HISTORIC ENVIRONMENT SCOTLAND

Battle of Pinkie - proposal to amend entry in Inventory of Historic Battlefields

CONSULTATION ANALYSIS & REPORT

October 2022

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PART A – CONSULTATION ANALYSIS

1. INTRODUCTION

1.1. Background to the consultations

Historic Environment Scotland (HES) is the lead public body for Scotland's historic environment. Historic Environment Scotland is responsible for compiling and maintaining the inventory of historic battlefields.

This consultation report concerns engagement and consultation carried out in connection with proposed changes to the inventory battlefield record for the Battle of Pinkie.

The Battle of Pinkie was added to the inventory of historic battlefields on 21/03/2011. The designation was last amended on 14/12/2012 and supplementary information was updated on 14/11/2016.

We received an application from a member of the public to review the inventory designation for the Battle of Pinkie on 19/02/2020. The application was submitted with supporting information in the form of a bibliography of reports of archaeological and historical research into the Battle of Pinkie since 2011.

After undertaking preparatory research and engagement with researchers, we prepared revisions to the inventory record for the Battle of Pinkie before consulting on the proposed changes.

1.2. The consultations

To date, we have held two public consultations on proposed changes to the inventory record for Pinkie.

The first consultation began on 10/11/2021 and closed on 22/12/2021. We revised the record on the basis of comments at the first consultation, undertook further research, and decided that a boundary change was required. This required a second consultation.

The second consultation began on 13/04/2022 and was intended to last until 04/05/2022 but, following a request from a member of the public, this was extended to 29/06/2022.

In the course of the second consultation, we received criticisms about our consultation processes, including the extent of the information which we made available to explain our proposed revisions to the record.

Given the concerns expressed about our processes, we wrote out to stakeholders on 28/06/2022 to inform them of our intention to organise a new consultation on the proposed changes.

This new consultation supersedes the second consultation. With the exception of some corrections to the referencing, the version of the record on which we are consulting afresh is the same version of the record that we provided at the second consultation.

As part of this new consultation, we are providing additional information to ensure that consultees can provide fully informed responses – including this consultation report.

1.3. What is the purpose of this report?

The purpose of this report is to outline our engagement and consultations to date, to set out the findings of the first consultation including any additional information not previously provided, and to explain how we have taken the comments we received into account in revisions to the proposed inventory record.

The report does not analyse comments that we received during the second consultation. Before we take our final decision, we will take into consideration all comments received about the proposed changes as part of the second consultation as well as any new comments through the new consultation.

The first part of this report (A) describes the HES consultation process and analyses the responses from the first consultation.

The second part of this report (B) describes how these views have shaped proposed changes to the record and our decision to organise a new consultation on the proposed changes.

2. APPROACH TO CONSULTATION

2.1. What engagement did we undertake before consulting?

On 30/04/2021, we organised a researchers' seminar to enable researchers to share their research and to discuss aspects of the narrative of the battle and its portrayal in the inventory record. The seminar was attended by 16 people.

A revised draft of the inventory record was circulated before the meeting.

After the meeting, a note of the meeting was agreed with attendees (See Appendix A).

Further changes to the draft record were made on the basis of discussions at the meeting. This draft was circulated to attendees and corrections were made.

We invited seminar attendees to participate in a site visit to look at the battlefield, The site visit took place on 26/08/2021.

2.2. How did we distribute, advertise and encourage participation in the consultations?

The *first consultation* took place over a period of six weeks (10 November – 22 December 2021). In line with our standard procedures, we published our draft record and report of handling on our portal. Through this portal, since July 2020, interested parties have been able to search for decisions open for comment.

We wrote to the planning authority to invite their views. As we were not proposing a boundary change in the first consultation, we did not contact owners/occupiers and tenants directly. We wrote to community councils in the battlefield boundary to make them aware of the consultation, and to the list of researchers who participated in our seminar.

We invited comments by email to designationconsultations@hes.scot. We also consulted on the record update using our Citizen Space website and promoted the consultation through the HES Twitter feed.

The *second consultation* was intended to last 21 days (prior to extension). We published the revised draft record and updated report of handling on our portal. We wrote to the planning authority to invite their views. As we were proposing a boundary change in the second consultation, we wrote to two owners who we considered may be directly affected by the proposed boundary change. We also wrote to the relevant community councils for the affected area of the boundary to make them aware of the consultation. We also wrote to the list of researchers who had either responded previously to our consultation and/or participated in the researchers seminar. We invited comments by email as above.

2.3. How did we analyse the responses from the first consultation?

When we consult about a proposed amendment to an entry in the inventory of historic battlefields, we provide a report of handling for comment. This report is an assessment produced for consultation and it sets out our view, including a proposed decision.

At the beginning of the consultation report of handling, we did not ask specific questions of consultees. We stated that we would consider comments and representations which are material to our decision-making, such as:

- Understanding of the cultural significance of the site or place.
- Whether sites or places meet the criteria for designation.
- The purpose and implications of designating the site or place. We consider whether these are relevant to the case.
- Development proposals related to the site or place.
- Where there are development proposals, we consider whether to proceed with designation in line with our designation policy.
- The accuracy of our information.

All consultees to the first consultation responded by email. No respondents replied through our Citizen Space website.

When consultations close we consider the comments before arriving at our decision.

After the first consultation, we collated all the responses into a spreadsheet which recorded the name of the consultee, the consultee type (ie whether the response was from a local authority, researcher, private industry etc), and the response. Categorising responses by respondent group enabled us to ascertain whether any particular theme was specific to one particular group, or whether it appeared in responses across groups. It does not mean that we treat any particular category of respondent any differently from another.

