed red earthenware, possibly of 18th century date, and a small sherd of sponge decorated glazed white earhenware, probably 1800-1850 (both Sample 2). Natural glacial till [3] with a surface scatter of small to medium stones, was reached at 0.4m bgl.
- **TP 6.** Ploughsoil was 0.18m deep, over 0.25m of mixed plough/subsoil [4]. Natural glacial till [3] was encountered at 0.44m bgl, and 'proved' to a depth of 0.59m. A sample was taken (4). There were no finds.
- **TP 7.** Ploughsoil [1] was 0.24m deep, and contained a clay-pipe stem. A mixed deposit [18] represented the interface between the ploughsoil and the natural glacial till, and contained chips of ceramic building material, probably field drain. The natural, an orange clay [19], was cut by a feature [20], possibly a post-hole, 0.44m deep and filled with brown soil [21]. Subsoil was 'proved' to a depth of 0.4m bgl.
- **TP 8.** (Fig. 26) This pit was progressively extended to become three 1m square pits, meeting at their south-west corners. Ploughsoil [1] was c.0.31m deep and came down onto [13], a mixed yellow-brown clay and silty soil. This may have been the same as the interface deposit [4] mixed ploughsoil and natural glacial till and contained some charcoal. Context [4] contained two flint flakes (Finds, 145-146). This was not securely stratified and consequently the sample was not processed. Below was a friable grey-brown soil with black carbon flecks and a few small stones [26] (sample10) and [78]. Below [78] was a deposit of black silty soil with angular fragments of stone, some apparently burned [81] at a depth of 0.4-0.5m bgl. This was sampled and returned a calibrated date of 2191-1972BC (at 95.4% probability) placing this activity in the late Neolithic to Early Bronze Age.

Cutting the [26]/[78] horizon, in the south section, was a shallow feature [79] filled with moderately compact yellow-brown clayey soil inclusions a few decomposed sandstone fragments [80]. Below this were very stony deposits 0.15m – 0.25m deep. Some stones were in a hard brown clay matrix, most in a black sandy soil with frequent pieces of fractured sandstone and andesite, some of which were reddened, perhaps by fire and may have been equivalent to [81].

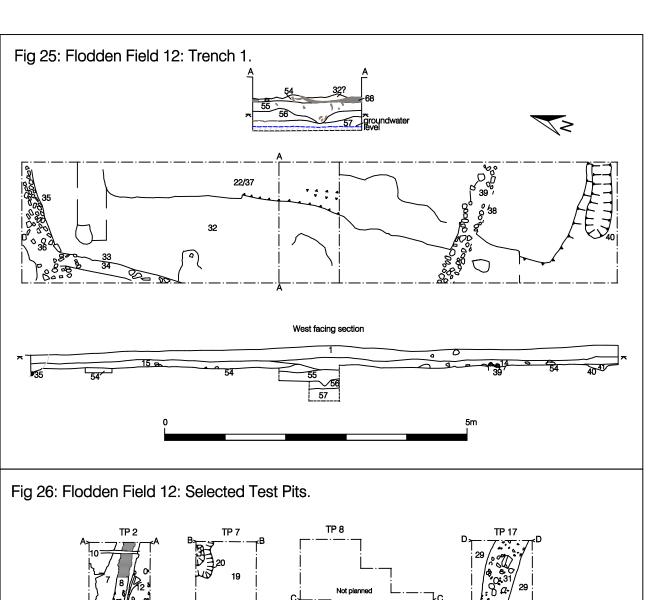
- **TP 9.** The ploughsoil [1] was 0.29m deep and contained three lumps of coarse, abraded, ceramic material, possibly degraded prehistoric pottery or burned daub, and two quartz fragments (Finds, 148, 149). Below this was a compact grey-brown clayey soil [83] containing a flint blade (Finds, 147). This came down onto a firm yellow-brown clayey silt [84]. In the north-west corner a 0.50m square sondage into this located a clean, natural, yellow-green glacial till [85] at 0.74m bgl. There were no features.
- **TP 10.** Ploughsoil about 0.3m deep above an 'interface' [4] of c.0.28m. In the northeast corner this was excavated to a maximum depth of 1.03m bgl., changing to a moist orange-grey gritty clay. At the base of the pit was a ragged east-west alignment of 'cobbles', possibly natural. There were no finds.

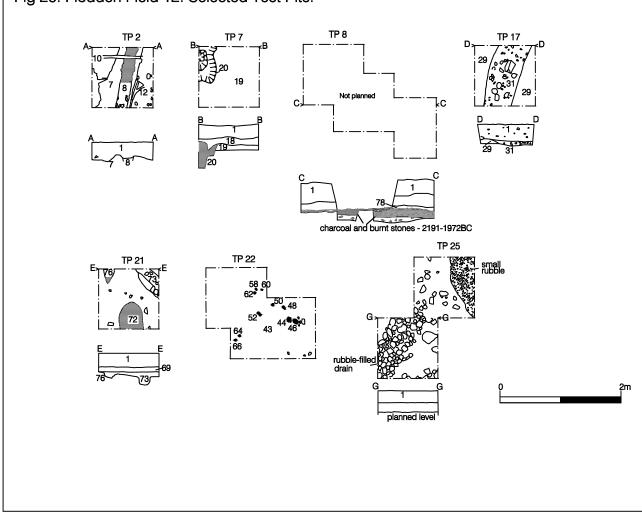
- **TP 11.** Ploughsoil was 0.27m deep, over the 'interface' of mixed topsoil and subsoil [4] which was 0.4m deep. A sondage through this in the north-west corner reached natural glacial till [3] at 0.68m bgl. There were no finds or features.
- **TP12.** This pit was enlarged by a 0.5m square extension at its south-west corner. Ploughsoil was 0.27m deep overlying natural glacial till [3] at 0.27m bgl.The only finds were a clay tobacco pipe stem fragment (bore 5/64") from the ploughsoil [1] (sample 9) and, probably from the same level, a large iron door/gate pintle (SF19).
- **TP13.** Ploughsoil 0.29m deep with frequent stones [27] containing sample 6, overlay mixed ploughsoil, clay and gravel [28] (sample 7), and then natural glacial till [3]. This was 'proved' to 0.58m bgl and included naturally occurring fragments of coal or carbonised material (Sample 8).

TP 14. Not excavated.

- **TP15.** The ploughsoil [1] was 0.3m deep, and contained an everted rim sherd in a pinkish-red fabric, possibly medieval, and two other undated sherds (Sf.18). The interface between the ploughsoil and the natural glacial till [4] was investigated in a 0.5m square sondage in the north-west corner and came down onto natural glacial till at 0.66m bgl which was proved to all depth of 0.75m bgl. There were no features.
- **TP 16.** No locational information was found for this pit, though it may have been midway between TP8 and 9. Stony ploughsoil 0.2m deep overlay a layer of iron-pan with compacted stones in the south-west(?) corner. Natural (glacial till) was reached at a depth of 0.45m bgl. There were no finds or features.
- **TP 17**. Below the ploughsoil [1] (0.24-0.29m deep) was the natural subsoil of orangey gritty glacial till [29] cut by a 'rumbler' field drain [30] filled with medium-large stones and orangey-brown soil [31]. Three lithics apparently came from this pit (see Finds, 150-152).
- **TP.18.** Ploughsoil [1] was 0.31m deep, and contained a sherd of late 18-19th century slip-coated glazed red earthenware with manganese trailing (SF20). Below was a thin (10mm) plough/subsoil interface deposit [4]. This was scattered with small-medium stones, one of which had been dragged by the plough creating a tear-shaped groove. Below this was the natural glacial till [3] at 0.33m bgl.
- **TP. 19*.** Ploughsoil [1] was c.0.3m deep, apparently directly overlying natural glacial till [3]. No finds or features were recorded.
- **TP 20***. **Field 12.** Ploughsoil [1] was 0.23m deep. Below this the 'interface' [4] was 0.15m deep, over natural glacial till [3]. The maximum depth of excavation was 0.45m in a sondage in the south-west corner. The only find was a fragment of a bottleneck of dark green glass (Sample 16), probably of 18th-19th century date.
- **TP 21.** Field 12. Ploughsoil [1] was 0.22m deep and came down onto mottled orange/green/brown silty clay [69], then a very compact pinkish-orange clay [70] probably the natural glacial till at 0.4m bgl. This was cut by three linear features: [72] was aligned north-south with a rounded terminal and contained green-brown clay silt [71]: feature [74] was on a south-east/north-west alignment, filled with greenish

- gravelly clay [73], and may have been a field drain. The terminal of another possible cut [76] was filled brown silty clay [75]. There were no finds.
- **TP 22.** Ploughsoil [1] was 0.3m deep, overlying mixed topsoil and blue clay subsoil [4/42] some 0.12-0.2m thick. Below this was an orangey—red gravelly subsoil [43] at a depth of 0.45m bgl. This was cut by ten small features interpreted as possible postor stake-holes: [44] fill [45], [46] fill [47], [48] fill [49], [50] fill [51], [52] fill [53], [58] fill [59], [60] fill [61], [62] fill [63], [64] fill [65], [66] fill [67]. All the fills contained decomposed wood and samples were taken from all ten fills (Sample numbers 11-15, 17-21, 59, 61, 63, 65 and 67). The results of archaeobotanic analysis of these samples is given in the Discussion. Two flints and ?worked quartz fragment came from this pit (see Finds, 153-155).
- **TP 23*.** Field 12. Ploughsoil [1] was 0.25m deep, partially overlying a lens of clay, probably redeposited [82]. Both overlay a thin (0.05m) layer of mixed plough/subsoil [4]. Natural glacial till was reached at c.0.34m, and 'proved' to a depth of 0.4m bgl.
- **TP 24*.** Field **15.** Ploughsoil [1] was 0.29m deep, and came down onto a scatter of small stones, with a cut or depression (uncontexted) in the south-west corner. There were no finds. Levels were apparently taken but were not recorded on the plan.
- **TP 25.** This pit was extended northwards by a 1m-square extension at its north-east corner. Ploughsoil [1] was 0.2m deep and contained two sherds of late (19th 20th century) glazed white earthenware. Below this was 0.15m of mixed plough/subsoil [4] overlying natural glacial till at a depth of 0.35m bgl. The till was cut by a 'rumbler' drain (uncontexted), running south-west north-east.
- **TP 26*.** Field **15**. Ploughsoil [1] was 0.63m deep over what was described as a greybrown topsoil with small stones [92]. Total depth of excavation was 0.92m in the south-east corner, possibly reaching the natural glacial till. There were no finds or features.
- **TP 27. Field 15.** Ploughsoil [1] was 0.25m deep overlying a gravelly silt (uncontexted) containing some larger stones and fragments of decomposed animal bone. The animal bone probably derived from livestock burials, such as were recorded in excavations further south in 2013. Excavation ceased at 0.45m bgl. Levels were taken but not recorded on the plan.
- **TP 28*. Field 12.** Ploughsoil [1] was 0.25m deep, over a mixed plough/subsoil deposit 0.07m thick. This overlay natural glacial till [3] at a depth of 0.32m bgl, with a few stones scattered on its surface, and which was 'proved' to a depth of 0.4m bgl in the north-east corner. 'Assorted chert flakes' are noted on the field plan as being found, but none were located in the post-excavation process.
- **TP 29. Field 12.** Ploughsoil was a grey-brown, c.0.25m deep, with frequent small stones [87]. This came down onto the interface of the plough zone and natural glacial till subsoil, represented by a mixed deposit of topsoil and gingery clay with many small stones, some river-washed, some angular [88]=[4]. The test pit was excavated to a maximum depth of 0.45m bgl. There were no finds or features apart from the stone scatter, which may not be natural.





TP 30. Field 12. Ploughsoil {1] depth is unknown, but produced a fragment of light green/blue, flat-sided, bottle glass (19th – early 20th century). The interface between the ploughsoil and natural subsoil seems to have been intermixed soil and gritty sand [77] overlying gritty sandy with small pebbles [91] – possibly natural - at a depth of 0.48m bgl. No features were recorded. Four pieces of worked quartz were found (see Finds, 156-159).

TP 31. Ploughsoil [1] was 0.28m deep, and produced part of the base of stoneware preserving jar and a sherd of late glazed white earthenware - all of late 19th – early 20th century date. This overlay a basal ploughsoil/interface deposit [4], 0.1m thick at the north end deepening to 0.32m at the south. Below this was a buried soil horizon [90], following the natural southward slope of the natural glacial till [3] at 0.4 –0.65m bgl. The natural was 'proved' to depths of 0.72-0.75m bgl. An uncontexted chip of flint was found (Finds, 160).

TP 32. Ploughsoil [1] was 0.3m deep, over a plough/subsoil interface deposit 0.2m thick. This overlay a grey gritty silty soil with frequent stones, equivalent to contexts [55-57] in Trench 1 (see below). Maximum depth of excavation, in the north-west corner, was 0.65m bgl.

Trench 1. (Fig. 25) The ploughsoil [1] contained fragments of clinker/burned low-grade coal, possibly deriving from lime used as fertiliser when the field was brought into arable use. Other finds from this deposit were a flint flake (Finds, 142), part of a bent iron nail or sheared chain link, slag, and a small fragment of medieval whiteware.

Below [1] at the south end was a deposit of clay [2] and a firm dark brown clayey soil with frequent small rounded and fractures stones and fragments of ceramic field drain [15]. This horizon seemed to be the base of active ploughsoil. Visible at this level was context [15] seemed to fill a NNE-SSW linear cut [22/37] possibly a 'subsoiler' plough groove. This may have been cut by an east-west orientated feature filled with a thin 4-6cm thick deposit of brown clayey soil with small rounded pebbles [14]. Context [16], a dark brown and very compact soil containing charcoal, wood and bark fragments, and two flakes of flint and chert (Finds, 143-144), seemed to be in an ephemeral cut [17]. Lower down lumps of grey clay. Two other possible cut features were semicircular [24], filled by [23], and [25].

Below these deposits was a sticky grey clay [32], in which another 'linear' running north-south appeared [33]. Filled with rounded river cobbles {34], this was a 'rumbler' - a form of post-medieval field drain. At the north end this joined a similar but wider linear [35], also filled with stones [36], running east-west. Two more probable drains on the same alignment were [38] (fill [39]), and [40] (fill a sticky grey clay [41]). Below [32] and [16] were patches and lenses of soft, dark reddish-brown organic silt [68] containing frequent fragments of decomposed wood and charcoal (Sample 22).

Below these features more grey clay [54] extended the full extent of the trench. This was not fully excavated, but in a sondage came down onto a sequence of moist rusty yellow gritty sandy silts [55-57], with some fragments of waterlogged wood.

Discussion.

No human bone or evidence for burial pits was found in either Field 15 or Field 19. The absence of evidence in the latter field does not totally disprove the 1810 report, since the closest investigations to the drainage ditch - Trench 1 and TP 32 - when plotted according to the available survey data are some 25m east of the Ordnance Survey findspot. The accuracy of the Ordnance Survey location may however be questioned.

The earliest known report of the 1810 discovery appeared in Brayley and Britton's Beauties of England and Wales (1813):-

'As Sir Carnaby Haggerston's workmen were digging in Flodden Field, in 1810, they came to a pit filled with human bones, which seemed of great extent; but, alarmed at the sight, they immediately filled up the excavation, and proceeded no farther.' [Brayley and Britton 1813, 221]

The story is reprinted almost verbatim in Richardson's Local Historian's Table Book under the year 1810, which gives the source as 'Local Papers' [Richardson LHTB, Vol III, p.99-100], and again by Fordyce and by Sykes [Local Records, 60]. The original report cannot be traced in any of the principal newspapers of the time (Newcastle Courant) and is elsewhere give as 'about the year 1817' and '1818'.

Nearly fifty years later (in 1858), when the Society of Antiquaries of Newcastle upon Tyne made a field trip to the battlefield, they were introduced by the vicar of Branxton, Rev. Jones, to Andrew Rankin, then church warden and named as the finder. Rankin, a hedger, said that when the discovery was made he had in fact been been working for Henry Collingwood, owner of Branxton Hill, not Carnaby Haggerston. He gave further details of the discovery, the date of which appears in *Archaeologia Aeliana* as 1818, stating that it was made while making drains, and that the 'trench' was

"intersected from east to west...(and)..was as wide as the turnpike road where they were standing"

Rankin pointed out the findspot to the visitors, which the Society's report states as being four fields to the west of the road where they were standing (they seem to have been just outside the vicarage), in a field called the Horse Close. This was presumably repeated shortly afterwards to the Ordnance Survey whose 1859-60 sixinch map marked the spot with the caption *'Large Pit full of Human Bones and Leaden Cannonball found'* at NT 388473 636873, in the Project's Field 19. This is precisely four fields due west of the vicarage road, and the wording implies that the bones and the cannonball were directly associated, though no cannonball is mentioned in earlier reports of the 1810 discovery.

In 1864 the Rev. Jones reported that a lead cannonball 'in the possession of John Collingwood Esq. of Cornhill House' had been found sinc he came to Branxton 'near the spot where such a number of bones were found about forty years ago by Mr. Rankin'.

This was presumably the cannonball mentioned in the Ordnance Surveyors' caption, so not only was it found *near* the bone pit, but as Jones was not appointed curate at Branxton until October 1829 it was also found later. In the notes accompanying Jones' 1864 account of the battle which relate to this cannonball, the discovery of the bones is said to have happened 'about the year 1817'. This is clearly inaccurate as the discovery appeared in print in 1813.

However, an estate plan of 1823 [NRO ZHE 31/1] calls Field 19 the 'Horse Field', not 'Horse Close'. Two fields actually called 'Horse Close' appear on other plans: one of Branxton Moor Estate at NT3895925 6356670 (centred) [ZHE 31/2] and the other of Branxton Buildings Estate at NT3886597 6373711 [ZHE 31/2 (1848)]. Both could, depending on how the field boundaries are counted, be counted as lying four fields broadly 'west' of the vicarage. Neither were part of the Project investigations, and both lie beyond the designated battlefield boundary. Carnaby Haggerston owned Branxton Buildings Estate, and Branxton Hill Farm, on Branxton Moor Estate, belonged to John Collingwood. The location of the northerly 'Horse Close' is shown on Fig. 24. This field is transected by the boundary of the two estates, and it is possible that confusion could have arisen over which landowner had undertaken drainage operations along this boundary. Might this field be the actual site of the bone pit?

Against this interpretation, Jones produced his own sketch-map to accompany his published account of the battle (1864) and marking the 'pit of bones'. Although this cannot be accurately overlain onto Ordnance Survey mapping, the findspot is indicated at a considerable distance *south* of the Branxton-Monylaws road. However as noted above Jones' information is not however always reliable – he was also under the impression the body of James IV's body had been buried on the field!

In 1858 at the prompted of the Rev. Jones, landowner John Collingwood undertook to erect a memorial on the spot where the 'pit of bones' had been found. Nothing happened until the present monument was erected by the Berwickshire Naturalists Club in 1910 on Stock Law which by then, due to the Rev.Jones' self-persuasion, had become known as 'Piper's Hill'. Clearly Stock Law is neither in the Horse Close or the Horse Field, but if the suggestion made above - that the 'pit of bones' lay on the boundary between two estates – is correct, it might have proved difficult to get the agreement of both owners to construct a memorial there. On the other hand there would have been no such difficulties with Stock Law, which was wholly within Collingwood's estate, was in view of the church, and by 1910 had acquired mythic status as the site of James IV's death. This site ticked all the boxes!

The presence of field drains in a number of of the excavations (Tr. 1, TP2, 3, 17, 25) does at least give credence to the reported circumstances of the 1810 discovery, and may be evidence for the date at which Field 19 was brought into arable cultivation. The presence of waterlogged wood in Trench 1 is also indicative of marshy ground with scrubby vegetation, further supported by the dark patches seen on aerial photographs.

The majority of finds from the excavations, and from the earlier metal-detecting and fieldwalking, are predominantly post-medieval. Apart from the possible prehistoric pottery, and two small sherds of medieval whiteware and Cistercian, nothing was identifiably earlier than the late 18th century. It seems reasonable to suggest that this is because the area of Fields 12, 15 and 19 were not, as suggested above, in arable cultivation before the later 18th or early 19th century: the name 'Horse Field' certainly implies pasturage, and might even be linked with the fragment of mid-17th to mid 18th century bridle boss initially interpreted as royal livery badge.

The two lead composite cannonballs found in 2007 are the only finds which can with any degree of certainty be assigned to 1513, but were they found where they had impacted with the ground nearly 500 years previously? They were both located on the eastern edge of the field and close to the track so could have been picked up during ploughing and deposited at the end of the furrow, though it seems unlikely given the interest in battle-related finds that they would not have been collected subsequently. The possibility that they are associated with the rumoured importation of soil cannot be discounted – the greatest depth of 'topsoil' occurred in this area – or that materail has been brought in as track metalling. It is even possible that they had been used as weights on agricultural equipment, such as a harrow.

The post-holes in TP 22 were initially suggested to representing stakes surrounding an English archer's 'stance' and therefore evidence for the battle in 1513, since the angle of a number of the holes suggested stakes pointing southwards towards the Branxton Hill ridge. This was not the case with all, however. The decomposed wood was identified by Jacqui Huntley then English Heritage's Science Advisor North East as alder, and suggested as possibly the remains of growing trees or stakes, though such wood is not commonly used for stakes or posts. By the time it was examined the samples were too badly contaminated with mould to be C14 dated (email report, Jacqui Huntley 11th June 2015). On balance it seems unlikely that the 'stakes' have any connection with the battle.

An unexpected discovery was the evidence in a number of test pits (TP 7, 8, 9, 10, 21, 24, 28, 29) for possibly prehistoric occupation. This was most clearly shown in TP 8.

Flodden Field 2013: Trial trenches in Field 15.

Location.

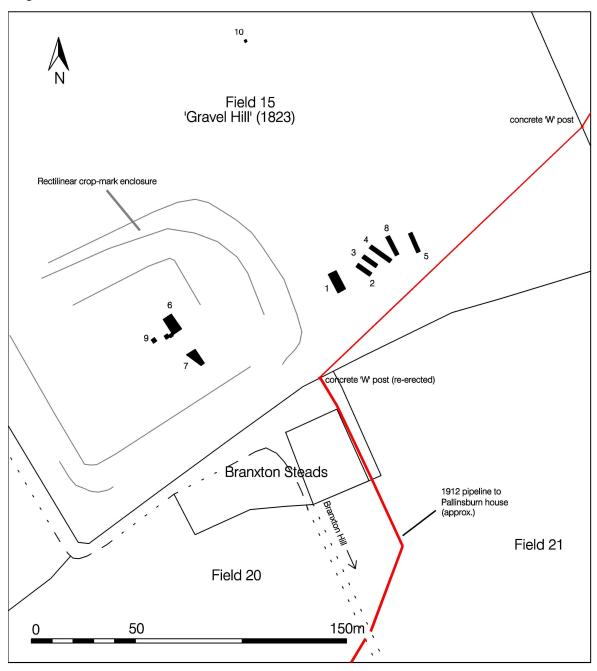
The second and last season of investigation on the presumed 'battlefield' in 2013 was confined to a single field - Field 15, known as 'Gravel Hill' from at least 1823.

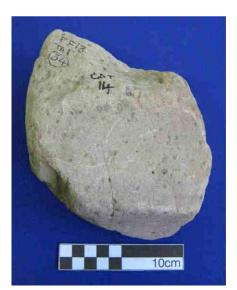
Reason for investigation.

In June 1912 *The Antiquary* reported the discovery of "a large number of bones" two feet below ground level, and within 250 yards of the recently erected memorial on 'Piper's Hill'. The circumstances of the find are not stated, but may have been made by workmen laying a waterpipe from the reservoir west of Branxton Hill farm to Pallinsburn House. The bones, which were identified as human, were apparently closely packed, giving the impression that the bodies hade been buried one on top of the other. The actual quantity of the remains is unclear, the report mentioning just three skulls – all of which predictably 'crumbled to pieces'. Further investigations of the find were proposed for the autumn when the crop was off the field, but there is no further published record. As with many other 'reports' of battlefield finds, there is no detailed first-hand record – in 1912 one might have at least expected a photograph – and no physical remains by which the veracity of the find can be proved. The story has subsequently been embroidered:

'oral tradition holds estate workers...encountered a pit filled with swords and skulls and that the pipe was re-routed around the pit to avoid disturbing it' (Burgess 2013, 2).

Fig 27: Flodden Field 2013, trench locations







P 19: Sheep burials in Trench 6 (photo James McQuillen)

P 18: ?Sharpening stone from Trench 1

The site is designated in the Northumberland HER as number 24248 'Possible mass grave, Battle of Flodden', and described as 'Approximate location of burials found during pipe-laying, according to farmer' [Foard, G 2008, 54]. The HER notes the evidence base as 'conjectural' and 'oral', and the Project Design for the 2013 excavations, which mis-dates the discovery to 1911, refers to it as the putative site of a body pit [Burgess 2013, 2]. The line of the pipe across Field 15 is marked by concrete posts in the hedgelines and a ground penetrating radar survey in this general vicinity located 'a large negative anomaly (a pit)' with evidence for a trench – not containing a pipe - running into it, possibly evidence for the alleged re-routing of the pipeline. The 2013 investigation was designed to test this hypothesis.

Areas of investigation and methodology.

Initially six trenches were proposed (Tr. 1- 5 and Tr. 8), to examine the possible burial pit and abandoned pipe trench. Unfortunately there was some confusion over the orientation of the geophysical survey, which led to some trenches being mispositioned. When none of the trenches revealed any evidence for the anticipated features, and in order to accommodate the high turn-out of volunteer excavators, two additional areas - Tr. 6 and Tr.7 - were opened at the south-west corner of the field, where Google Earth images showed the faint outline of a double-ditched rectilinear enclosure. Two 1m square test pits were also excavated (TP 9 and 10). The investigation took place between 2 – 12 September, with a 'rest day' on the 9^{th} September because of commemorative events. The areas of investigation are shown on Fig.27.

Limitations on the data.

As with Flodden Field 2012 the digital photographic record was not available for writing this report. The image shown as P17 was supplied by one of the volunteer excavators, James McQuillen.

As in 2012 levels were taken for all excavations using the tops of nearby fence-posts as temporary bench marks. Again it does not appear that these were ever tied to Ordnance Datum and no record of which posts were used has been found, consequently levels can only be given as depths 'below ground level' (bgl).

Trench 1. (Fig.28)

The ploughsoil [1] was a moderately firm, dark brown, stony clay silt, averaging 0.3m deep and containing small fragments of ceramic field drain and a chert core (see Finds, 253). This overlay a lighter brown and very compacted stony soil [2]. Below this was a natural deposit of fine gritty gravel with some larger rounded cobbles [33]. At the south-west corner of the trench, at 0.36 bgl, this was cut by a pit or post-hole [35] filled with an orange and coal/charcoal-flecked silty soil [39]. Within this feature was a sub-circular pit or posthole [37], within which was a possible post pipe or another post-hole [38] with a similarly charcoal-rich fill [34], which was sampled for potential C14 dating but the resulting flot was not considered viable for analysis (C.O'Brien pers comm). Context [34] contained what appeared to be a hammerstone, later identified as natural, and a whetstone (P16) (Finds, 164-165).

Trench 2.

The ploughsoil [1] was moderately firm, dark brown, stony clay silt, averaging 0.3m deep, containing a small flint flake (see Finds, 167). This overlay a lighter brown and

very compacted stony soil [3]. Below this was small gravel in yellow-grey silty sand [6], possibly a natural glacial deposit, with a flint flake on its surface (Finds, 166).

Trench 3.

Ploughsoil was 0.2-0.4m deep and included small pieces of coarse lime, probably used as 'dressing' for fields. At the south end of the trench this overlay an east-west aligned strip of firmer dark brown soil [4] some 0.8m wide, and a pale brown silty clay [7] which contained an agate flake (see Finds, 258). Below this was grey silty clay and yellow sand with traces of iron pan [13] which produced a chip of chert (Finds, 259). Below was a compacted brown sandy clay with frequent stones [14]. Both were undisturbed natural glacial deposits. The trench was crossed by a north-west/south-east aligned field drain [20/21] containing a cylindrical-section ceramic pipe [22], backfilled with redeposited clay. The pipe lay at a depth of 0.6m – 0.66m bgl., with a fall to the south-east. Another field drain [63] on the same alignment, containing a pipe of extruded form with flat base, lay in a trench [62] filled with brown silty soil [61]. This pipe trench cut a clay lens [59] and moist natural clay [60].

Trench 4.

Ploughsoil [1] was c.0.25m deep over dark brown very compact silty clay soil with occasional stones [5 and 8]. This was scored by several plough-marks. Below this was blue-grey moderately firm clay [9] and a mixed yellow-blue-grey clay with rounded medium-sized cobbles with some flecks of coal/charcoal [10]. A sample of the coal/charcoal was taken. This was cut by an east-west linear feature [11] filled with brown silty soil containing divots of yellow clay (disturbed subsoil) [12] containing A flint scraper (see Finds, 260)

Trench 5.

Below ploughsoil [1], which was c. 0.2m deep and contained a flint flake (Finds, 171), was firmer brown clay soil [36], either the basal cultivation soil or remains of the preagricultural ground surface. This was cut by a trench 0.12m wide containing a ceramic field drain lying 0.61m – 0.65m bgl.

Trench 6. (Fig.29)

Ploughsoil [15] was some 0.4m deep and contained a flint flake (Finds, 172). It overlay patches of dark brown sand and gravel [16] and [17], in which ploughgrooves and a concentrations of animal bone were visible. Context [16] produced a flake of quartzy flint (Finds, 175) and in the north-west area of the trench it overlay fine, brown, silty sand and gravel [64,65]. Below [17] part of a possibly circular cut [66] filled with light brown sand [67] emerged from under the section.

Articulated and plough-disturbed animal skeletons occurred in patches of compact grey, silty, sand [23] and gravelly sand [24], in pit [27] (fill [28]/bones [45]), in brown sandy clay [29] (possibly the same as [28]) and in a sub-rectangular cut containing dark silty soil [42]. One of the patches [25], possibly filling cut [18], contained two complete sheep skeletons laid end to end (*P17*). A representative sample of the animal bone was taken for species identification (see Discussion below). Excavation ceased at c.0.68m bgl.

Trench 6.1. This began as a 1m-square test pit to the west of Trench 6, and was subsequently extended to almost join it. Ploughsoil [15] was some 0.18m deep, and overlay a cut [45] filled with soft, mid-brown sandy soil [43 and 44] again containing a

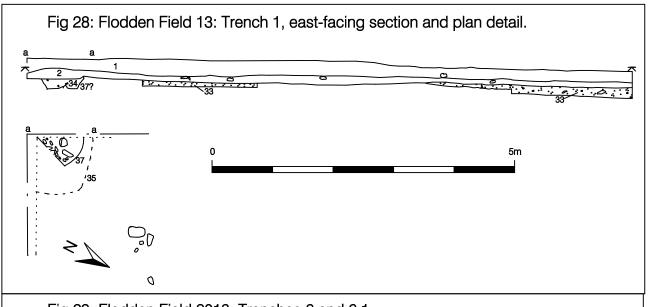
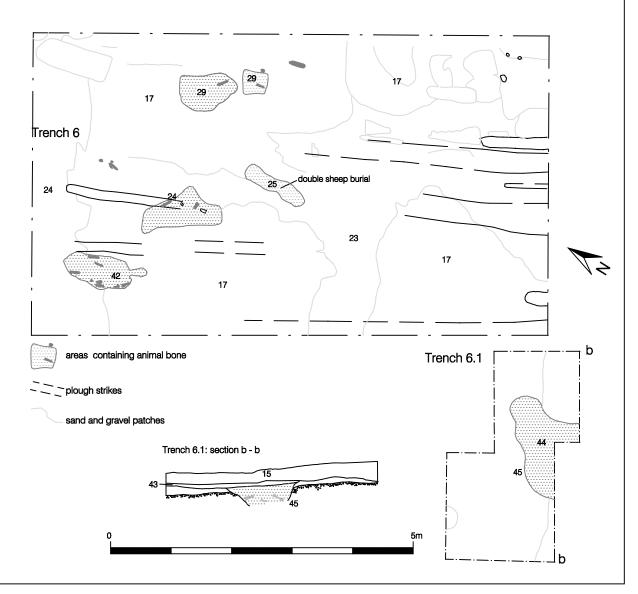


Fig 29: Flodden Field 2013: Trenches 6 and 6.1



large quantity of animal bone. The cut extended beyond the trench edges, so its full extent could not be determined.

Trench 7. Ploughsoil [19 and 46] was 0.17m deep, dark brown, and contained plough-shattered pebbles. This overlay a firmly compacted dark brown stoney clay [26] at the southern end of the trench, and bands of fine and coarse sandy gravels with rounded/subangular pebbles, apparently truncated tip-lines, dropping to the north [47-55]. Excavation ceased at 0.27m bgl.

Trench 8.