As the responses to the first consultation all related to details in the record, we included a column to indicate what aspect of the record each response referred to. This enabled us to identify any emerging themes and similar issues or differing perspectives covering the same aspect of the record. We also included two columns to record our consideration of the response and any action taken.

During our analysis of responses, we held follow up discussions with one researcher to seek clarification on aspects of their response. No such clarification was required from the other responders.

In terms of reporting on our analysis, we do not normally publish personal data or detailed comments in our report on handling. However, following a request from a consultee, we undertook to look at the level of detail that we were able to provide in this case. We prepared a table summarising the comments we received and our response, setting out how we took account of the comment in updates to the record. However, we received criticism in response to the approach we took, namely that the level of information we provided on the responses was not informative.

The information provided through this consultation report seeks to address the criticisms we received. We have included the following:

- The meeting note of a researchers' seminar – see Appendix A.
- Responses to the first consultation in full where we have permission to do so– See Appendix B
- An updated draft record including annotations showing the changes and the comments that each change relates to – See Appendix C.

3. SUMMARY OF RESPONSES

This section describes how many responses were given to the first consultation and a summary of views expressed including key emerging themes.

3.1. How many responses did we receive?

We received four responses to our first consultation - two from private researchers into the battlefield, and two from companies.

We have not undertaken any statistical analysis given the small number of responses.

3.2. What did people say?

No comments raised any issues that called into question the national importance of the Battle of Pinkie, or the case for updating the record to reflect research since 2011.

All the responses covered detailed aspects of the proposed revisions to the inventory record, including the accompanying maps.

The following themes emerged from the responses:

- Queries about use of modern place names in the inventory record.
- Our use of certain sources for the inventory record in particular an over-reliance on the work of Charles Oman.
- Aspects of the battle narrative.
- Interpretation of the archaeological evidence or absence of it.
- Evidence for locating aspects of the action in the landscape, in particular where the culmination of the battle took place.

- The role of certain modern features in the battle such as the modern Howe Mire, and identification of Patten's 'slough'.
- Mapping – including our proposal to remove the deployment map. This is seen by one responder as a retrograde step – ' it is essential that mapping of battle manoeuvres is retained in some form to provide a consistent understanding for the public.'
- Use of referencing in the inventory text.

Where we have the necessary permissions, the full responses are provided through a Sharefile link at Appendix B.

4. ANALYSIS OF RESPONSES TO FIRST CONSULTATION

We have grouped the comments below according to which aspect of the record the response referred to.

The comments provided in the table have, in places been summarised/or abbreviated. Where we have the necessary permissions, individual responses are provided in full through a Sharefile link at Appendix B.

ID	Section in record	Location in record	Responder (includes hyperlink)	Summary of comment
1	General		AOC	Welcomed inclusion of grey literature reports in the updated bibliography. However, recommended adding referencing to the text of the inventory record as any academic or technical report would be required to do. 'The lack of referencing throughout the document makes it unclear as to what evidence and previous analysis HES are relying on when coming to conclusions on the battle.'
2	Overview and statement of significance	p.5 The battle was fought across the settlements of Musselburgh, Wallyford, Carberry and Whitecraig.	David Caldwell	Use of modern place names is potentially misleading given that places such as Whitecraig and Carberry Hill are not place names in the contemporary 16th century literature. 'Whitecraig not mentioned at all and Carberry (Hill), as a placename, first appears in 1644.
3	Overview and statement of significance	Names of the battle	David Caldwell	William Patten's explanations for the names given to the battle are of more than passing interest. The response refers to the Scots and English not agreeing what to call the battle. For the English it was variously Musselburgh, Seton, Falside Brae, Inveresk, or Wallyford. Scottish sources from the very beginning fairly consistently call the battle Pinkie Cleuch.
4	Inventory boundary	p.5 The plain between Inveresk and the lower slopes of Falside and Carberry Hills, including Inveresk fields and the area now known as the Howe Mire. This open area was the area through which the Scottish army advanced, where it was engaged by the English cavalry, and where it is ultimately located at the culmination of the battle.	AOC	Recommendation 2: HES should consider replacing the use of the placename Howe Mire with that of Inveresk Fields.

5	The battle	p.6 The Scottish cavalry was effectively removed as a viable fighting force on the 10th as a result of its defeat on the 9th.	David Caldwell	This interpretation is derived from Charles Oman and is not born out by early sources, especially Patten, indicating the continuing influence of the Scottish cavalry on 10 September
6	The battle	p.7 Heavy fire from the English ships resulted in some of the archers fleeing.	David Caldwell	No early sources say that fire from the English ships was heavy, nor do they indicate that any of the archers fled. This again is an interpretation by Charles Oman on the basis that Patten believed that the archers were unsettled by gunfire.
7	The battle	p.7 The Scots' position at this point was still reasonably strong, as their front was protected by the cross-ditch, while a turf wall appears to have been protecting their right flank and possibly a water course on their left.	David Caldwell	Requires some explanation. 'I do not understand how this interpretation relates either to your map of significant features or, more importantly, early descriptions of the battle.'
8	The Battle	p.7 (second paragraph) – Furthermore, the Scots were continuing to advance forwards from the church at a rapid pace, deployed in three main battles with support from cavalry and archers on the flanks.	Geddes Consulting	Further information requested on the scale of the deployment of the armies on the move across the battlefield.
9	The armies	p.8 Both armies contained experienced troops who had been involved in fighting across Europe.	David Caldwell	Query over this reference - true of the English , and many Scots were experienced, but not aware that any of the Scots had continental experience.
10	Losses	P.9	Geddes Consulting	No bodies have been found within the battlefield which are definitely associated with the battle. A sentence to this effect should be added at the end of this section on Losses.
11	Action	p.12 and others	AOC	Recommendation 3:HES should amend these references to describe the Scots as moving southwards, in line with the quote from Patten which they cite.
12	Action	p.11 The Scottish cavalry was out of action the following day [the 10th]. p.12 [On the 10th] The Scottish horse mounted a 'half-hearted' attack on the English artillery.	David Caldwell	There is confusion in these two statements, again because you have relied on recent interpretations by Charles Oman and others rather than on early sources. The latter do indicate that the Scottish horse came off worse in the fighting on 9 September, but, for instance, Patten described two units of Scottish horse in the field on 10 September (see comment id 5). Queries interpretation of the attack as 'half-hearted'.

13	Action	p.11 The Highland archers were on the left flank of the rearguard	David Caldwell	Again this is down to Charles Oman. Patten does not give their position relative to the rearguard but says they were intended to be a wing to the vanguard. My reading of other early sources (Holinshed, Leslie and Pitscottie) suggests that the archers formed sleeves to the main battle.
14	Action	p.13 'feeling'	David Caldwell	should be 'fleeing'
15	Action	P.11 (4th paragraph) – mustering of the Scots army and reference to the two hillocks.	Geddes Consulting	More specific locational information requested in this section for the two hillocks.
16	Action	P.12 (3rd paragraph) – HES suggests ... at this stage, the entire Scottish army appears to have begun advancing eastwards, closer the English force.	Geddes Consulting	The revision of direction from eastwards to southwards is requested.
17	Action		A researcher	Potential additional location for the battle further west than the current interpretations.
18	Events & Participants	p.16 *The Italian War in France between 1544 and 1546*.	David Caldwell	I think you just mean the Anglo-French wars of that time.
19	Events & Participants	p.17 *Schiltrons*.	David Caldwell	It is anachronistic to use this term for 16th-century battle formations, and in any case, it has been much misunderstood. It would be better to stick to contemporary 16th-century terms, especially 'battles'.
20	Battlefield Landscape	P.19 is a description of the manoeuvres of the Scots and English armies up until the rout following the culmination of the battle (as defined by HES) when the English heavy cavalry engaged the advancing Scots vanguard, to halt the advance of the Scots army up to Falside Hill.	Geddes Consulting	Extensive mapping of historic events and features is requested.
21	Battlefield Landscape	P.19 (5th paragraph) –Patten describes the Scots army as advancing past two hillocks as they moved eastwards.	Geddes Consulting	The revision of direction to southwards is requested.

22	Battlefield Landscape	P.20 (1st paragraph) ...HES states that key views within the landscape also survive such as: 1.To and from the high ground at Inveresk….	Geddes Consulting	More detail on the views provided is requested to illustrate which manoeuvres and visual relationships of the battle across the battlefield are still visible in the landscape today.
23	Location	P.22 (last paragraph) and P.23 (first paragraph) – Unfortunately, the currently available evidence does not allow us to fully confirm or refute any of these interpretations and indeed it is possible that none of them have correctly identified the cross-ditch.	Geddes Consulting	HES through its high standards of referencing should confirm the research in published work, that the probable location of the culmination of the battle is south of the A1 and is likely to be south west of Crookston.
24	Location	p.22 Another interpretation is based on an unnamed feature that is now far less visible on the ground than the previous two but can be traced through historic contour mapping and LIDAR data. It runs southeast to northwest across the Howe Mire area, starting from the vicinity of the memorial off Salter's Road, and it is potentially the original route of the Crookston Burn before it was channelled.	AOC	Recommendation 4:HES should consider removing the features they have identified via LiDAR from the Significant Features map based on the fact that the location of these has been previously subject to intrusive archaeological investigation and no corresponding cut archaeological features have been identified.
25	Location	p.21 The first of the suggested features is the Crookston Burn. This was the first of the three features currently proposed as possibilities to be associated with Patten's slough, for example by Dr David Caldwell in 1991. The burn has been channelled in the process of enclosing and improving the agricultural land, and further altered during the building of the A1. The previous route of	AOC	Recommendation 5: HES are requested to justify the naming of the modern drain to the northeast of Crookston as 'Crookston Burn'. If no reasonable justification can be offered, which indicates a historical feature in this location, then reference to this feature should be removed from the Inventory text and Significant Features map.

		the burn appears to have been broadly from the southeast to the northwest, beginning on the slopes of Falside Hill and passing to the north of modern Crookston farm, and the section of the burn in question would have been in the vicinity of Crookston.		
26	Location	p.21 'A burn',	David Caldwell	identified as the slough or cross ditch which features in Patten's account of the battle. Of the many early sources only Patten mentions the slough or cross ditch. There is no description of it being a burn or containing water. Patten's tables indicate that it was a linear feature running east-west, which is one of the reasons for identifying it with Colton Dean..... I now recognise that my naming of this burn (unnamed on OS maps) as the Crookston Burn was mistaken. I am informed that the local farmers are not aware of it ever having had a name. It has certainly not been known, as indicated on the map accompanying this updated inventory record, as Colton Dean. The placename Colton Dean refers solely to the narrow, deep ravine with trees to the east of this burn. I confirm that I now believe that Colton Dean can be identified as Patten's slough, not the burn to the west of it.....These errors in naming have now been compounded by the application in this revised inventory record of 'Crookston Burn' to a feature north of Crookston which is clearly an artificial channel dug for drainage (the feature marked in green on the significant features map). I assume you have no authority for this identification and that it should be removed.
27	Location	P.21 (6th paragraph)... historical route of Crookston Burn.	Geddes Consulting	Without any evidence, reference to the Crookston Burn (line of modern artificial channel) should be deleted from the text of the Inventory and the Draft Significant Features Map.
28	Location	P.22 (3rd paragraph) – HES makes reference to an unnamed feature which is believed to be the linear ditches and HES asserts could have been the original course of Crookston Burn before it was channelled. HES then draws the conclusion that this could be	Geddes Consulting	There is no evidence to support HES including these features in the Inventory and Draft Significant Features Map. These features are not the slough. In the absence of any contrary evidence, HES is invited to delete all reference to these two linear features.