Below the ploughsoil [1] which was some 0.22m deep and contained three flint flakes (Finds, 176-178) was a firm yellow brown clay loam with more small stones [30/40]. This overlay a firm stoney brown clay soil with frequent rounded stones [31] containing a piece of banded agate (Finds, 179). Below this at 0.48m bgl the clay turned moist and yellow-grey, containing frequent rounded river cobbles [32 and 41]. This was naturally deposited and not excavated, but was cut by a 0.2m wide trench [61], aligned east-west, containing a cylindrical ceramic field drain [63] lying at 0.63m bgl. Excavation ceased at 0.53m bgl.

Trench 9.

Ploughsoil [56] was c.0.26m deep over a mid-brown gravelly soil [57] which in turn overlay a stone-free mid-light brown sandy soil [58] at 0.46m bgl, which was sterile and considered to be natural.

Trench 10.

A 1m square test pit. Ploughsoil was 0.3m deep, overlying a mixed layer of sand and soil, which came down onto pure sand at 0.5m bgl. This was dug to a depth of 0.65bgl without any observable change, and considered to be natural.

Discussion

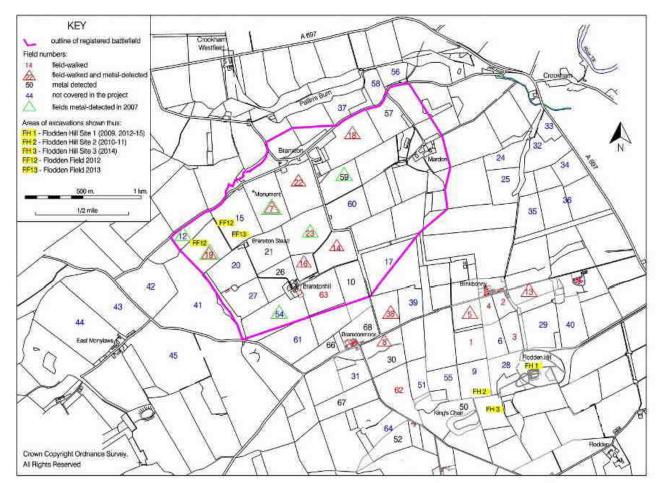
As in the previous year, the 2013 investigations in Field 15 found no evidence for either mass graves or an abandoned water-pipe trench, and the geophysical anomalies turned out to be geological. The water-pipe was seen in the bed of the drainage ditch along the south-east edge of the field, close to a concrete post marked 'W', and is cast-iron. The course of pipe as laid is marked by identical posts in the hedge-lines between Field 15 and Field 7, and Field 7 and Field 22. When these points are plotted, the pipeline is some 10m south of the 2013 trenches, which would represent a considerable and arguably unnecessarily wide diversion from what the 1912 report suggests was quite a limited discovery. The 1912 account does not mention any re-routing of the pipeline to avoid the bones – it even implies that some of the remains encountered were disinterred and handled. Possibly the alleged 're-routing' is a later gloss on the story.

Apart from the report in The Antiquary, and subsequent embroidered versions of the samer event, no other record of the discovery has been traced. However the wording of the report implies that the findspot was in fact in Field 7, and broadly between the Monument and the Vicarage. This appears to be equatable with Northumberland Historic Environment Record ID 752 *'Possible mass grave, Battle of Flodden'*, though it is described in the HER as the site of *two* pits, and the date is inexplicably given as 1910. Possibly this arises from confusion with the 1810 discovery. In the

published report on the 'Two Men in a Trench' excavations in Field 7 in 2002 the statement appears 'at one point we narrowly missed breaking a waterpipe with the JCB bucket' (Pollard and Oliver, 164). The 2002 trenches were south-east of the Monument and it seems probable that this was the 1912 Pallinsburn pipe, but regrettably no location for the 2001 'near miss' is available! There is a small collection of human bones in Berwick Museum labelled 'From Flodden Field', but these do not have any more detailed provenance, finder or date of discovery, or date of accession. The associated packaging appears to be 1970s.

It is impossible to certain that the bones found in 1912 were in fact human. In the light of the 2013 discovery of livestock burials in Field 15 on Gravel Hill, which were not at first unversally recognised as animal, and a reference to sheep skeletons being found in Field 7 in 2002 (Pollard and Oliver,165) – it could be speculated that there was an initial mis-identification, and that the apparent lack of further investigations or other record was to avoid embarrassment. It is also possible the 1912 bones were indeed human, and the lack of any follow-up investigation due to other circumstances. But if so, and if the later oral tradition of 'swords' being found with the skulls is discounted (it seems highly unlikely any weapons still complete enough to be recognisable after nearly 400 years would have been buried with the dead), the remains need not automatically be attributed to the battle. The high ground of Stock Law now called 'Piper's Hill' may have been a manorial gallows site and the bones those of medieval criminals, or even remains from a prehistoric cist disturbed by ploughing.

Although no evidence relating to the battle was found, the single pit in Trench 1, with its possible whetstone, suggests Romano-British activity in this area. This is not surprising given the large rectilinear crop-mark site at the south-west corner of the field, and the evidence for probable settlement at this period found in Field 19 (Trench 8).



Section 5. Fieldwalking and metal-detecting: Flodden Hill and Branxton

Fig. 1 Field locations

Introduction

Sixty-eight fields north, east, and west of Flodden Hill were identified by Dr. Chris Burgess for investigation at the start of the project in 2009. Eighteen fields were subsequently field-walked, some of these were also metal-detected. Ten fields were metal-detected only.

One of the fields (11) was at Barmoor. The finds from this field, walked and detected in 2010, were subsequently catalogued by NCAS as part of the Conservation Management Plan report for Barmoor Castle (Spence & Dower 2012). As Barmoor was not directly associated with the battle this field is not discussed in this report.

Seven of the fields had been metal-detected prior to the Project. Field 7 and 26 were detected in 2001 as part of the 'Two Men in a Trench series' (Pollard and Oliver 2002). In 2007 Fields 7, 12, 19, 23, 54 and 59 were detected by a team led by Dr. Glenn Foard of Huddersfield University (Foard 2007). This pre-dated the assignment of Project field numbers; the 2007 field numbering is cross-referenced to that of the Project below:-

Foard 2007	Flodden500
1	59
2	7

Flodden Hill and Flodden Field: excavations, fieldwalking and metaldetecting, 2009-2015

3	19
4	12
5	23
7	54

The Project field numbering sequence was extended to four fields near Ladykirk, on the side of the Tweed opposite Norham Castle (F69, F70, F71 and F72). Two of these F69 and F72 were metal detected, although for some reason the finds were recorded as Fields 50 and 51, duplicating numbers with those used on battlefield.

Methodology of data collection

Fieldwalked fields were marked out with an alpha-numeric 10 metre grid (A1, A2 etc.). Up until 2014 walkers covered the whole of each 10m. wide strip two, three, or four abreast depending on the turn-out. A different strategy was adopted for the fields walked in 2014 (7 and 22) because the number of volunteers had declined. They were gridded out in the same way but only sampled by pairs of walkers working north to south either side of the grid lines, each covering a strip about two metres wide. In all fields finds from each 10m. square were bagged and labelled separately.

Volunteers involved in metal-detecting were generally speaking discouraged from pursuing iron signals (i.e. digging for the source). This was done to minimise ground disturbance with the good will of the farmers in mind. Volunteers were also discouraged from "bagging bits of plough and rusty nails" (Ian Glendinning pers com.). On gridded fields (i.e. those being field-walked) some grids were selected where all iron was recovered. However, the data on what these grids were and what finds were recovered in this way is not available. Nor is it possible, in these fields, to distinguish between items collected by fieldwalkers and items collected by metal-detectorists, which may have been labelled with alpha-numeric grid squares (see below). It is assumed that fieldwalkers did collect all surface iron.

Recording the locations of the metal-detected finds was erratic. Some finds, when detecting took place at the same time as fieldwalking, were assigned to the alpha-numeric grid square. Otherwise most were recorded by NGR, and some to latitude and longitude, using Garmin GPS. Some were located by roughly-drawn squares on the finds bags representing the field, with cross or dot for the location. Others were simply bagged as being from the field.

Most fieldwalked finds were catalogued on pro-forma sheets by volunteers supervised by professional archaeologists. The data was input into an Access database. The professional archaeologists listed most of the finds from metal-detected only fields.

Limitations on using the collected data

It has long been recognised that any overall 'assemblage' generated by fieldwalking cultivated soil only constitutes a sample. In part this is because only what is visible on the surface at that point in time is collected. This can be a very small proportion of the totality of artefactual material present. Further, collection levels are subject to an individual walker's level of observation/perception, and to any 'screening' instructions imposed. An instruction not to collect ceramic building material, for example, can result in

Flodden Hill and Flodden Field: excavations, fieldwalking and metaldetecting, 2009-2015

redware/unglazed pottery being bypassed.

The fields surveyed are less than half those originally designated for investigation (see Fig. 1). This may be because they were not in cultivation, or because the landowner did not allow access. Further, not all fields were surveyed in their totality and the paper-record of the grid layouts of only six (7 (2014 only), 18, 19, 22, 38 and 62) were available although the approximate area covered by the grids for another five fields (1 - 5) is known. An assessment of the actual extent of investigation can only be made on the basis of the grid squares for which finds are present, or personal recollection by participants.

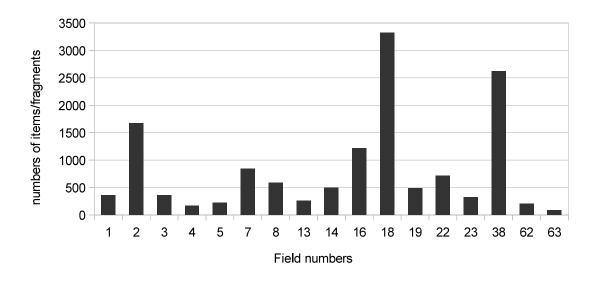
The problems of trying to interpret and present the data can thus perhaps be summarised:

- not all designated fields were surveyed
- there is limited data on the grid layouts and the proportion of the field that was covered
- there was considerable disparity in the metal-detecting recording methodologies and it is not known how much of any metal-detected field was covered
- there were differences in recovery levels and techniques between fields
- as some metal-detected finds were recorded by grid-square it is not possible to compare recovery rates by fieldwalkers with those of metal detectorists.

In addition to this Field 7 (the monument field) was walked twice, in 2010 and in 2014, using unrelated grid layouts. This was not at first understood when the finds were being catalogued and thus if the date was not recorded or noted by the cataloguer, it is not certain which grid layout was being used. Time restrictions have so far prevented the field assemblage being re-checked.

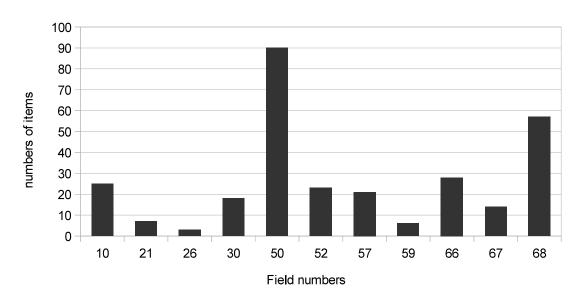
What follows is a summary of the survey data field-by-field, with comment on historical land-use where known and individual field assemblages as appropriate.

Comparison of totals: fieldwalked fields



The two charts are a broad guide to the quantity of artefacts recovered although it should be borne in mind that not only is the size of fields variable but also the proportion of the field which was walked or covered by the metal-detectorists. The individual field reports give a guide to this where it is known.

Comparison of totals: metal-detected only fields



NB:

The commonest types of pottery recovered during fieldwalking were white-glazed white earthenwares, the standard table ware with a variety of decorative techniques (transfer printing, sponging, painting) from the later 18th century onwards, and red earthenwares. The latter are mainly kitchen wares common also from the 18th century through to the early 20th. Many of the redwares have an internal white slip coating, sometimes mottled with brown. These sherds are from large kitchen bowls. The two types can thus be seen as the normal range of wares deriving from the same households. In varying proportions they made up the bulk of the pottery recovered in all fields.

The mark 'TW' occurs on several clay tobacco pipe bowls. This mark is common on later 19th century pipes in the area. Such pipes often also feature a cross-hatched heart on one side. This type of mark is known to occur on pipes by a number of north-east makers, including the Tennant family of Berwick.

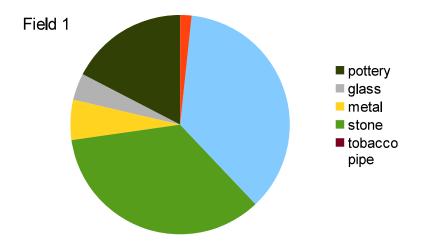
One of the commonest non-ferrous metal finds was small lead shot, over fifty pieces of which were found by fieldwalking alone, mainly from Fields 7, 18 and 22. None has been identified as being of the Flodden period, and most 'ball' shot can be attributed to sporting and hunting activities between the 1600s and 1800s.

In charts and elsewhere cbm = ceramic building material (tile, field drain, brick etc); misc=miscellaneous (e.g. plastic, coal, slate).

FIELD 1

Field 1 is part of G.A. Askew's Mardon and Branxton estate and was called 'Low Flodden

Side' on an estate plan of 1826 (NRO 2DE 15/4).



About a third or more of this field was not walked, nor was the field metal-detected. More lithic material came from this field than any other and it made up over 34% of the field assemblage. The majority of material recovered was, however, ceramic, with ceramic building material (cbm), probably mainly fragments of field drain, and non-diagnostic small fragments making up about 36% of the items recovered, and pottery sherds a further 17%. The pottery was roughly evenly divided between white-glazed white earthenwares, including a few transfer printed fragments, and red earthenwares.

Among the lithics were eleven cores, seven scrapers of later mesolithic type (two are illustrated), a broken microlith and one possible retouched knife of Neolithic or Bronze Age date. A number of test pits were excavated in the northern part of this field in 2011 under the direction of Lizzy Young (now Herbert). The assemblage recovered was predominantly of Late Mesolithic, narrow-blade origin.

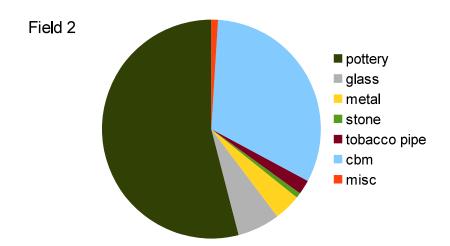
A few fragments of glass were of no particular interest. Most were probably from bottles.

Metal objects were also relatively few in number. Iron objects were a horseshoe and one or two

pieces which could be related to agricultural practices, one or two nails, a cross head screw and other unidentifiable pieces. There were two fragments of lead and a piece of wire fencing. The only object of interest is a small copper alloy object tentatively identified as a pipe tamper of 17th century date.



Most of this field was covered except for a small wedge at the north end. Although smaller than Field 1 it produced far more material, the majority of which was again ceramic: there was more pottery than ceramic building material.



Over 70% of pottery sherds were white-glazed whitewares many of them decorated in some way, eg. transfer printing, sponging, plain coloured bands. Red earthenware made up a further 20%. There was a single sherd of medieval pottery, probably 14th century. The rest of the assemblage being a range of late post-medieval wares including yellow-glazed kitchen wares and stonewares.

Most of the glass fragments were from green bottles including some from dark green 'wine' bottles. Many fragments were too small to identify the vessel type clearly. Amongst the

clay tobacco pipe fragments were at least three from 'TW' bowls, very probably made by Charles Tennent and son of Berwick. These are late 19th century.

Lithics made up less than 1% of the field assemblage but items recovered included a needle point microlith, a broken scraper and two fine examples of plano-convex knives (illustrated). The latter two objects date to the Late Neolithic/early Bronze Age.

Amongst a number of nails and unidentifiable iron fragments were a hoe or mattock-head and a clog iron. Buttons were the commonest finds amongst the other metal objects, several had maker's names stamped on them. There was a very small fragment of



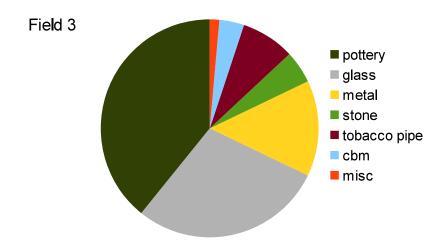
Late Neolithic/Early Bronze Age knives

medieval silver penny, probably of Edward I or II (1307-1327), and a gaming counter of about 1850 inscribed 'Prince of Wales Model Half Soy.'

FIELD 3

This seems to have been totally covered by fieldwalking but produced relatively little. There was noticeably little ceramic building material so it is possible that the walkers were selective in what they picked up. The two main components of the pottery assemblage

were red earthenwares and white glazed whitewares, with miscellaneous other late post-medieval wares occurring in small quantities.