		another location for the cross ditch.		
29	Location	p.21 the English camp in the modern area of Drummohr and the Royal Musselburgh Golf Course, which would also provide direct access to the small harbour at Morrison's Haven.	AOC	Recommendation 6: HES should consider the results of archaeological fieldwork undertaken at Goshen and update the Inventory text to reflect the results thereof.
30	Location	p.20 Edmiston Edge – no longer identifiable.	David Caldwell	This is a rather negative assessment of relatively good information on its location. Patten places the Scottish camp at Edmiston Edge near Gilberton. Gilberton is known to be an earlier name for Brunstane, located about a mile west of the old bridge over the Esk. Early sources like the Bodleian Roll, the Harleian Manuscript , Knox and Pitscottie indicate the camp was adjacent to the River Esk. It would therefore appear not unreasonable to equate the 'Edge' with the steep bank on the west side of the river between the bridge and Monktonhall.
31	Location	p.22 Wallyford Hill – an unnamed feature, traceable through historic contour mapping and LIDAR data.	David Caldwell	What is the evidence for this? How does it square with Patten's specific statement that the English vanguard, and some of the main battle, were drawn up on the side of Falside Brae? It was also noted by Caldwell that a different feature identified on LIDAR was proposed as the slough by Dr R. McNutt.
32	Location	P.20 (4th paragraph) ... The lower slopes[of Falside Hill and Carberry Hill) are also likely to represent the high ground that both armies look to claim The evidence from Patten makes it clear that both armies were seeking to make for the higher slopes on Falside Hill.	Geddes Consulting	The removal of the interpretation utilising Wallyford as a potential strategic feature is requested. The advance to 'Wallyford Hill' by both armies rather than Falside Hill is not supported by Patten's descriptions.
33	Location	In the same paragraph on Page 22, HES make reference to Wallyford Hill. This is new landscape feature introduced by HES to support its assertion that this is the high ground that both the Scottish and English armies might be 'racing to'in order to secure tactical advantage.	Geddes Consulting	HES to delete the whole paragraph on page 22 and all reference to 'Wallyford Hill'.

34	Location	p.21 Carberry or Cousland.	David Caldwell	Cousland Castle is represented on the first and third tables provided by Patten, and labelled as such. It is also shown as a tower-house on the Bodleian Roll and the copperplate engraving derived from it, in the British Library. Carberry Castle is not mentioned in early sources and is probably of later date than 1547.
35	Location	P.21 (4th paragraph) HES concludes that it is more likely that Carberry Road is the modern equivalent of the route depicted on the battle plans.	Geddes Consulting	HES should note that historic alignment of Crookston Road was further to the east than shown on the OS mapping.
36	Archaeological and physical remains and potential	p.21 Carberry Hill –	David Caldwell	Not the site of an English camp since the ramparts and ditches are prehistoric. This does not make sense. Why shouldn't the English have occupied, indeed benefited from the remains of an earlier fortification? In 1513 the Scots appear to have re-used prehistoric earthworks when they camped on Flodden Edge, and Edgerston Fort in the Borders, obviously prehistoric, has produced artefacts consistent with the stay there of a medieval army. Two early sources, John Knox and Hume of Godscroft, described the English using Carberry Hill. Presumably this would just have been on 9 September rather than the following day.
37	Archaeological and physical remains and potential	Page 25 3rdparagraph – this is the reference by HES to the possible Tudor finds recovered from land at Crookston(refer to Crookston Battle Finds 2017)	Geddes Consulting	HES should give greater weight to the significance of these Tudor finds. It is recommended that HES contact Dr Caldwell and AOC to determine the appropriate text to be included in the Inventory Record.
38	Further bibliography	p.27	David Caldwell	The engraving of the battle in the National Army Museum that I reproduced in 1991 is a 19th century copy of a 16th-century copperplate engraving in the British Library: shelf mark CC.5.a.409.
39	Further bibliography		David Caldwell	Over-reliance throughout this record on the work and opinions of Charles Oman, writing in the earlier 20th century, rather than a re-examination of original sources, almost all of which are readily accessible. Oman is held in high regard, justifiably, as a military historian, but his accounts of the battle of Pinkie are not his finest work……. I recommend that Oman's work should not be used as a primary source and that your sources of information on the battle should be fully referenced and acknowledged.

40	Terrain	P.22 The terrain feature within the battlefield which is particularly curious and which may have influenced events on the day is the area known as the Howe Mire.	David Caldwell	I am surprised that Howe Mire should feature in your document like this, especially since no early sources mention such an area of boggy ground or give any suggestion that either army was constrained by such a feature from closing in on or attacking the other on 10 September. Sir James Ferguson (1963) was the first to suggest that Howe Mire might have been a morass that affected the development of the fighting, but Alastair Ross and his team from Stirling University failed to produce clear evidence in 2008 that it was boggy ground in 1547, best avoided by an army. If, however, it were a morass in 1547, that surely strengthens the case for the battle on 10 September having taken place further south than is sometime supposed, and offers one explanation of why there is a dearth of possible battle relics from this location.
41	Terrain	Page 23 (4th paragraph) – discussion about Howe Mire	Geddes Consulting	HES should confirm from the current research that Howe Mire has no association with the battle. Both armies avoided crossing it.
42	Maps		Geddes Consulting	Inclusion of a deployments and manoeuvres map.