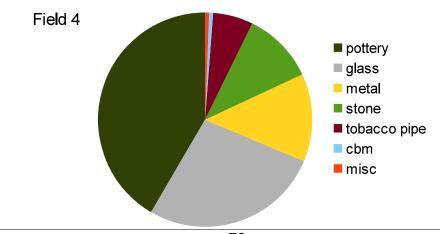
Glass fragments were from green and clear (white) bottles and possibly other vessel types. There were also a few blue fragments. Tobacco pipe fragments were almost all stems. There was one piece of a decorated bowl and a stem with the letters 'FOO....'.

Metal finds included a penny of 1898, nine buttons - one of them from a 'Yeomanry' uniform, and part of a lead toy soldier. There was also a single musket ball and an off-cut of lead pipe. Iron objects included nails and few other fragments of possible structural items.

Lithics made up nearly 5% of the items recovered and included two quartz cores, two possible scrapers and two bladelets.

FIELD 4

A narrow wedge-shaped strip on the east side of the field appears to have been left but a substantial part of this field was covered by the field-walkers. The proportions of the finds types was very similar to Field 3 but overall quantity was much less and there was no cbm. Most of the pottery was redware and none of the relatively few fragments of whiteware



Flodden Hill and Flodden Field: excavations, fieldwalking and metaldetecting, 2009-2015

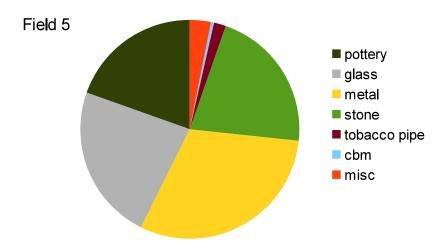
appeared to be decorated. There was one fragment of a 'TW' stamped bowl amongst the clay pipe.

Metalwork included a fragment of cast copper-alloy decoration, a 17th century fitting, and part of decorated lead strip (incomplete) of possible 16th century date.

Amongst the lithics, which made up 11% of items recovered, were two scrapers and an agate core.

FIELD 5

In 1826 this was part of Mardon and Branxton farm belonging to G. A. Askew. In the 19th century a building called *'Herd's House'* stood near the south-west corner and the 1860 and 1896 Ordnance Survey maps show it crossed diagonally by a footpath.



This field appears to have been comprehensively covered although the number of items recovered was relatively small. Lithic material made up about 21% and included eight cores and two scrapers. Both metal objects and glass fragments outnumbered pottery and only one fragment of ceramic building material was retrieved.

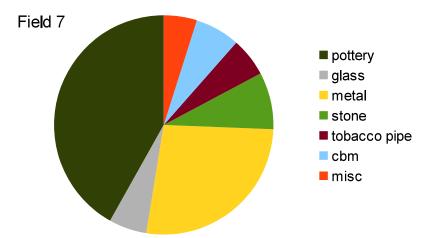
Iron objects included fragments of plough shares and other bits of farm machinery, bolts and fittings, a splitting wedge and part of a boot heel tap. Of interest amongst the other metal items was a Simmonds patent hood joint and a copper alloy lock fitting, which could be as early as the 16th century. There were also six buttons and a press stud. Lead objects A possible tile clip was recovered but other lead items were scraps and offcuts. There were two George III pennies (1799 and 1806) and a William III halfpenny (1698-1701)

A few fragments of thin window glass were present but most of the glass was from bottles including a number of 'black' (i.e. dark green) bases. One or two clear fragments were obviously later and possibly from milk bottles.

Most of the pottery was red earthenware.

FIELD 7

This field was part of Henry Collingwood's Branxton Hill Farm in 1823 (NRO ZHE 31/1) when it was known as 'Stock Law' (a name perpetuated on Ordnance Survey maps). It is now commonly called Piper's Hill, a variant on the name 'Piperd Hill' where, according the chronicler John Stow, James IV was killed (Stow). No other account or chronicle mentions this name. When questioned about the name in 1858 by the Society of Antiquaries of Newcastle the 70-year old churchwarden Mr Rankin said he had never heard of it before. The identification of Stow's 'Piperd Hill' with the present monument field seems to have been made by the Rev. Jones in the 1860s, as aspirations for a battlefield monument grew and it lent a suitably 'romantic' touch to the area. Jones may also have been influenced by the fact that the field belonged to a sympathetic landowner John Collingwood, and perhaps because it was close to his church. The identification was accepted fact by the 1900s when the existing memorial was finally erected in 1910. In 1912 a supposed burial pit was found within 250 yards of the monument apparently when laying a waterpipe to Pallinsburn House (*The Antiquary*, 1912). Three skulls were reportedly seen, which 'crumbled to pieces when touched'. There is no further record of this 'discovery'.



The field was walked in 2010 and again in 2014 using different grid systems. It was also metal detected using both national grid references and latitude and longitude. The 2010 fieldwalking started on the west side of the field south of the monument though the precise origin is not clear. The 2014 grid started at the north east corner. It is probable that most of the field was covered although the methodology employed in 2014 resulted in grid squares only being 20% sampled.

Nearly 42% of items recovered were pottery sherds, 27% metal objects, lithics nearly 9%, cbm under 7% and glass and clay tobacco pipe under 6%, so a very different pattern to the fields summarised above. A very small fragment of human jaw bone was also recovered. It was identified subsequently by Dr Pia Nystrom of Sheffield University as belonging to a female or young adult male (C14 dating showed the bone was most likely to be 17th to 18th century).

Nearly 58% of pottery sherds were white glazed whitewares but the rest of the assemblage consisted of a wide range of types including 31 medieval sherds. The redwares which made up 18% of pottery sherds recovered included several fragments of a softer light red fabric with traces of slip decoration including some rim sherds. This is an earlier type of redware probably made in Berwick in the later 17th and early 18th century. A

number of other redware fragments could be within this date band, rather than being the standard 19th century kitchenware. Other indications of earlier activity were two sherds of 'Staffordshire type' slipware (brown trailed decoration on white body) and a small fragment of tin-glazed earthenware (17th/18th century) and a possible fragment of 16th/17th century stoneware. A few fragments of creamware which is a later 18th century tableware were also present as well as a range of less easily dateable wares.

Fifteen of the twenty-eight coins recovered were 17th century turners (Scottish 2d) and another was a Scottish 'bawbee' (6d) of Charles II. Another Scottish coin was an ecclesiastical copper penny dating to 1452-80. There was a silver penny of Elizabeth I (1558-1603) and a silver groat of Henry VI (1422-61). Georges III and VI were represented (1817 and 1940) as well as a young Victoria and Elizabeth II.

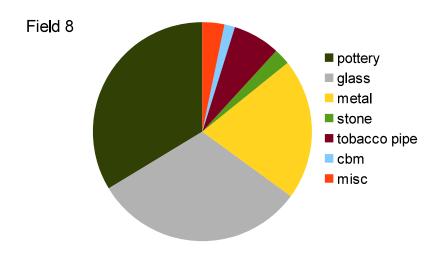
Iron objects included several horseshoes and a possible ox-shoe as well as miscellaneous agricultural machinery parts and nails. Amongst the copper alloy items were four buckles which could be early post-medieval (16th/17th century) and another which was definitely medieval (1250-1400). There were fragments of a number of other buckles, one possibly a harness buckle and one a shoe buckle, all likely to be 18th century or later. There were also several fragments of possible cooking vessels. A turned cylindrical mount once suggested as the tip of a pennon has been identified as an 18th or 19th century mount from a firearm accessory or tool (Caldwell)

This field produced the second largest number of pieces of lead shot (17), ranging in diameter from just over 11mm to over 18mm. There were also two lead spindle whorls, one of possibly early medieval date and one late- or post-medieval.

There were three cores and five scrapers amongst the lithic material. A few of the pieces suggested a later Mesolithic/Early Neolithic presence but later Neolithic/Bronze Age material was also present. There was also a whetstone which could date to any period after the introduction of metals.

FIELD 8

This field does not appear to have been systematically metal-detected, or if it was most items were collected by grid square. A number were not located at all. Pottery, glass and



Flodden Hill and Flodden Field: excavations, fieldwalking and metaldetecting, 2009-2015

metal objects were the main groups of finds collected.

Fragments of red earthenware dominate the pottery assemblage, most of them with internal white slip coating. There were considerably fewer white-glazed earthenware sherds. Amongst the miscellaneous stonewares present were a number of fragments of possible 18th century date. A single piece of medieval pottery was recovered.

Glass fragments covered a wide range of types and vessels from dark green bottles to clear decorative tablewares. There were a number of blue fragments, likely to be 19th century medicine bottles and a single piece of possibly a glass roof tile.

Iron items were the most numerousmetal finds. Amongst a range of nails, other fittings and fragments of agricultural machinery were two probable harness buckles, a heavy horseshoe and fragment of another. Other horse-related artefacts were a lead-alloy saddler's plate with the name 'R. Wallace' and a copper-alloy harness fitting. Two pieces of lead shot were recovered. There was a George III halfpenny (1799-1806) and a farthing, possibly early 18th century.

Clay pipe fragments, mainly stems, made up just over 7% of the items recovered. Four stems were marked with the name Tennant (or part of it). A bowl was marked 'CORK' with a harp beneath. These are all 19th century pieces. One possibly earlier stem fragment was recovered.

Only a few lithics were recovered, including a probably mesolithic scraper.

FIELD 9

A rectilinear 'earthwork' is shown on Richardson's enclosure plan of 1780, but none of the later field boundaries. This field is part of G.A. Askew's Mardon and Branxton estate in 1826.

This is the field where the 2010 and 2011 excavations took place (Flodden Hill Site 2). Three metal-detected finds were recorded. Two were copper alloy buttons of relatively recent date, one of domed hollow-form, the domed face possibly silvered, the other flat with engine turned decoration, 18th -19th century. The third item was a decorated rectangular 18th century shoe buckle made of copper alloy and tinned.

FIELD 10

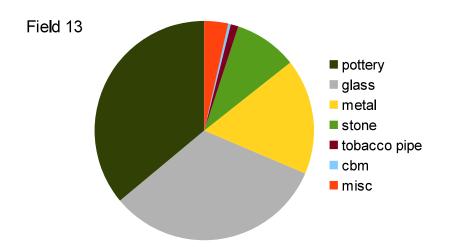
In 1823 this was called 'White Walls', it was part of Henry Collingwood's Branxton Hill Farm.

Apart from two items listed as 'slag', possibly the residue from lime burning which was an occasional find in several fields, only metal objects (25, mainly iron) were recovered from this field, presumably by metal-detectors although they were collected by grid square. There were several fragments of plough or other probably agricultural equipment, a few nails and a piece of a small horseshoe. A brass tube and threaded fitting was possibly from a gas light. There was also a corroded ball-bearing and the base of a 12-bore cartridge

Flodden Hill and Flodden Field: excavations, fieldwalking and metaldetecting, 2009-2015

case.

FIELD 13



This field was metal-detected and fieldwalked. Pottery and glass made up over 68% of items recovered, metal a further 17% and lithics just over 9%.

The pottery consisted of roughly equal quantities of red earthenwares and white glazed whitewares with small quantities of miscellaneous other late post-medieval earthenwares and stonewares. Apart from two fragments of black basalt ware, which can be 18th century, and piece of possibly 18th century stoneware, nothing was necessarily earlier than the 19th century. The glass was a mixture of mainly green and white (i.e. clear) bottle glass. The latter included a 'Daddies Sauce' bottle top.

Amongst the metalwork finds were a fragment of Romano-British trumpet brooch. Other metal objects included fragments of horse harness and a large



horseshoe, a crushed tubular container possibly for shaving soap and a cable clip. An iron boss, at first thought to be from a shield or targe, has been identified by Dr. Caldwell as a possible mount of late 19th-20th century date (Caldwell). Only one piece of lead shot was found. There were two halfpennies, probably both George III (1799-1806) and a halfpenny token dated 1790.

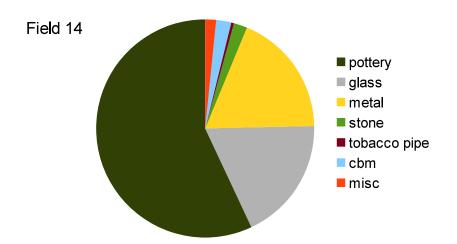
The lithics included a small 'thumbnail' type and two end scrapers. There was also a borer/piercer. These four items are possibly of later Mesolithic date.

FIELD 14

This was part of 'South Banks' Henry Collingwood's Branxton Hill Farm in 1823.

This field was metal detected by grid square. Pottery sherds made up 57% of the items

recovered with metal and glass about 18% each. White glazed whiteware fragments were by far the most numerous with a relatively small quantity of red earthenware. Stonewares included a number of preserve jar fragments. Glass finds were the usual mixture of clear (bottle and other vessel types) and mainly green (dark and light) bottle fragments.



Amongst the metal finds were an aluminium ear tag for livestock, and a pair of ear-tag liers. Iron objects included bolts, nails and bits of farm equipment. More unusual metal finds were the lead backing to a horse harness ornament, fragments of a toy car, and an early 20th century Lucas 'King of the Road' motor horn. Two pieces of lead shot were

recovered, one of which was a 19th century bullet. Two fragments of a doll were amongst miscellaneous ceramic finds. There was one silver penny of Edward I or II (1301-27), and three 20th century pennies (1904, 1938 and 1984).

Only a few lithic pieces were found, including a Mesolithic scraper.

FIELD 15.

This field was part of Henry Collingwood's Branxton Hill Farm, and was called 'Gravel

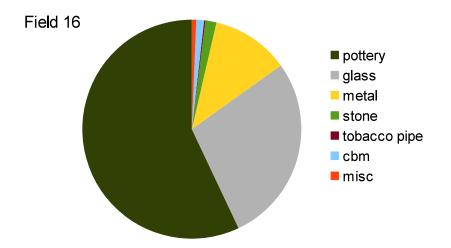
Hill' in 1823. There was some metal-detecting at the time of the excavations in 2013



There were three copper alloy finds: a bent disc (possibly a coin), a brooch/medallion embossed with 'In Commemoration of the 60th Year of the Reign of Her Majesty Queen Victoria' (ie 1897) and a ring and finial cap from a ?bell

FIELD 16

In 19th century this was the west part of a field known (with F14) as 'South Banks'. It was part of Henry Collingwood's Branxton Hill Farm, crossed by footpaths, with Branxton Moor farm at its south-west corner. The farm itself is not recorded before the ?late 18th century; there is no evidence for medieval occupation.



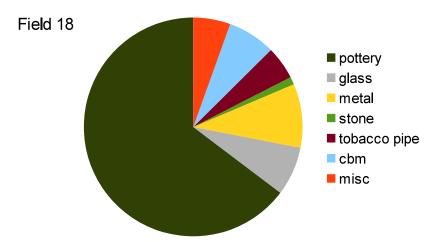
This field was metal detected as well as field-walked but finds were collected by grid square. The pattern was very similar to Field 14, though considerably more items were recovered, and as for Field 14 white-glazed whiteware fragments were by far the most numerous amongst the pottery sherds. Redwares were a slightly bigger proportion. There were a number of other kitchen wares (e.g. mixing bowls) and numerous bits of stoneware jam jars and other storage vessels. Interestingly there was a relatively large number of fragments of china, as opposed to white glazed earthenware. The only other field where fragments of china reached double figures was Field 38. However, it is doubtful how much significance can be attached to these figures as Field 16 and 38 were both catalogued by a pottery specialist. It is possible that the volunteers were unable to distinguish between the white earthenwares and china. There were also a few fragments of creamware which is a later 18th century type.

The usual range of glass was present though with rather more than the handful of fragments of brown glass noted for other fields.

There was a wide range of metal objects from this field including fragments of aluminium foil containers, an oil-can nozzle, a homing pigeon's identification ring, a rattle in th shape of a cat, military buttons, a cap badge with the words 'LOCAL COMPANIES', a folding ruler, part of a pocket watch. One interesting piece was a swinging toggle terret, its bell missing, from working-horse harness of the late 19th-20th century. There were also fragments of harness decoration and part of a large horshoe. Of the eight coins the earliest were three probably of George III, the latest was a 1963 florin.

Amongst the few pieces of lithic were three scrapers, two of them 'thumbnail' types of Neolithic/Early Bronze Age date. FIELD 18

This is part of G.A. Askews Mardon and Branxton estate in 1826. Immediately south-east of Branxton village, and boundering on the backlands of properties it was formerly divided into two fields: Golden Knoll (later Gordon Field) and Gordon Close, and included a pond (labelled 'Gordon' on the 1826 estate plan) and spring known as Golden Well.