PART B – CONSULTATION REPORT

5. APPROACH TO UPDATING INVENTORY ENTRY

This section describes how we have taken the views expressed through the engagement and consultation process into account in revisions to the draft inventory record for Pinkie.

5.1. How did we take account of the application, the supplementary information we received, and discussions at the researchers' seminar.

The table below explains the changes we are proposing to the inventory entry on the basis of our review of the application, the supplementary information we considered, and discussions at the researchers seminar on 30/02/2021.

We have annotated the draft record to highlight these changes (See Appendix 3).

Item	Changes proposed
Historical context	Changes proposed to address the reasons why Somerset invaded, and the wider aims of the 1547 campaign.
Battlefield narrative	
Dates	Changed portrayal from a one day, to a two-day battle
The armies	Corrections to some discrepancies in the figures about the size of the English forces. Following our researchers' seminar, we acted on advice that the previous record was optimistic in terms of its description of the armoury the English infantry. We are correcting this to make it clear that the English forces were still quite reliant on archers.
The naval engagement	Greater emphasis in the narrative about the battle to the naval element of the Rough Wooing.
The inventory boundary	The role of Cousland Castle (SM1187) was raised by researchers. We have decided not to include Cousland Castle in the inventory boundary. While the location of the castle was of value in locating some of the events of the battle, particularly the path of the cavalry rout, the castle itself does not appear to have played a sufficiently direct role in the events of the conflict to merit inclusion. We have however referred to this castle within the revised inventory record for its historical link to the battle and its value as a locational reference for some elements of the battle.
Locating landscape features	We concluded that the previous inventory record was based too strongly in favour of one interpretation of how the events of the battle took place in the landscape. We have revised the record to reflect other interpretations set out in supplementary information, and discussed at

	the researchers seminar, which may equally be supported by the available evidence at the current time (2022). Additional landscape features related to the various interpretations of the battle have been identified. Important landscape features have also been identified in bold text within the document for ease of reference.
Archaeological evidence	We have updated information on the archaeological evidence and potential for the battlefield based on recent archaeological investigations and discussions at the researchers' seminar
Inventory maps	We are proposing to separate the troop deployment map. This is consistent with our position following our 2017 survey, and feedback following this which indicates that these are, generally speaking, open to misuse/misinterpretation. We are proposing to revisit the landscape features map to improve how the special qualities and landscape characteristics of the battlefield are illustrated. We hope that the updated maps will assist management of the battlefield in the planning system. The updated map now includes linear landscape features mentioned in the record.
Bibliography	Recent publications and grey literature have been added to the references.

5.2. How have views and information from the first consultation been taken into account?

Following the feedback we received at the first consultation, we are proposing further revisions to the record to incorporate further changes as set out below:

General

- We have updated references to include new information and sources. However, we do not propose to make any changes to the way we use referencing in the text as this is not our established practice for the inventory generally (see comment 1). The inventory is not an academic or technical work but provides information to aid understanding of the battlefield and its management in the planning system. In our view, adding references in the text would reduce the useability of the record for its primary purpose.

Overview and statement of significance

- On comment 2, we have reworded the text to clarify when we refer to modern settlements. However, we maintain that use of modern place names in the inventory record is important because, together with the use of modern maps, we consider this necessary to inform understanding for the purpose of planning and land-use management.
- We recognise that the various names of the battle may be of interest in terms of our understanding of where it took place (comment 3), but we do not propose to add to the alternative names of the battle already given in the inventory record.

Inventory boundary

- We made changes to the wording for the location of the battle (comment 4) although we have retained use of the term Howe Mire as the modern mapped name of the relevant section of landscape (for the same reasons as set out above).

The battle

- We revised the wording on the Scottish cavalry to address comment 5.
- We deleted the reference to 'heavy fire' to address comment 6.
- We revised the wording to provide clearer explanation about the Scots' position in response to comment 7.
- To address comment 8, we added a section to 'Armies' with estimated scales of the armies on the ground. We have had to caveat this to a degree as it is not possible to provide accurate measurements from the available evidence, but we have provided rough sizes and information on how we arrived at these.

The armies

- We made no changes in response to comment 9. This reference is intended to include the British Isles as part of the wider geographical and military context of Europe as a whole, rather than as a separate entity from continental Europe.

Losses

- In relation to comment 10, we have not made any changes as we consider that this aspect is sufficiently covered under the relevant section of the record (Archaeological and physical remains and potential).

Action

- To address comment 11 and comment 16, we replaced 'eastwards' with 'towards Falside Hill' and added explanation of the possible meaning of the contemporary word used by William Patten 'declyning' and how it affects understanding of the battle. We also made changes in the 'battlefields landscape' section (comment 21).
- We revised wording in relation to the action of the cavalry on 10 September (see comment 5 and comment 12).
- We revised wording for the position of the Highland archers (comment 13)
- We corrected the typo (comment 14).
- On comment 15, we have not made any changes as we consider that the possible location of the hillocks is discussed in detail within 'Battlefield Landscape'.
- On the possibility of a further location for the action further west than the current interpretations (see comment 17) we don't propose any further changes to the record at the current time. We will consider any new published information which is brought to our attention.

Events and participants

- To address comment 18, we revised the text to more specifically to refer to the English expeditions in France that Lord Grey participated in during this period.
- On comment 19 in relation to the term 'schiltrons', we revised the text to address this comment. We also added a clarification that "battle" in this sense is the precursor of "battalion" to remove a potential source of confusion on this point.