This field produced by far the largest quantity of finds - nearly 25% of items recovered from field-walked fields — although the grid plan indicates that considerably less than half of the field was covered. About 65% of the finds were pottery sherds and at least 49% of these were white-glazed earthenwares. 'At least' because this was one of the earliest fields catalogued by volunteers and many recorded identifications were difficult to interpret. A much smaller proportion of the sherds (c. 17%) were red earthenwares a few of which

were the earlier 17th /early 18th century type, probably from Berwick. Other indications of earlier post-medieval activity were at least one sherd of Cistercian ware (16th century), a possible piece of 16th century stoneware and a few fragments of tin-glazed earthenwares (17th/18th century). Some of the black glazed redwares present may also be quite early but in small fragments are not easily identifiable. Some of them could be 18th century and fragments of creamware, one or two of white salt-glazed stoneware and a possible



Medieval Pottery from Field 18

fragment of Nottingham type stoneware also point to 18th century activity. Medieval sherds, the majority unglazed, made up 8 to 10% of the assemblage and have a broad date range of 13th to 14th century.

Metal objects made up just over 9% of objects from the field. More unusual finds were a Romano-British trumpet brooch and part of a 16th/17th century candle snuffer. An intriguing item was a copper alloy disc with three securing rivets which had been crudely centrepunched. This was faintly engraved with a hand or glove with two forefingers extended, below a scroll containing a motto which appeared to read 'MANENT OPTIMO COELO' — possibly the crest of Miller of Glenshee. The style of lettering suggests a 17th or 18th century date. There were two lead spindle whorls and a 16th century lead button with cross and pellet decoration. The foot of a vessel in lead bronze could also date to the 16th

century while another vessel foot is possibly later. This field contained the largest quantity of lead shot (23 pieces) ranging in diameter from just over 13mm to over 19mm. The assemblage included two 'slugs' and a 19th century hollow bullet. Amongst the coins was a 12th century Scottish silver halfpenny dating from between 1150 to 1195, sixteen turners ranging in date from 1609 to 1663, a silver shilling of William III (1695-1701) and several pieces of small change of George I - III. The most recent were five coins of Queeen Victoria.

Glass was the usual mixture of bottle and vessel glass impossible to date closely. There were also several fragments of thin window glass which could be 17th - 18th century, Ithough thin glass continued in use into the 19th century.

As might be expected considering the other early postmedieval material present several of the clay pipe fragments were stems with large bores typical of 17th and early 18th century pipes. There were also two partial marks identifiable as Thomas White of Edinburgh a well known 19th century maker.

Lithics were only a very small proportion of finds from this field and were mainly waste material. There was however type of drill bit, known as a *meche de floret* (photo, right), which is typical of the Later Mesolithic period. Other stone objects were a whetstone and an unusual plano-convex bar-like tool made of slate. Neither of these items can be dated.



Two views of meche de floret

It is possible that the high concentration of finds is linked to the in-filling of the pond.

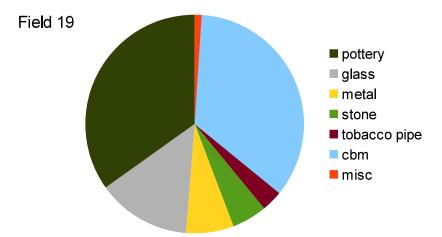
FIELD 19

This was metal-detected in 2007 by Glenn Foard and team (as Field 3).

This field was part of Henry Collingwood's Branxton Hill Farm in 1823 when it was known as 'Horse Field'. It is marked on Ordnance Survey 1st edition *et seq*. as the find-spot (in 1810) of a *'pit of bones and leaden cannonball*', though the cannonball was in fact found separately 'near' the site of the pit, which was in the Horse Close, not Horse Field. The Ordnance Survey seem to have taken the directions of the 70 year old Mr Rankin who claimed to have found the pit 'four fields to the west of the vicarage' very literally. There is a *Horse Close* on the north side of the Branxton-Monylaws road, which could also be construed as being four fields distant.

Only a 100 metre wide strip at the eastern side of this field was covered by the walkers. Thirteen metal objects were recorded by grid reference but whether the metal detecting covered the same extent as the walking is not known.

Fragments of pottery and cbm each made up about 35% of items recovered from this field. There were three possible medieval fragments of pottery. White-glazed whitewares were the most numerous with lesser quantities of redwares although a number of these were the early type also seen in Field 18 (see above), so a relatively small proportion of the later



red kitchenwares was present. There were a number of sherds which could possibly be 18th century but nothing clearly diagnostic and the remainder were a mixture of table and utilitarian late post-medieval wares. Ceramic building material was a mixture of probable field drain with some tile.

Glass included a few possible early green bottle fragments with otherwise the usual mixture of bottle and a few tableware fragments, some relatively recent. Amongst the lithics was a small thumbnail scraper of possible later Mesolithic date.

Five coins were recovered of which three were mid-17th century turners, another a 1797 cartwheel penny and the fifth 1945 thruppenny bit.

One of the most interesting metal finds was a fragment of 17th century copper-alloy bridle boss, intriguingly paralleled by a complete example from a Colonial plantation called Angelica Knoll in Maryland, Virginia (www.jefpat.org). A possible pipe-tamper (incomplete) could also be this early but



is not closely dateable, and a silvered openwork lid, possibly from a pomander has been dated to the 18th century. Possibly the earliest metal object from this field was a lead spindle whorl which is likely to be medieval. There was also a single piece of lead shot. The iron objects are likely to be bits of farm equipment/tools and include the heel-tap from a boot.

During the 2007 investigation by Glenn Foard's team two 'lead composite' (iron dice-cored) cannonballs were found near the track (i.e. on east side of the field), one towards the northern edge and one to the south. One weighs 576g and the other, damaged either by impact or later ploughing, weighs 387g.

The cannon balls found in 2007 were considered as 'proving we were on the battlefield' (Foard G and Curry A . 2013, 107). A similar cannonball had been found in 2001, further east (Pollard and Oliver 2002). These are typologically 'in period' for 1513, though it cannot be undisputably stated that they had lain undisturbed in their findspots since the battle. The two found in 2007 could have been found and placed on the field edge during later ploughing, or picked up elsewhere as 'curiosities' and subsequently discarded.

The field name suggests it was pasture in the 17th-18th centuries. The bridle boss could be associated with this use and the coin finds also fit with this date. The field boundaries are regular and probably the result of enclosure in the late 18th-early 19th century – Rankin was engaged in planting hedges and digging ditches and drains on what had in his youth been open land.

FIELD 21

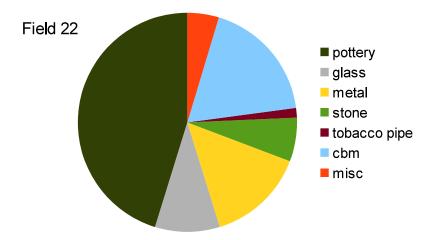
This was part of Henry Collingwood's Branxton Hill farm in 1823 and was called 'Low Onstead Field'. It is south-east of the derelict 'Low Onstead'. This appears to be of 18th-19th century date and to have incorporated a water-powered thresher. The field does not appear to have been systematically metal-detected as all the nine finds were made by one detectorist.

The earliest identifiable find is a turner of the mid- 17th century. Other finds are late 18th century or later and include part of a copper-alloy working horse harness buckle, two buttons - one a hollow form military emblem (arm with hand holding spear/lighting bolt), and an iron splitting-wedge. The only lead items were two melted blobs.

FIELD 22

This was called 'Town Field' and was part of Henry Collingwood's Branxton Hill farm in 1823.

It was walked in both 2013 and 2014. It is not known if the same grid layout was used. Metal-detectors accompanied the walkers in 2014 and finds were recorded by grid square, or unlocated.



Pottery made up over 45% of the assemblage from this field and cbm about 18%. There were 31 sherds of medieval pottery but over 60% of the pottery sherds were white-glazed whiteware. There were far fewer redwares and, as for Fields 18 and 19, a number of these were the earlier type. A few other sherds were 17th/early 18th century types (black glazed redware, possible Staffordshire type wares and stoneware).

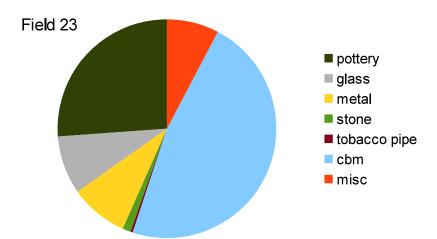
The glass recovered was the usual mixture of bottle and vessel glass (blue, green and clear) with a few pieces of window glass. Lithics made up about 6.5% of the field assemblage. None of the pieces, which included two scrapers and two borers, was chronologically diagnostic (i.e. they could be anywhere within the later Mesolithic to Early Bronze Age date range). There was also a whetstone which, other than being after the introduction of metal tools, is essentially undateable.

There were four turners amongst the coins, a bawbee of Charles II, a number of 18th century halfpennies, a 1921 penny and a 1953 sixpence. Other metal finds included six pieces of lead shot, eight buttons and a shoe buckle.

FIELD 23.

In 1823 this was called 'North Banks', and was part of Henry Collingwood's Branxton Hill Farm.

This field was detected by Glenn Foard and team in 2007 as Field 5. The 2007 investigation yielded a large 19th century cast copper-alloy button (loop broken) with an unidentifiable crest (19C), part of a large draught horse harness buckle, and a very worn? Georgian halfpenny counterstruck with 'WL'.



This was one of the less productive fields and nearly 47% of items recovered were fragments of ceramic building material or other unidentifiable worn ceramics. The majority of pot sherds were white glazed whitewares with only a small number of redware fragments. The glass included some fragments of car windscreen.

Metal finds included a model/brooch of a dog's head with stone eyes, four pieces of lead shot, a drawing-pin and part of a ball-valve mechanism. A shield-shaped piece of lead is probably part of working-horse harness decoration.

FIELD 26

This was part of Henry Collingwood's Branxton Hill Farm in 1823, when it was called 'High Onstead Field'. The field is on the north-east slope of Branxton Hill, with Branxton Hill Farm at its south-east corner, OS 2nd edition shows it crossed by track to Branxton Steads

Flodden Hill and Flodden Field: excavations, fieldwalking and metaldetecting, 2009-2015

and with a plantation/shelter belt along its southern side.

It was metal-detected in 2001 as part of the 'Two Men in a Trench' programme. The locations of a large number of detected finds are shown on plan in the published account of this investigation, but the only ones mentioned are a button 'typicalof the garb of a medieval Scottish soldier', a square of iron interpreted as coming from a cloth-covered defensive 'jack', and a lead composite cannonball.

Only three finds are recorded from detecting during the Project: a large flat copper-alloy button of 18th–19th century date, and two iron objects, one a swivel ring which is likely to be from 19th-early 20th century working-horse harness.

A concentration of metalwork might be expected given the proximity of the field to Branxton Hill Farm but there is no further detail of the 2001 finds. It is possible that the cannonball had 'migrated', having been found elsewhere on the farm.

FIELD 30

Part of Branxton Moor estate, this field was called 'Shank' in 1848. A former road from Milfield to to Branxton ran along its eastern boundary. This field was metal-detected only.

The earliest finds were two worn half pennies, one probably George II (1729-54) and one George III (1806), which could have had a long period of circulation. There was one piece of lead shot. Most interesting is a commemorative token/medal in copper-alloy featuring three profiled heads on one side encircled by 'GREY RUSSELL & BROUGHAM THE FRIENDS OF THE PEOPLE', on the other side a thistle, and 'CORRUPTION DESTROYED JULY 17 1832'. This commemorates the Reform Bill for Scotland gaining Royal assent. There were three buttons, though one may be a decorative nail from horse harness, and horse-harness buckles (19th/20th century). The 20th century is also represented by at least three tyre valve components, a mouth-organ and part of a penknife. A large cast brass spigot could be 18th century.

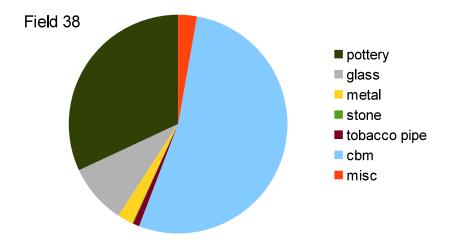
While there is a strong element of 'agricultural' detritus, some items could derive from the former road.

FIELD 38.

Part of Branxton Moor Estate, together with F39 this is marked on the 1780 Enclosure plan as 'Battle Bush Here the hottest part of the Battle of Flodden field was fought' (NRO 2DE17/1). It was called 'Low Moor' in 1848.

About half the field was gridded and covered by the field-walkers. Out of 61 metal items recovered 21 had no locational data at all and 17 had grid references, so it is uncertain how much of the field was covered by the metal-detectorists.

After Field 18 this was the most productive field but over half of items recovered were fragments of cbm and other unidentifiable worn ceramics. There were also a few fragments of slate scattered across this field.



Pottery fragments, many very small, made up about a third of items recovered. About 70% of the sherds were white glazed earthenwares. A few of these were possible creamwares and pearlwares (later 18th and early 19th century types). Redware sherds made up less than 15% of the pottery, most with internal white slip and many of these with brown mottling. Much smaller quantities of plain black and brown glazed redwares were present. Miscellaneous other pottery types included some fine china and stoneware jam jars.

Glass finds were a mixture of bottle fragments.

A number of structural metal-work items included a cast iron gutter fragment and 'holdfast' roofing nails. There was a chain link made from two horseshoes welded together and bits of horse harness including a buckle. Some other items were probably parts of agricultural machinery. There was also the socket and part of the blade of a hoe. Two of the seven buttons recovered were four-hole dungaree buttons, these and the others were probably lost by farm workers. A silver-plated cutlery handle and what appeared to be a locket



were more domestic items. Three shotgun cartridge paper/card case ends were also recovered and a bone domino..

Sir David Smith (c.1820) says of fields F38 and F39:-"The Battle raged chiefly near Branxton, & principally on this ground, belonging to Sir Carnaby Haggerston, called now, in consequence there of, "Battle Bush", the hottest part of the battle having been fought here; partly in proof of which, fractured helmets & broken pieces of Armour are occasionall turned up — The S.E. Angle of this field, is called "Bloody bush Nook" (Alnwick Castle DNP MS 1874/8). In view of the Project's finds, the reliability of Smith's information may be questioned, particularly as his accompanying plan places Branxton Moor farm (which is in Field 68) and Branxton South Side some 400m too far east..

FIELD 50

The field is on the south-east side of King's Chair, part of the Flodden Edge ridge. It was

metal-detected on several occasions.

The earliest item recovered was a cast copper-alloy strap union of late Iron Age date (100BC to 100AD) see right. There would originally have been three loops. A substantial cast lead-alloy circular lobed object is one of the few items recovered during the project with a date range which includes the 16th century (though it could be later). It has been tentatively identified, by comparison to objects from elsewhere, as a mount from a ceiling or similar ornamentation. Another lead-alloy object is a solid cast



button with twelve petals encircling a central boss. It is rather heavy to be one of a set of buttons on personal dress but may be for some particular use on its own. It has been dated to the 17th century by our independent specialist.

A lead-alloy shield-shaped mount was originally identified as a livery badge but has now been identified as the backing to a sheet brass draught-horse harness decoration known from elsewhere

(http://www.nationalhorsebrasssociety.org.uk/Core Horse-Brass/Pages/cast_brasses-1506.aspx.)

Seven large flat lead-alloy, probably pewter, buttons with back loops were recovered. These are of a size and form broadly mid-18th to mid-19th century, and could derive from farm workers' clothing. Two hollow-form copper alloy buttons are late 19th-mid 20th century military types embossed with Royal Arms General Service type.

30mm

Harness mount backings, right F 50, left, F 57 showing rivet on reverse side

Two copper alloy coins were heavily corroded or worn. One was a farthing, possibly Victoria and

late 19th century, and the other a halfpenny of George II (1729-54). There was one piece of small lead shot. There were also two large copper alloy tarpaulin eyelets, a dessert spoon and the base of a cardboard 12-bore shotgun cartridge case.

A group of 31 lithics were recorded from Field 50. There is no locational data for these items which presumably were collected by one or more of the metal detectorists. Three scrapers and two serrated blades were not chronologically diagnostic but six of the other pieces (blades and bladelets) could be later Mesolithic.

The military buttons might perhaps derive from use of Flodden Edge for military fraining or have come from greatcoats retained after demobilisation in either WW1 or WW2 and worn by agricultural workers. The large eyelets could also be from military bivouacs, though tarpaulins used to cover harvest wagons are just as likely to be a source. The majority of other finds point to 18th-20th century farm activity.