Battlefield landscape

- On comment 20, with regards to the mapping of historic features, many of the features are already mapped on the significant features map where this is possible, while the remainder relate to the movements of the armies. In our view it is problematic to meaningfully map the deployments and manoeuvres of the forces at Pinkie when we are seeking to take account of different interpretations of the action in the record, and there remains ambiguity and debate over where those deployments and manoeuvres took place.

- On comment 22, we do not propose to make any changes at the current time to illustrate viewpoints and lines of sight. However, we are considering suitable options for analysing and presenting such information in future revisions and will take account of the suggestions for Pinkie as part of this.

Location – of the battle

- In response to comment 23 about published evidence of the culmination of the battle taking place south of the A1, we have added further discussion on the various options to the draft record but we consider that the available evidence does not resolve the debate over locating the culmination of the battle.

Location – of Patten's 'slough'

- We added further discussion on the slough and made the following changes in response to comments 24, 25, 26, 27, and 28:
    - We removed the reference to Crookston Burn and revised the information around it.
    - We removed one of the LiDAR features from the significant features map. We retained reference to the southern feature but reworded the text to be clearer on the evidence.
    - We added further detail and discussion on the slough, including information on the definition of the feature, and the difficulty in identifying the specific feature Patten describes in the modern landscape.
    - We identified Colton Dean as a possible candidate.

Location – the camps

- We did not make changes about the English camp (comment 29) as this section merely states where the camp is understood to have been located. The lack of archaeological evidence is discussed in the section on archaeological remains.
- We revised the text to locate the Scottish camp (comment 30).

Location – the high ground where the armies looked to claim an advantage

- In relation to comments 31, 32 and 33, we consider that this potential location and the basis for its inclusion have been explained within the draft inventory record. However, we revised the reference to 'Wallyford Hill' to refer to this location as part of the forebrae of Falside Hill. For all the potential variants for the action, we added discussion of how each agrees with/conflicts with elements of Patten's account.
- In follow-up discussions with HES about the LiDAR data in relation to comment 31, Dr Caldwell mentioned an additional feature identified in a PhD thesis by Dr Ryan McNutt. We investigated the LiDAR feature identified by Dr McNutt and referred to this work and the further option it opens up. As a result of this, we are proposing a change to the south-eastern boundary of the designation, to include the entire ridgeline of high ground between Falside and Carberry Hills.
- On comment 34, we clarified the likelihood that the castle depicted in this section is probably Cousland, and that any suggestion of it being Carberry is undermined by the lack of clear evidence Carberry was built by this time.
- On comment 35, we added a reference to the historic alignment of Crookston road.

Archaeological and physical remains and potential

- On comment 36, we added discussion about the association between a prehistoric hillfort at Carberry Hill and an English camp in the same area.
- We do not propose any changes in response to comment 37. The Tudor finds are already accounted for in the draft. These may relate to the Battle of Pinkie, but as

yet, in our view, there is insufficient evidence to confirm a Pinkie provenance for these or other potentially mid-16th century artefacts from the area.

Further bibliography

- On comment 38, we updated the bibliography to take account of the engraving mentioned.
- In response to comment 39 on the work of Charles Oman, we made various changes to the record, and added a short section to the Information on Sources and Publications section highlighting some of the broad concerns with Oman's work on Pinkie.

Terrain

- To address the point made in comment 40, we kept references to the Howe Mire as it is a modern mapped feature (see also response to comment 4).
- On comment 41, we added further detail including discussion of the debate over whether a marsh existed in this area, and if it did, the possible impact of such a feature on the movement of an army.

Maps

- To reflect proposed changes to the south-eastern boundary of the designation om in relation to the additional feature identified by Dr McNutt (in response to comment 31), we are proposing a revised boundary map.
- We are proposing revisions to the landscape features map to reflect information received.
- In relation to the request to retain the deployment and manoeuvres map (comment 42), we remain of the view that this map should be separated from the inventory entry. This is consistent with our position following our 2017 survey, and feedback following this which indicates that these are, generally speaking, open to misuse/misinterpretation. Additionally, for Pinkie, the level of debate about the locations of elements of the battle and the manoeuvring of the armies means that it is not possible, based on current evidence, to provide a map with a sufficient degree of confidence as part of the inventory itself. We are currently considering the best location for the updated map, potentially through Canmore.

We have annotated the draft inventory record highlighting proposed changes (See Appendix 3) and prepared revisions to the boundary map and landscape features map.

5.3. Next steps

Our next step is to organise a new consultation on the proposed changes.

This new consultation supersedes the second consultation and includes a range of additional information to assist consultees in responding. These changes are intended to address the concerns that we received in the course of the second consultation.

With the exception of some corrections to the referencing, the version of the record on which we are consulting afresh is the same version of the record that we provided at the second consultation.

Once we have completed the new consultation, we will analyse the comments, make further revisions to the record, before taking our decision and publishing it on our Heritage Portal.

APPENDIX A- MEETING NOTE - RESEARCHERS SEMINAR: BATTLE OF PINKIE 30 APRIL 2021

Purpose and agenda
An event to enable researchers to share their research and to discuss aspects of the narrative of the battle and its portrayal in the inventory record for Pinkie.

10:00	**SESSION 1: Welcome and introductions:** Ailsa Macfarlane, Built Environment Forum Scotland
10:10	**Reviewing the Inventory Record for Pinkie:** Kevin Munro, Senior Designations Officer, Historic Environment Scotland
10:30	**Recent research on Pinkie:** Dr David Caldwell, Victoria Oleksy (AOC) and Tim Neighbour (CFA)
11:30	**Questions and discussion arising from research presented in session 1**
12:15 – 2:00 Break	
2:00	**SESSION 2: Welcome back**
2:10	**'Likely men and ready horses': The English Forces at Pinkie:** Dr Bess Rhodes (University of St Andrews)
2.40	**Applying the inventory record in the planning system:** Andrew Robertson, East Lothian Council Archaeology Service**.**
3.00	**Q&A and discussion**
4.00pm	**Close**

Notes on papers and discussion

Sources

- Importance of looking at other historical sources, not just Patten.
- The Copperplate engraving of *The Englishe Victore Agaynste The Schottes by Muskelbroghe 1547* – an important contemporary record of the battle, produced in England either by Thomas Gemini or Rainer Wolf.
- The Bodleian Role and the work of Richard Lee as an official English record of the battle (incomplete, with the front end missing and a scene where the English cavalry hits into the Scottish vanguard under Angus);
- Jean Ribault (a cavalryman/French sea captain);
- Leonard Digges – one of the English cavalrymen at Pinkie (also a distinguished mathematician and scientist) – account of Muscleborough Field
- The work of Sir Charles Oman – Oman's accounts of Pinkie are not his finest works.
- 14th Baron Grey's account of his father isn't mentioned in the inventory (Arthur Lord Grey of Wilton, *A Commentary of the Services and Charges of William Lord Grey of Wilton, K.G.*-written in the 16th century and published 1847).

Wider historical context

- Timeline of how the English forces got to Pinkie is tied up with events at the siege of St Andrews. Plans for the Pinkie campaign are against the backdrop of a rapidly evolving situation, including the liberation of St Andrews Castle.

- Why did Somerset invade – he did have an interest in dynastic union, as suggested by the inventory. However, there is more than a brutal royal courtship. He seems to have regarded this as a religious mission, which shouldn't be downplayed. It is a protestant manifesto against the Pope.
- Why so quickly in the King's reign? As an opportunity to assist St Andrews Castle. The aim of the 1547 campaign was not devastation but intended to win hearts and minds 'we intende to passe amicably'.

Battlefield narrative

- There has been a focus on the main fighting when there are other key aspects: cavalry engagement, and face-off between the armies on the morning of the 10th. Suggest changing portrayal in the inventory of Pinkie from a 1 day, to a two-day battle (9th and 10th)
- The inventory record has some discrepancies in the figures from Patten, about the English forces.
- Inventory optimistic in terms of the armoury the English infantry. The English forces were still quite reliant on archers. Plate body armour for the forward troops.
- Important to emphasise the naval element to the Rough Wooing. As the English move north, their camps are next to the sea (indicating the importance of this as a campaign by land and sea).

The inventory boundary

- Discussion didn't identify need for significant changes except for a suggestion that Cousland Castle should be included, as playing an important part in the events of 9th. General acceptance in discussion that this is not a mistake.
- HES consider that it wouldn't be justifiable to take in all the land to Cousland as a whole strip of land but might be possible to have a separate boundary polygon to cover the castle. However, we need firstly to clarify the precise events that took place around Cousland on the 9th to decide whether it merits inclusion in this way.

Locating landscape features

- Inventory can portray more than one interpretation of where action took place (see Battle of Alford) - the inventory record for Pinkie previously has perhaps been too strong in favour of one particular interpretation;
- HES intention is to reflect other interpretations discussed in the revised Pinkie record and to look for ways to improve how these are depicted on a landscape features map.
- General acceptance of this as a way forward although with the caveat that multiple portrayals pose challenges to planning decision-making.
- Readily identifiable features (Scots camp on the western bank of the River Esk; English camp in the area of Drummohr/Morrison's Haven by Prestonpans; Bridge across the Esk in Musselburgh; St Michael's Church Inveresk; Falside Castle)
- Other features which are broadly identifiable (e.g., Falside Brae).
- For features we cannot locate with certainty at present, we can present the options: the cross-ditch/slough (potential candidates include Colton Dean/Crookston Burn/ditch feature on Lidar in Howe Mire area); the turf banked lane (potential candidates being Carberry Road, or Crookston Road); the two hillocks (Pinkiehill or group of hillocks marked on Roy which disappear in later mapping ; the square turf enclosure (no clear modern feature to identify this but archaeological evidence may

well survive along Falside Brae – David Caldwell/original inventory record suggests near St Clement's Wells).

Archaeological evidence for Pinkie

- Attribution of archaeological finds to the battle of Pinkie needs to be reconsidered.
- Finds recovered historically (e.g., the recovery of items recorded in the OS Name Book) have been attributed to the battle in modern times, but their recovery location has not always been recorded accurately The OS namebook entries describe a wide area, not only the location of the cross swords (which themselves have migrated across the landscape during the 19th century). Finds most likely located south of Pinkie House, on the west side of the Howe Mire (not the east side).
- In some cases, further research indicates historical finds are unlikely to be even broadly contemporary with the battle: human remains may be earlier, and other finds later – e.g., epaulets of 18th century date.
- Lack of consistency in methodology of recording, particularly prior to 2016.
- Tendency to assume that military remains, particularly lead shot must be associated with the battle. Inventory entry should seek to manage expectations given the amount of activity in this area during the 16th century.
- Munitions evidence from large amount of metal detecting – not yielding much that can conclusively be tied to Pinkie. Bullets, musket balls etc – hard to date with any certainty; round shot and case shot slightly more convincing – although given the location of the Napoleonic barracks – it's possible that these could be training activities associated with the barracks. 2 possible pieces of case shot; composite shot – dating to the 16th century, 4 definite composite shot, and a further two possible.
- Goshen - no evidence for entrenchments associated with the English camp.
- Human Remains close to Queen Margaret University – broadly of 16th-century-date. Could relate to the rout of the Scottish army after the battle.
- One of the key indicators for fighting in 1547 would be arrow heads – a pattern of these would answer a lot particularly in combination with other dateable artefacts – e.g., belt buckles.