FIELD 52

This was part of the fields already partitioned by 1780 on the west side of the Milfield-Monylaws road and south side of East Flodden Hill

The only coins are one of Victoria (young head), a 1924 sixpence and a halfpenny of 1960. Two copper-alloy buckles are saddlery/horse-harness types of the late 19th-early 20th century; two pieces of cast lead alloy with iron pins are the backing for working horse-



Horse harness buckle teaspoon.

harness mounts of the same date. There were four buttons - two plain, one with a lion passant and another hollow-form with the royal coat of arms (illustrated right). These are mid-19th century or later. A strip of aluminium was possibly a livestock ear tag.

There were also two fragments of cutlery – part of the handle of a spoon/fork, possibly 18th century, and a late 19th-20th century



There was no clear evidence for pre-19th century activity. Most finds relate to later agricultural use.

FIELD 54

This was called 'North-West Moor Field' and was part of Henry Collingwood's Branxton

Hill Farm in 1823. It was metal-detected by Glenn Foard's team in 2007 as Field 7 but not detected or walked during the Project.

None of the 2007 finds were battle related. They included the front and back plates of a very corroded large copper alloy flat button with machined decoration (late 18th -19th century), a broken cast copper-alloy turning catch (as in Field 66) and what at first appeared to be a flat cast copper-alloy 'mount' in the form of a lion passant (right). This is in fact the central motif from a circular



horse-brass: identical but complete examples can be found on the internet.

FIELD 57

This field was part of G.A. Askew's Mardon and Branxton estate in 1826 and was called Mardon Bank. This was the last field metal-detected in 2015.

Eleven coins and ten other items were recovered. The coins included the only Roman coin recovered during the project – a silver denarius of Domitian (95-96 AD). Others were three turners of Charles I or II, three coins of George III - a shilling (see below), a penny and a

halfpenny ranging in date from 1771 to 1816 - and a halfpenny of William III (1698 – 1701). The remaining three halfpennies were not closely dateable but are between 1695 to 1860.



The other items included what has been identified as an Iron Age or Roman votive object in the form of a miniature axehead. The only item found during the Project which could conceivably be directly related to the battle was

recovered from this field: a belt fitting

with pendant loop from which a sword or dagger was hung (see right). However, swords and daggers were commonly carried in daily life at this period, and this need not have any connection with 1513. A cast copper-alloy strap fitting of 16th to 18th century date was also recovered. Other items included possible fragments of copper alloy vessels and part of another heart-shaped backing for horse-harness decoration (see Field 50).



FIELD 59

This field was part of G.A. Askew's Mardon and Branxton estate in 1826 and was called 'West Intake Close'.

A single metal detectorist seems to have mistakenly searched this field, instead of the designated F57. A few objects were left in the field and recovered later. These seem to have included several scraps of lead, a cast iron fragment (probably agricultural machinery), and a press stud, but the locations given for the finds are ambiguous.

Metal-detecting in 2007 recovered a Continental imitation of an Edward I silver penny dated 1261-94. There were also three probable turners and two Georgian coins, five others were not identified. Three fragments, including a foot, of copper alloys vessels are noted in the finds list along with few buttons and a number of unidentified items of both lead and iron.

FIELD 62

This is part of Branxton Moor Estate and was formerly two fields, in 1848 the northern one called 'East Middle Field' and the southern one 'Gibbeys Corner' (NRO 2DE 15/4).

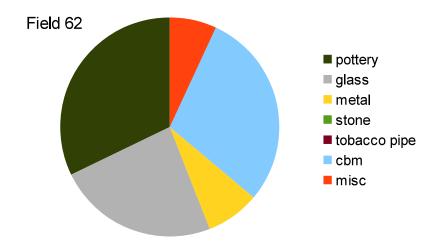
There were no lithics or clay pipes recovered from this field. Pottery and cbm were the two largest groups followed by glass with smaller quantities of metal and miscellaneous items. The majority of pottery sherds were white-glazed white earthenwares with only a small number of redware pieces. There was a single medieval sherd. The cbm all appeared to be field drain



Flodden Hill and Flodden Field: excavations, fieldwalking and metaldetecting, 2009-2015

and the glass a mixture of window, vessel and bottle glass, much of it probably relatively recent.

There was a single coin – a very worn penny, a plated horse-harness buckle, and a gin trap.



FIELD 63

This field was part of Henry Collingwood's Branxton Hill Farm in 1823, called 'North East Moor Field'.

Only relatively few finds were recovered with pottery, dominated by white-glazed earthenwares, making up a very large proportion. The single metal find was a buckle, probably from horse-harness. Fragments of field drain and miscellaneous bottle fragments were also present.

FIELD 66

In 19th century this field was known as 'West Fairney Beds'. It is bounded by roads on south-east and southwest sides.

The earliest identifiable item was a cast lead spindle whorl with decoration, possibly late medieval to early post-medieval (15th to 16th century). Post-medieval agricultural use accounts for a wing-nut, cotter-pin, draw-hoe head, tarpaulin eyelets, a .410 shotgun



cartridge case and backing fragments from brass harness decoration (see above). There was also a probable aluminium livestock eartag. Miscellaneous offcuts/scraps of lead and iron eg. nails, strap, scissors blade, small adjuster nut and spindle/compass-point are general farm/domestic detritus. Only one coin was recovered – an Irish halfpenny of George III.

FIELD 67.

Part of Branxton Moor, in 1848 this field was divided into 'West Middle Field' and 'Middle West Field' as the result of enclosure after 1780. It lies west of the route leading over Flodden Edge north-west towards East Learmouth and the Leet ford crossing of the Tweed.

The earliest object recovered was a worn base silver Scottish 1/3rd groat probably of James V (1526-39). All the other items which could be identified and broadly dated were of much later date - 18th/19th century or later. They included a large brass buckle, probably part of working horse equipment, as was a fragment of a lead alloy backing for a harness mount with metal pins for attachment. A more unusual object was a Simmonds joint from folding hood, perhaps a carriage (another was found in Field 5). There were also three buttons, a pop-rivet, wire, a small heart-shaped padlock faceplate and a fragment of ploughshare.



FIELD 68

Branxton Moor Farm occupies the south-west part of this field, known in 1848 as 'East Fairney Beds'.

There were two late harness buckles and two pieces of cast lead alloy backings for harness mounts, one with the maker's name 'ST....L Saddler Wooler'. The ferrous items all appear to be cast iron or mild steel, probable farm machinery detritus. The only items of shot were one small lead ball, from a pistol or smallbore musket, an unfired copper-jacketed ..303 bullet hammered flat, and what might be a ball reshaped into a four-sided slug. One flattened scrap of lead may be a heavily impacted bullet. Four buttons – one openwork possibly not a button, others



are 19th-20th century, one military has an arm holding a spear and the motto 'Advance with



Lead-wrapped pebble

Courage'. Another, stamped 'Birmingham' has a hand holding a sword with an impaled head (see above). Three coins range from one late 17th century turner to George III shilling of 1817 and an 1866 halfpenny. Other items include parts of a mouthorgan, a curtain ring, drawer/cupboard fittings and part of a spoon or fork. Lead scraps all appear to be offcuts or tile clips. There was one piece of cast lead shot, and a piece of stone partly wrapped with lead, which has been identified as a form of early shot, possibly related to the battle.

The majority of the finds from this field can probably be associated with occupation of the farm and working the land from the 18th century to the present day.

Discussion

The relatively small number of artefacts of medieval to early post-medieval (up to 17th/early 18th century) date are mainly from the fields immediately adjacent to Branxton - F7, F18, F19 and F22, and can be attributed to the detritus of everyday life in the village. Away from the village such early finds were scarce, with a medieval coin from F2, another from F14, and single, possible early 16th century finds, from F50 (King's Chair), F4 and 5 (foot of Flodden Hill north side), and Fields 66 and 68 (Branxton Moor). A 16th century coin, post-dating 1513, came from Field 67 and single, possible 17th century, items from F1 and F50.

None of the items recovered during the Project could be confidently related to the battle, though the sword-hanger from Field 57 is perhaps the most likely candidate. The absence of battle-related finds is not altogether surprising as once the armies had left the area is likely to have been thoroughly scavenged by the local population for anything usable or recyclable. It may also reflect the extent of the landscape sampled - for various reasons many of the fields around Branxton were neither fieldwalked or metal-detected, and several fields were not covered systematically over their entire area. More fundamentally it may however mean that, as has recently happened at Bosworth, the 'accepted' site of the battle has to be viewed more critically and that this may lead to a radical reassessment of its location.

A note on the finds identification

The majority of the finds recovered from field-walked fields were identified at the cataloguing sessions referred to above. Most of the finds from the fields which were only metal-detected were identified and listed by John Nolan. A relatively small number of artefacts were selected to be sent to 'outside' specialists. The criteria for selection were:

- Coins which could not be identified, or which it was hoped could be more closely dated (Richard Brickstock)
- Militaria (Dr. David Caldwell)
- A selection of metal objects (less than 100) whose identification and dating was uncertain (a number remained so) or which it was thought needed a second opinion (Gail Drinkall)
- Lithics, this covers fragments of chipped stone and possible stone artefacts (Dr Rob Young)

Section 6. Overall conclusions.

The small number of finds which can, with varying degrees of confidence, be associated with the events of late August-early September 1513 is intriguing and raises some fundamental questions as to whether accepted locations of the 'Scot's Camp' and the 'battlefield' as currently defined, are matters of indisputable fact.

For the 'Scots Camp' (Site 1) and the putatively associated Sites 2 and 3, the nature of the material detritus which an early 16th century army might potentially leave to mark its presence or passage - clothing and temporary shelters, wood, horn and hide utensils - argues against a significant surviving archaeological 'footprint' of discarded hardware. Much artefactual material would be organic and even if not subject to subsequent pilfering would be unlikely to survive except in waterlogged soil conditions. Also, at Flodden the inference from 16th century accounts is that tents - most probably those of the magnates – and other infrastructure including stores and provisions, were moved from the army's first location prior to the battle, and the debris of the original camp, perhaps including the temporary shelters of the common soldiers, were then burned.

For the battlefield itself, looting of the dead by victorious soldiery was a well recognised activity both in medieval and later times. Sixteenth century accounts of the search for James' body explicitly mentions the problems of identifying corpses stripped of their clothing, and some salvaged armour was actually sold on the field (CSP). It may be supposed the same thing occurred where any servicable weaponry was concerned, and that after the pick of the spoils had been taken the battle landscape would then have been scoured over time by local peasantry for whatever else could be repaired, adapted, recycled, or sold. Scott's description of the battlefield of Waterloo, which he visited shortly after the battle of 18 June 1815, provides an apt illustration of the effects of post-battle salvage-hunting:

'All the ground is still...covered with cartridges, old hats, and shoes, and various relics of the fray which the peasants have not thought worth removing' (Grierson).

By this time all the dead men and horses had been either burned or buried, and helmets, cuirasses and weapons were being sold as souvenirs in local hamlets.

What would remain after this scouring would be small items too deeply trodden and embedded in the mud to be seen. At Flodden these might include arrowheads and shot. Cannon balls in the field were intended to bounce and roll as their force was expended while still being capable of causing injury, as graphically evidenced in Roger Fenton's Crimean War photographs of shot-strewn landscapes, though it is quite possible that in 1513 some may have embedded themselves in the wet ground. The pre-enclosure 'battlefield' terrain appears to have had extensive areas of largely open moor, and it may be suspected that the effects of heavy rainfall on such landscape would differ from the effects of such weather on the present land-drained, ditched, deep-ploughed, enclosed, and improved fields. It is consequently difficult to be confident that recent hydrological and geological-based interpretations suggesting waterlogged ground as a factor in the Scottish defeat should be too readily accepted, particularly when no 16th century accounts mention men floundering into bogs. Consequently after 500 years, in an area continuously occupied and farmed, there

can be little expectation of significant artefactual remains for a conflict which, though undoubtedly ferocious and destructive of lives, lasted a matter of hours.

Excluding finds made prior to 2009, only one possibly 'military' artefact of the period has been recovered during the Flodden500 fieldwork – a buckle with pendant loop perhaps for attaching a scabbard to a belt (Caldwell Cat.99). Even this may equally have been an item of civilan dress, or battlefield salvage finally deposited at some distance from the site of initial loss. No arrowheads or burial pits have been found. Of the pre-2009 finds only three composite cannon balls (Caldwell Cat. 34, 35, 92) have a strong claim as 1513 relics – and interestingly all three came from the western side of the designated battlefield. However none of these were necessarily found where they originally fell. The 2007 finds came from the north and south margins of Field 19 and towards a farm track, perhaps found during ploughing and redeposited at the end of the furrow. Nor can it be proven that these cannonballs actually date from September 1513. They are of a type used from the late 15th century until at least the mid-16th century and there were armies in this landscape on other occasions: Branxton tower (with others) was destroyed during James' earlier invasion of 1496 – destruction that has been attributed to the Scottish artillery (Reese 2013, 47), and were back besieging Norham the following year. In 1542 and 1545 English armies rendezvoused at 'Crookam Moor Stone' or the 'Standing Stone on Crooke a More' - later known as the 'King's Stone' -just north of the A697 at Pallinsburn (State Papers, Henry 8, 629). It is interesting that two recorded 19th century finds of lead cannon balls, though not precisely located, also appear to have been from the western side of the 'battlefield' (though these may have both been the same item!).

Other finds of cannon ball finds (between 8 and 10 items - two possibly reported twice), were made in the 19th century but their present whereabouts are unknown. Of the reputed collection of 'about 40 and 50', said to have been found in the field west of Branxton Church during the late 19th-early 20th centuries, Coldstream Museum has nine, apparently from this group, one of which is lead. The others are cast iron, and exhibit such marked differences in degree of corrosion/patination as to suggest to the writer several have not spent any period of time in the ground, if ever buried at all, and cannot be regarded as coming from an 'assemblage'.

Taking the finds distribution together with the highly questionable identification of 'Piper's Hill', it might be suggested that battlefield fieldwork needs shift its focus away from Branxton itself, and extend further west. Here there is a route from, or to, the Lees ford at Coldstream, passing East and West Learmouth and Monylaws, across Branxton Moor to West Flodden and ultimately Milfield. This crosses Flodden Edge in a saddle between King's Chair Hill on the north-east and East and West Flodden Hills on the south-west. It is possible that in the sixteenth-century, terms like the 'hill' or 'heights of Flodden' could have embraced the entire ridge, from modern Flodden Hill on the east to East and West Flodden Hills or even Monylaws Covert on the west. The description of the Scots army given in the 'Trewe Encountre' may reflect the high points of the extended ridge:

'enclosed in three parties, with three great mountaynes, soe that there was noe passage nor entre unto hym but oon way'

It might be hypothesised that encamped astride this 'pass', or on its southern slopes, as well as controlling the ridge of high ground (Flodden Edge) the Scots would have commanded both the Milfield plain to the south-east, where a counter-attacking army might reasonably be expected to appear. It would also offer over-sight of, and some control over, the road back to the Lees Ford near Coldstream – either as a victorious returning army or, in dire circumstances, a convenient means of retreat – particularly for the artillery and baggage train. This is not to say that the Scot's 'camp' did not include modern Flodden Hill: the eastern crest would have provided an important observation point from which any activity between Milfield and Ford and beyond could be monitored. It has also been suggested in this report that existing, upstanding, earthworks such as those of Site 1 could well have been utilised by the Scottish army, though more perhaps because their rampart banks offered some shelter from the elements than for any defensive qualities. It can also be speculated that such re-use might have involved linking, perhaps by turf banks, other prehistoric earthworks on the hill such as Sites 2 and 3, into a rapidly constructed enclosed 'camp'.

Whether or not the Scots artillery was literally sited *on* the hill remains contentious. In the view of the writer, there is no convincing archival or archaeological evidence for this, nor does it seem there would be any practical or military reason to have 'dug-in' artillery, particularly siege pieces, on the heights. The excavations at Site 1 have demonstrated that there was no corner bastion or other evidence for use as an artillery fortification. Nor is there any scientific dating or artefactual evidence to suggest that the inner enclosure was built in 1513. However, mindful of the well-worn adage that 'absence of evidence is not necessarily evidence of absence', there is always the possibility that this view could be overturned by further fieldwork. The 'artillery redoubt' interpretation may in any event by now be so well-entrenched as to have become an unquestionable part of Flodden lore.

Sources

AA. Archaeologia Aeliana, New Series, Vol. 3.1859.

Archaeological Survey and Consulting (AS&C), 2014 Geophysical (Total Field Magnetometry) Survey Report, Flodden 3, Flodden, Northumberland, (FLO14c) Manchester.

Burgess, C. 2009 Summary:archaeological excavations 2009 [www.iflodden,info]

Burgess, C. 2013. Excavations at Flodden Field Site 2 Project Design and Method Statement August 31st 2013 V1.0.

BRO. Berwick Records Office, NR01216 B2/4/5 Ford Estate accounts.

Burgess, C. 2013. Excavations at Flodden Field Site 2, Project Design and Method Statement, August 31st 2013. V1.0, 2.

Caldwell DH, 2016 A Report on lead-shot and other possible military material from the supposed area of Flodden battlefield. 2016.

Cool, H E M and Price, J, 1998. 'The vessels and objects of glass' in Cool and Philo 1998, 141-194,

Cool, H E M and Philo, C, (eds) 1998. Roman Castleford Excavations 1974-85. Vol I: the small finds, Yorkshire Archaeology 4, Wakefield.

CSP . Calendar of State Papers Domestic. Letters and Papers of Henry VIII, 1, 668-9, 4442 (1862).

Ekwall, E. 1974. Eilert Ekwall, The Concise English Dictionary of English Placenames. Fourth Edition. Oxford, 1974.

Ferguson, J.A. 2013 *The Battle of Flodden & Thomas Howard, Earl of Surrey, 2nd Duke of Norfolk (1443-1524) Contemporary Letters & Documents.* Coldharbour Press October 2013.

Grierson, HJC. The Letters of Sir Walter Scott. London 1932-37.

Guard Archaeology 2014 Flodden 500 Project, Flodden Hill: Geophysical Survey, Project 3669, Glasgow.

Goodwin, G. 2013 Fatal Rivalry, Flodden 1513: Henry VIII, James IV and the battle for Renaisssance Britain, London.

Gordon, A. Itinerarium Septentrionale, or A Journey thro' the Counties of Scotland and those in the North of England (1726).

Hall, E. 1548 The Union of the Two Noble and Illustre Families of Lancastre and Yorke.

Harding, D. 2012 Iron Age Hill forts in Britain and Beyond Oxford University Press.

Hodgson, J. 1813 'Northumberland' in Brayley and Britton, *The Beauties of England and Wales, or Original Delineations, Topographical, Historical, and Descriptive of Each County,* Vol.12, Part 1, London.

Hope Dodds, M. Prehistoric Section in *History of Northumberland*, Vol. 14,38-39. 1935.

Hunter Blair CH. 1966. History, in Norham Castle Northumberland. DoE Ancient Monuments and Historic Buildings. HMSO London.

Jobey, G. 1960. 'Some rectilinear Settlements of the Roman Period in Northumberland' in *Archaeologia Aeliana* series 4, Vol. 38.

Jobey, G. 1963. 'Excavations of a Native Settlement at Marden, Tynemouth' in *Archaeologia Aeliana* series 4, Vol. 41.

Jones, Rev R. 1864 *The Battle of Flodden Field: Fought Sept.9, 1513,* Edinburgh and London.

Kilbride-Jones, H E, 1938. 'Glass armlets in Britain', Proceedings of the Society of Antiquaries of Scotland 72, 366-395.

MacLauchlan, H. 1867. *Notes, Not Included in the Memoirs Already Published on Roman Roads in Northumberland,* 28-29, London. [Society of Antiquaries of Newcastle upon Tyne copy with manuscript notes, shelf reference BD030A).

Oswald, A, Ainsworth, S, and Pearson, T., Iron Age Hillforts in their Landscape Contexts: a Fresh look at the Field Evidence in the Northumberland Cheviots, *Archaeologia Aeliana* 5th Series, 37. 2008.

Passmore, D.G. and Waddington, C. 2009. *Managing Archaeological Landscapes in Northumberland. Till-Tweed Studies*, Volume 1, 223-43, Oxford.

Pollard, T. and Oliver, N. 2002 'Flodden 1513' in *Two Men in a Trench, Battlefield Archaeology, the key to unlocking the past*, 118-183.

Price, J and Wilson, P R, (eds) 1988 Recent Research in Roman Yorkshire: Studies in honour of Mary Kitson Clark (Mrs Derwas Chitty), BAR British Series 193, 366-331.

Price, J, 1988 'Romano-British Glass bangles from East Yorkshire' in Price and Wilson 1988, 339-366.

PSAN. Proceedings of the the Society of Antiquaries of Newcastle upon Tyne. 1941.

RAF Aerial photograph 106G/UK.765.3 Sep'45. F/20"/541 SQDN. 4013.

Richardson LHTB. MA Richardson, *The Local Historian's Table Book*, Vol. III Historical Division, 99-100, Newcastle upon Tyne. 1846.

Ridpath, G. 1771 The Border-History of England and Scotland, deduced from the earliest times to the union of the two crowns, London.

Rose EPF and Nathanial CP (eds.) 2000. Geology and Warfare: examples of the influence of Terrain and Geologists on military operations. Geological Society 2000.

Sadler, J and Serdiville, R. The Battle of Flodden 1513. The History Press. 2013.

Saxton, Christopher 1579 'Northumbriae Comitatus' in Atlas of the Counties of England and Wales.

Smith. Sir David Smith Bt. Alnwick Castle DNP: MS 187A/8. Manuscript volume entitled *Northumberland Collection, Camps and Castles, Volume 2, D-K'*.

SUERC1: Scottish Universities Environmental Research Centre, Radiocarbon dating certificates: 40024-40032REP, 07/03/2016.

SUERC2: Scottish Universities Environmental Research Centre, Radiocarbon dating certificates: 40703-40708REP, 22/04/2016.

Sykes, J. 1866. Local Records; or, Historical Register of Remarkable Events, Vol. 2. Newcastle.

Stow, J. 1580 Annales or a Generale Chronicle of England from Brute Until the present yeare of Christ 1580.

The Antiquary, 1912 'Notes of the Month', Vol.48, 206.

Trewe Encountre, reprinted in Proceedings of the Society of Antiquaries of Scotland Vol.17 1867.

Vickers K.H. Parish of Branxton, in *A History of Northumberland*, Vol.11. 1922.

Weever 1631. William Weever, reprinted in John Weever, 1631 *Ancient Funerall Monuments within the United Monarchie of Great Britain, Diocese of Norwich.*Transcript of the Thomas Howard Memorial in Thetford Priory,834-840.

White, Robert. The Battle of Flodden, Archaeologia Aeliana New Series 3, (1859).

Williamson, T. 2007 Rabbits, Warrens and Archaeology Tempus, Stroud

Young a. Dr. R. Young. Catalogue of Iron Age/Native Pottery from excavations on Flodden Hill. June 2016.

Young b. Dr. R. Young, An analysis and descriptive catalogue of lithic material from the Flodden area and Flodden 500: additional lithic material from excavation and fieldwalking. 2016.

MAPS AND PLANS

Armstrong, Lt. A., and Son, 1769. A Map of the County of Northumberland with that part of the County of Durham that is North of the River Tyne Also the Town of Berwick and its Bounds Taken from an actual Survey and laid down from a Scale of an Inch to a Mile; By Lieut^t. And^w Armstrong and Son & Engraved by Thos. Kitchin Geog^r. 1769. Newcastle Central Library L912.2 94678 NR4 (maps).

Bell 1823, *Plan of Branxton Hill Estate in the County of Northumberland belonging to Henry Collingwood Esq.* Thomas Bell Surveyor December 1823. ZHE 31/1 [Northumberland Archives].

Blaeu, Joan 1646 Comitatus Northumbria Vernacule Northumberland

Estate plan 1848, Plan of Branxton Buildings Estate in the Parish of Branxton in the County of Northumberland, ZHE 31/2 [Northumberland Archives].

Horsely and Cay Map of Northumberland 1753

Saxton, Christopher 1579 'Northumbriae Comitatus' in Atlas of the Counties of England and Wales.

Speed, John, 1610 'Northumberland' in Theatre of the Empire of Great Britain, 1612.

Northumberland Archives. NRO ZDE 15/3. A Plan of Pallinsburn Estate belonging to G.A.Askew Esq. Surveyed in May 1795 by T. Rae.

Northumberland Archives. NRO ZDE 15/4. A Plan of Mardon and Branxton the Property of G.A. Askew Esqr. Surveyed in May 1826.

NRO ZDE 17/1. A Plan of Branxton Common in the County of Northumberland as allotted and awarded in 1780 by Richard Richardson, 1780. Northumberland Archives.

NRO ZHE 31/2 Lithographed plans of Branxton Moor and Branxton Buildings farms, August 10th 1848. 'Branxton Moor ex'tors of Mr Jamieson, Branxton Hill exec'tors of Andrew Elliot. Northumberland Archives.

NRO ZHE 31/1 Estate plan 1823, *Plan of Branxton Hill Estate in the County of Northumberland belonging to Henry Collingwood Esq.* Thomas Bell Surveyor December 1823. Northumberland Archives.

NRO ZHE 31/2 Estate plan 1848, Plan of Branxton Buildings Estate in the Parish of Branxton in the County of Northumberland..Northumberland Archives.

OS 1. Ordnance Survey First edition 1:2500 surveyed 1859-60

OS 2. Ordnance Survey Second edition 1:2500, Sheet XIV.1, Surveyed 1860, Revised 1896-7, Published 1898.

OS 3. Ordnance Survey Third edition (Revision of 1924) 1:2500, Revised 1922, published 1924.

Richardson, Richard, 1780 A Plan of Branxton Common in the County of Northumberland as allotted and awarded in 1780, NRO ZDE 17/1.

Saxton, Christopher 1579 'Northumbriae Comitatus' in Atlas of the Counties of England and Wales.

Speed, John, 1610 'Northumberland' in Theatre of the Empire of Great Britain, 1612.

Warburton, John, 1716 A New Map of the County of Northumberland.

APPENDIX A. Piper's Hill discovered – a Flodden myth.

The monument on Piper's Hill has, since its erection in 1910, become one of the most iconic images relating to the battle of Flodden, and serves as a focal point on what seems generally perceived to be the 'battlefield'. Yet there is no 'Piper's Hill' on early 19th century mapping – it is Stock Law, and that name persists on Ordnance Survey mapping to the present day. The processes by which Stock Law became popularly known as Piper's Hill illustrate the effect that romantic imagination has had over the past 200 or so years in mythologising Flodden.

Sixteenth-century accounts closest in time to the battle (Articles, Trewe Encountre, Brian Tuke's letter) are vague in their topography, using 'the hill' or 'a hill' to describe both the Scottish camp, and their redeployed battle position. Hall's account of 1548 is more specific than others in naming the Scottish army's second (battle) position, saying when the English army was drawn into line for battle they had 'the Scottes in the Southe before theim on the for sayde hyll called Bramston', and that during the battle Sir Edward Stanley 'captaine of the left wyng' 'clame up to the toppe of the hyll called Bramston'.

How precisely this name was applied in the early 16th century is unknown, and the spelling *Bram...* is intriguing when in other documents, medieval and later, the village name is spelled *Branxton*, *Brankeston* or *Brainston* - all variants have the hard 'n'. The discrepancy may be no more than a single mishearing being reduplicated, but can we be *certain* Bramstone and Branxton are synonymous?

Stowe is the only source to define a battle location still further, saying the King was slain 'at Bramstone upon Piperd hill' (Stowe 829), and this place name recurs occasionally in subsequent Flodden lore (eg. Ridpath 1771, 338), though interestingly Scott does not mention it in *Marmion*, published in 1808. Nor is it mentioned in Sir David Smith's notes on the battle, probably written c.1820, which is unsurprising as Smith located the battle on the north slope of Flodden Hill below King's Chair and the fields east of Branxtonmoor Farm.

Evidently mindful of Stow's 'Piperd Hill', in 1848 Robert White wrote in his account of the battle (White, 229) that south-west of the village is a hill of moderate dimensions

'...desirable for Surrey to occupy, which in former times may have been resorted to in the summer evenings by the piper of the place, who likely had his croft there; and if by the faint echo of some old tradition we could learn that the spot was once known as Piperd Hill, such intelligence might enable the modern pilgrim to identify the spot where Scotland's King...was slain.'

In July 1858 a party from the Society of Antiquaries of Newcastle upon Tyne visited the battlefield, and met with the Vicar of Branxton, the Rev. Robert Jones, who introduced the visitors to Andrew Rankin *'one of the churchwardens aged 70'*. Rankin was asked

"if he could point out the "Pipard Hill" of the old chronicles, where king James was said to have been slain, but he said he had never heard of such a hill – not from the oldest residenters – and his memory went back upwards of sixty years'.

However the legend was building, and a few years later in his account of the battle (1864) Jones wrote first of

"the small eminence to the right of the Church is what, in all probability, must have been known in those days as Piper's Hill for there is no other elevated ground on the battle-field that could have been designated by that name."

then

"an elevation of ground a few hundred yards from the church, supposed to be the "Piper's Hill" alluded to in history"

and then

'the rising ground spoken of as "Pipers Hill" and finally

"The eminence we now think proper to call "Piper's Hill" and "what is now considered to be Piper's Hill"

The subtle transition from *Piperd* to Piper's Hill, with its connotations of lament, is redolent of the romanticism which imbues so much Victorian writing on the battle. Jones was an assiduous, if not particularly critical, collector of Flodden relics and lore, and appears to have been anxious to promote associations between his church with events of the battle. The name Rankin too is strongly linked. A Tom Rankin is named as one of the finders of cannonballs in the field to the west of Branxton church in the late 19th and early/mid 20th century (Flodden Small Finds Archive 8), and in 1955 an Ordnance Survey field surveyor took information on the 1912 discovery of human remains in the Monument area from a 'Mr. Ranking, curator, Flodden Field' (HER752).

Jones' promotion of Stock Law as Stow's 'Piper's Hill' was successful. By 1908 the name was unequivocally applied to the hill where the Flodden Monument was to be erected (BNC; PSAN 3, IV), and has since been used unquestioningly as a location in describing events of the battle and battlefield topography.

Stow's source for 'Piperd Hill' is unknown. It may have arisen through confusion with the so called 'battle of Piperdean', a skirmish apparently fought in 1435, although the brief description in the HER adds the alternative date of 1536. Even the site of this 'battle' seems disputed, though a possible candidate is the area of 'Piperdean Hagg' marked by Armstrong in 1769, and Piperdean Lane (OS 1 onwards), both some 2.5km west of Monylaws.

APPENDIX B. 'Battlefield' finds reported prior to the Project

This catalogue of 'finds' is specifically concerned with reports of discoveries from the battlefield area, and are listed in chronological order of discovery.

- 1. **Sword, dagger and ring.** Said to have been taken from James IV's body on the field and given to the College of Arms in the late 17th century. Examined in 2013 by Dr. R. Moffatt, Curator of European Arms and Armour at Kelvingrove Art Gallery and Museum who reported that the sword and dagger were of later 16th century date, though the sword blade might be earlier. The ring was about the same date.(College of Arms Website). Replicas of these are at Ford Castle.
- 2. **Seal/intaglio.** A 'Ruby found on Flodden Hills' appears in a vignette on John Warburton's map of Northumberland published in 1716. Later this is described as a 'curious intaglio in Cornelian...found, some Years ago, near Flodden-Field' and thought by some as Roman, by others 'that it might have belong'd to some Commander of Note, slain there' (Gordon 1726, 147). A later reference to the same find says 'A fine seal, supposed to be Roman, was found here, and was in the possession of the late Countess Cowper.' [Brayley and Britten, 1813].
- 3. **Human remains**. A 'pit filled with human bones' was found in 1810, later given the location of being four fields west of the vicarage . No contemporary report has been found, though Richardson (1846, 99-100) cites 'Local Papers' as his source. The earliest reference so far found is in Brayley and Britten's *Beauties of England and Wales* (1813). Other sources give the find date variously as 'about the year 1817' (but see 9 below), or 1818 (AA NS. 3, 1859, 162), and even 1918 (Pollard and Oliver, 163). The location of this find is more fully described in the excavation report for Flodden Field 2012. This is Northumberland HER 751.
- 4. **Ring.** A 13th 14th century finger-ring, gold hoop broadening to faceted shoulders, irregular hexagonal bezel containing a sapphire '*Found on Flodden Field about 1818*' (Archaeological Journal Vol. 7, 72).
- 5. **Cannonball.** A cannon ball 'from Flodden Field' was donated to the Society of Antiquaries of Newcastle upon Tyne by Mr. Dixon Dixon Esq. of Unthank Hall, on 3rd January 1850. Its present whereabouts is unknown. (SANT Donations Book).
- 6. **Cannonball.** In 1858 it was reported that a cannon ball weighing 13lbs had been found (actual find date unknown) in "a bog at the foot of Branxton Hill, where Pallinsburn takes its rise". This may be the same as "A cannon ball weighing 13½ lbs, now in the possession of Watson Askew Esq., of Pallinsburn House, was found a few years since when draining the upper or west end of the bog" (AA N.S. 3, 233). This ball was apparently of lead (White 1859, 233), which seems unfeasibly heavy.
- 7. **French gold coin** of 1530. Again reported in 1858, this was supposedly found 'in a field to the south ...which it has been surmised, may have been dropped by some curious visitor from France, making a pilgrimage to the site of the battle.' (AA NS 3, 161). Large numbers of French mercenaries were involved in 16th century Scottish incursions.

- 8. **Human remains.** Several years previous to 1858, a pit was discovered in Branxton churchyard "in which men and horses had been hastily buried together" (Jones, 162). Presumably referring to the same discovery Jones also says:-
 - "...when widening the path to the church door, about nine years ago (ie c.1849, when the church was rebuilt), we came on a deposit of bones close to the surface. I counted several sculls within the space of a yard square heaped, one on another. I can give no reason for these bones being found in such a position, unless we consider them as the remains of some of the men who fell in the village, and about the church, when the battle was fought, hurriedly collected together and buried in a hole for that purpose, that they might rest in consecrated ground."

In 1910 this discovery was reported to have been 'a long and wide trench full of human bones' (PSAN3, IV, 216). The latter is evidently a conflation of Jones' account with that of the 1810 discovery. This is Northumberland HER 753.

9. **Lead cannon ball.** 'Another ball, in the possession of John Collingwood Esq., Cornhill House, was dug up near the spot where such a number of human bones were found, about the year 1817' (AA N.S. 3, 233).

It is not clear if the date 1817 is being applied to the cannonball, or to the discovery of the bones.

- 10. **Iron cannon ball.** 'I have an iron ball in my possession picked up by a man ploughing below the hill, nearly opposite the church' (White, 233)
- 11. **Iron and lead cannon balls.** 'I have in my possession two iron balls and a leaden one, turned up at different times by men ploughing or draining. The two iron ones were found, one on the side of the hill, the other over it, on which the Scotch took up their position, and the leaden one to the south-west of Piper's Hill.' (Jones, 70).
- 12. **Coin of Henry VIII.** 'I have also a silver coin of Henry VIII, in an excellent state of preservation, picked up by a young woman residing in the village a few years ago when working on the land, which evidently had lain on the field ever since the battle. It was found to the south, a few hundred yards from the top of what is now considered to be Piper's Hill, a little southwest of the church' (Jones, 71).
- 13. **Rapier or dagger.** When the Berwickshire Naturalists Club visited Branxton c.1882 their secretary was presented with 'a short rapier or single-edged dagger, broken at the hilt, found near the rectory' (BNC 1882-4, 442). Although not directly stated, the implication is that this was regarded as a battle relic. No date is given for the actual finding, and the mention of the Vicarage suggests this too may have a Rev. Jones connection.
- 14. **Human remains.** In June 1912 it was reported that a large number of bones had been dug up from two feet below the surface within 250 yards of the newly erected memorial. Skulls are mentioned, which predictably crumbled to dust. Further investigation was proposed after the crop was off the field, but there appears to have been no follow-up. (The Antiquary Vol. 48; PSAN 3, 5 (1912), No.18, 187). This is Northumberland HER 752, which cites a 1955 Ordnance Survey archaeological field investigation source as 'Mr Ranking, Curator, Flodden Field 9/11/1955' who claimed there were two pits. Perhaps this gave rise to the Northumberland HER site 24248 in

Field 15, for which the source is given as 'farmer'? There may be a connection between this discovery and the finds made by Pollard and Oliver in 2001.

- 15. **Cannon balls.** Two cannon balls from Flodden Field donated to the Society of Antiquaries of Newcastle upon Tyne by Miss E.S. Bolam (PSAN 4th Series, IX No. 1, p.19 (April 1939). It is always possible that these were 'inherited' finds, which might had been reported earlier.
- 16. **Cannon ball(s).** The Flodden Small Finds Archive (SFA) lists an iron cannonball of 6" diameter, now at Sunilaws Farm, Cornhill-on-Tweed, found by 'Raymond Brydon/Tom Rankin'. Tom Rankin may have been son of Andrew Rankin, finder of the bone pit, and who died in 1920. Raymond Bydon is the current owner of Sunilaws. The find is described as being

'One of between 40 and 50 discovered in the field to the west of Branxton church by Mr. Rankin during cultivation of the field in the late 19th and early/mid 20th centuries. Sizes ranged from 4" up to 6". The collection was distributed between Coldstream Museum and Museum in Newcastle (possibly the Hancock) in 1984 when the property was sold and only this ball (the largest type in the collection) was retained.' [Small Finds Archive SFA8].

The Small Find Archive suggests these might represent an ammunition dump, though it seems unlikely that such a mass of shot would have been abandoned on the field and remained undisturbed until the late 19th century. Nine cannonballs belonging to this collection are at Coldstream Museum, but appear too variable in condition to have all been found in a field or to all be over 400 years old and one seems to be part of a relatively late bar-shot. A single lead cannonball is comparable with those from 2001 and 2007, but lacks patina, suggesting long handling and it may have been one of those belonging to Rev. Jones. No museum in Newcastle has any record of accessioning cannonballs from Flodden at this date (*pers. comm.* Andrew Parkin/Lindsay Allason-Jones/Audrey Glasgow (Great North Museum/Society of Antiquaries/Tyne and Wear Museums)). The reputed number and provenance of these finds is therefore suspect.

- 17. **Sword.** In 2001 the JCB driver for the BBC's 'Two Men in Trench' investigations of the battlefield
 - related that years ago, when he had been clearing drainage ditches not far from where we were (Field 7), he had found an old sword. As he picked it up and realized what it was, it crumbled to dust in his hands'. (Pollard and Oliver 2002, p.164)
- 18. **Cannonball.** Metal-detecting in Field 26 in 2001 for the the BBC television series 'Two Men in a Trench' located a lead cannonball *'lightly scratched and scored'* (ibid., 159). Other finds from this fieldwork included from the Project's Field 7 *'a lead ball about the size and weight of a musket-ball. The Scots had brought an unspecified number of primitive muskets known as 'arquebuses' or 'hackbuts' to Flodden' (ibid., 160].*
 - There is however no record of hackbuts having actually been *used* at Flodden (David Caldwell pers. comm.) suggesting this is more likely to be indeed a later musket ball.
 - 'a metal button, green with age and about the size of a 1p piece. The simple design on on its face seems to have been inspired by buttons carved from

horn or bone, and typical of the type associated with the garb of a medieval Scottish soldier'.

'a small rectangular piece of iron about 3in x 2in. Unprepossessing to the untrained eye, it might easily have been overlooked: closer examination, however, revealed it for what it was – armour plating for the medieval version of the flak jacket.'

These came from F26 The published photograph of this object seems to show it had sharp corners, when surviving jacks have plates with corners bevelled to prevent fraying the guilting and fabric.

'a delicately-fashioned copper-alloy buckle, part of fastening for a leather belt or a piece of armour; half another buckle, also copper alloy, clearly stamped with a Tudor rose'.

Perhaps from metal-detecting in F7. The Tudor rose motif was suggested as perhaps commissioned by a wealthy man with money to display his allegiance to king and country, A number of small buckles were found during the project, some in this field, all of which are likely to be civilian casual loss items.

Two medieval coins, one silver and one bronze, again perhaps from F7.

Though neither is identified to date, these were suggested to perhaps be part of an individual soldier's pay.

- 23. **Cannonballs.** Metal detecting in Project Fields 7, 15, 19 by Dr. Glenn Foard and the Battlefield Trust in 2007 located two lead composite cannonballs at the north and south sides of Field 19.
- 24. **Polishing stone.** Found in 2009 in a field north of the Monument. Described as 'complex' in the Flodden500 Small Find Archive and dated '1513?'. This is a cobble with naturally formed hollows.

Discussion.

The Newcastle Society of Antiquaries' visited Flodden in 1858 and in the report of their visit (PSAN 1858,163) it was stated that lead and iron shot 'are found all over the field; and Mr. Jones (the Vicar) had samples to show his visitors'. The impression of a landscape strewn with spent ordnance has endured – a recent account of the battle states 'We have referred earlier to nineteenth-century antiquarian's comments on to (sic) the amount of cannon shot lying over the field at that time' (Sadler and Serdiville, 149, 229). However, apart from the questionable '40-50' apparently found by Mr. Rankin, the number of recorded cannon ball finds is actually small and some of these have probably been 'counted' twice. Jones makes several references to finds of shot which were then in his, or other people's, possession, but in at least two instances it seems most likely that the same item is being referred to. For example find 10 may very probably be one of the iron balls mentioned under find 11.

Of the finds from Pollard and Oliver's investigations in 2001 and attributed to the battle, only the lead cannon ball was available for examination at the time of writing (Caldwell Cat.92). Some other finds from these investigations, attributed to 1513, appear overly influenced by their 'battlefield' location. An 'arquebus' ball – likened in the published account to a musket ball – is surely just that, and like similar finds made during Project metal-detecting could date to a century or more after 1513. Buttons, buckles, and coins, particularly from the fields close to Branxton village and

farmsteads are, more likely to derive from the background 'noise' of local settlement over the centuries.

Reports of human remains being found are equally problematic the evidence is at best second-hand, locations are rather imprecise, and no physical evidence was ever retained. Subsequent embroidery of the stories may be suspected. The 1810 discovery came at a time when the 'battlefield' landscape was being ditched and drained for improved agriculture, which lends credibility to the circumstances of the find. But would Georgian labourers really have been so 'alarmed' at finding human bones that they immediately covered the find up – and would their employer have allowed them to leave field drains unfinished? The story changed later, and nearly 50 years later Andrew Rankin, one of the finders, described the 'pit' as a trench which they intersected from east to west, and being as wide as the turnpike road – implying the workmen cut fully across its width.

Attributing a pit of bones found in the churchyard *c.*1849 (Northumberland HER 753 to the battle seems dubious, when disposal of charnel material is the more likely reason. It is highly unlikely that horses would have been buried within the consecrated area.

The Flodden Small Finds Archive (SFA) includes finds speculatively attributed to the events of 1513 from further afield. These include a sword from the river Bowmont (SFA7), and a cast-iron 'cannon ball' from Crookham with a hole drilled into it, filled with lead (SFA4). This may have held a suspension loop, and could be a counterweight perhaps from blacksmith's bellows. Including two stone balls from Barmoor (SFA3) which have been suggested to be early 16th century cannon balls, and a polishing stone (SFA1) dated '1513?' which has naturally dished hollows, seem to be pushing the evidence too far.

APPENDIX C. Military finds.

A Report on lead-shot and other possible military material from the supposed area of Flodden battlefield David H Caldwell

The material reported on here was recovered in recent fieldwork undertaken in the general area where it has been supposed the battle of Flodden was fought. Table ** lists 62 pieces of gun shot, including two pieces (nos 46 and 47) recovered in 2007 by Dr Glenn Foard of the Battlefields Archaeology Trust (no 46 illustrated Foard & Morris 2012: fig 4.1) and a third (no 59) found in 2010 by Tony Pollard and Neil Oliver (BBC, *Two Men in a Trench*; Pollard & Oliver 2002: 158). All the shot is of lead, but four are composite pieces, one containing a pebble (no 61), the rest iron dice or cubes. Most are heavily corroded, and many obviously deformed as a result of having been shot from a gun. All, including the composite pieces, show signs of having been cast in two piece moulds.

All the pieces were weighed (on electronic scales for those up to 200gr) and a diameter, where detectable, taken with a digital caliper. These diameters are only to give an approximate indication of the size of each piece, not an accurate assessment of the calibre of the weapon from which they were fired. Apart from the problems of factoring in corrosion and deformation it should be noted that there is no sound knowledge for how tightly these pieces of shot were meant to fit in the barrel or the extent to which they were wadded.

Almost all of this shot would have been fired from hand guns. The three largest pieces (nos 46, 47, 59), those containing iron cubes and with diameters between about 47mm and 50mm (approximately 1.85 inches to 1.97 inches), may have been shot from small field guns called falconets or falcons. The Scottish artillery train at Flodden is known to have consisted of much larger battery guns (Caldwell 2013: 60-62, 75), but the English had 18 field guns described as falcons (Brewer 1920: no 2651/2). The fourth piece of composite shot (no 61), with a diameter of about 21mm, could have been fired from an even smaller field gun, a type known to the Scots as a 'hagbut of crok' (Caldwell 1981: 78-80; Caldwell 1983: 440-44).

That leaves 58 other probable pieces of lead shot for firearms. Although some or all of them could, theoretically, date to 1513 there are no early accounts of the battle which mention firearms being used by either side. Two of the pieces (nos 28, 31) are described as slugs. They are roughly rectangular in shape and may be the result of gun owners re-shaping balls of too large a calibre so that they would fit in guns of smaller bore. Other examples have already been published from Tantallon Castle and Edgehill, Warwickshire, site of a battle in 1642 (Caldwell 1991: 346; Foard & Morris 2012: 77).

The Flodden assemblage also contains the following items:

- 63. Lead bullet, battered and in poor condition. Wt 30.27gr; 26-57mm x 13.46mm. 19th century. Field 14.
- 64. Fragment of 19th-century hollow bullet. Field 18.
- 65. Solid lead cylinder. Wt 16.07gr; Diam 15.80mm; L 10.95mm. Field 18. Possibly an impacted piece of shot.
- 66. Copper alloy rectangular buckle, half missing, with central bar and pendant loop, perhaps for attaching a scabbard to a belt. Ht 42mm. Field 57. Possibly of late medieval date.
- 67. Copper alloy cast cylindrical mount. Ht 47.51mm; Diam 21.15mm. Field 7. It has been identified as the tip of a pennon, but is more probably the mount from an 18th-or 19th-century firearm accessory or tool.
- 68. Iron circular and domed boss. Ht 48mm; Diam 120mm. Field 13. There are no late medieval shields or pieces of armour known to have any similarity to this piece. It is probably of 19th- or 20th-century date, perhaps a harness mount.
- 69. Iron strap. L 90mm. Field 50. This has tentatively been identified as part of a sword hilt, but if so, a late medieval one seems most improbable. It might conceivably have come from a much later basket hilt.

INTERPRETATION OF THE ASSEMBLAGE

None of the items in this assemblage can certainly be related to events in 1513. The best candidates are the four pieces of composite shot (nos 46, 47, 59, 61), identified for use with small pieces of artillery. All of them show signs of having been fired and, therefore, cannot readily be dismissed as casual losses. Composite pieces of shot containing iron cubes are known to have been used by the Scots as early as 1496 and by the English in the 16th century. Composite pieces of shot containing pebbles are likely to be of similar date (Caldwell 1991: 344; Foard & Morris 2012: 68-69). There may, however, have been other unrecorded occasions when such pieces of shot were fired in the vicinity, and they could have carried or rolled a considerable distance from the scene of conflict.

The 58 listed pieces of lead shot for firearms, including the two 'slugs' (nos 1-45, 47-58, 60, 62), surely have nothing to do with the battle of Flodden. From 38 years' experience of handling finds as a curator for National Museums Scotland, and anecdotal information from metal detectorists, the writer believes that this quantity of shot from such an area is by no means unusual. It merely reflects the activities over a few hundred years of sportsmen shooting birds and small mammals, prior to the use in modern times of breech-loading shotguns and cartridges loaded with pellets. Possibly some of the shot were fired from pellet or stone crossbows, popular from the 16th to the 19th century (Blackmore 1972: 205-10).

REFERENCES

Blackmore, HL 1972 Hunting Weapons. New York: Walker.

Brewer, JS (ed) 1920 *Letters and Papers, Foreign and Domestic, Henry VIII, Volume* 1, 1509-1514. London: HMSO.

Caldwell, DH 1981 'Royal Patronage of Arms and Armour Making in Fifteenth and Sixteenth-Century Scotland', *in* DH Caldwell (ed) 1981 *Scottish Weapons & Fortifications 1100-1800*. Edinburgh: John Donald, 73-93.

Caldwell, DH 1983 'The Royal Scottish Gun Foundry in the Sixteenth Century', *in* A O'Connor & DV Clarke (eds) 1983 *From the Stone Age to the 'Forty-Five*. Edinburgh: John Donald, 427-49.

Caldwell, DH 1991 'Tantallon Castle, East Lothian: a catalogue of the finds', *Proceedings Society Antiquaries Scotland* 121: 335-57.

Caldwell, DH 2013 'How Well Prepared was James IV to fight by Land and Sea in 1513?', *Journal Sydney Society Scottish History* 14: 33-75.

Foard, G & Morris, R 2012 *The Archaeology of English Battlefields*. Council for British Archaeology research report 168.

Pollard, T & Oliver, N 2002 *Two Men in a Trench. Battlefield Archaeology – The Key to Unlocking the Past.* London: Michael Joseph.