Research potential - Pinkie

- Identification of the double ditch road: documentation goes back to the 12th century, the most reasonable explanation is the Carberry Road.
- The slough - geophysics around Colton Dean (to find evidence of a burial pit or other military activity).
- Area to the south of the A1 around Colton Dean, St Clements, there is potential for things in there.
- Searches to the east of Crookston - there are possible Tudor badges from Crookston and some possible bits of armoury.
- The turf enclosure – somewhere along Falside Brae.

Battlefield records

- Battlefield records are a combination of place-based records and event records – planning system not good at dealing with events.
- Updating the inventory regularly or changing its emphasis to ensure that the most up to date information can be included in planning decisions is key;

- HES intention is to make battlefield records shorter and more focussed on what is important in terms of special qualities/landscape characteristics. Some of the detailed narrative on events likely to going into Canmore. The Heritage Hub project will help to bring these records together.
- The deployment maps are being misinterpreted and the intention is to remove these, potentially into Canmore.

Management of inventory battlefields

- The inventory as a trigger to ensure the battlefield is considered in planning terms – but with decision-making based on sensitivity and contribution.
- Need to make sure that the inventory and battlefield planning policies are complimentary.
- In order to be able to assess the results of mitigation we need to apply a level of consistency of methodology in terms of archaeological recording, across different sites within a battlefield
- Need to be better at framing the discussion about impacts from development and move away from focusing on the minutiae of battle events.
- Conservation Area-style appraisal, involving consideration of key views, character areas etc might be a model worth considering.
- Review of NPF4 - there is a steer around sense of place and placemaking and there was some discussion about how the battlefield inventory can make a positive contribution in terms of sense of place etc.

Management of Pinkie battlefield

- Pinkie as an altered battlefield landscape - self-evident that bits of Pinkie battlefield are less sensitive than others.
- Local Authority has prepared supplementary guidance for Pinkie, highlighting areas of high/moderate/low sensitivity and key viewpoints.
- Sightlines at Pinkie may be particularly significant - some have been impacted, but if we lose these sightlines, this may adversely affect our ability to understand the battle in the future.

Attendees

Name	Organisation
Ailsa Macfarlane (chair)	Built Environment Forum Scotland (BEFS)
Kevin Munro	HES
Philip Robertson	
James Bruhn	
Ruth Cameron	
Sam Fox	
Allan Rutherford	
Arran Johnston	Scottish Battlefields Trust
David Caldwell	Researcher
Tim Neighbour	CFA Archaeology
Vicky Oleksy	AOC Archaeology
Bess Rhodes	University of St Andrews
Andrew Robertson	East Lothian Council Archaeology Service
Andrew Coulson	Pinkie Cleugh Battlefield Group
Jon Cooper	University of Glasgow
Amy Blakeway	University of St Andrews

Philip Robertson 4 May 2021

APPENDIX B – RESPONSES TO THE FIRST CONSULTATION

We received the following responses

Response A – Dr David Caldwell
Response B - AOC Archaeology
Response C - Geddes Consulting
Response D - Researcher.

Responses a-c can be accessed in full via our Sharefile link.
We do not have permission to publish response D.

APPENDIX C– REVISED DRAFT RECORD HIGHLIGHTING PROPOSED CHANGES.

Key to annotation of revisions
Green text – denotes significant changes proposed following initial review of application, supplementary information and researchers' seminar. These changes appeared for the first consultation.
Blue text – denotes text added in response to comments at first consultation
~~Strike through red text~~ – denotes text removed in response to comments at first consultation

On each change, please see footnotes for explanation of the revisions.

Battle of Pinkie

Alternative names: Battle of Pinkie Cleugh, Battle of Musselburgh Field, Battle of Inveresk

Date of battle: 9-10[1] September 1547

Local Authority: East Lothian

NGR centred:

Date added: 21/03/2011

Date of last amendment: <Date>

Overview and statement of significance

The Battle of Pinkie in 1547 was fought across the area of coastal plain that is now mainly agricultural land and the modern[2] settlements of Musselburgh, Wallyford, Carberry and Whitecraig in East Lothian. Pinkie is believed to be the largest single battle ever fought in Scotland in terms of the numbers of combatants involved. It is a rare British example of a large-scale 16th century battle incorporating the major tactical and technical advancements in use within Europe at the time. The Battle of Pinkie is also the final time the Scots and the English would engage in a large scale pitched battle before the Union of the Crowns in 1603, although the conflict between them, along with the Scots' French allies, would continue until 1550.

The battle was a key part of the English campaign known as the Rough Wooing. This effort, begun by Henry VIII and continued by the Duke of Somerset as Lord Protector following Henry's death, was an attempt to force the completion of a previously proposed marriage between the infant Mary Queen of Scots and Henry's son Edward. Despite their decisive victory in the battle, in the wider political context of the Rough Wooing it was at best a pyrrhic victory. Mary was taken to France where she was betrothed to Francis, the French Dauphin, ending any chance of marrying her to

[1] We changed portrayal of Pinkie from a one-day, to a two-day battle in response to discussions at the researchers' seminar.
[2] See comment 2 at the first consultation – here and elsewhere in the text we added 'modern' to be clear about where we are referring to modern place names.

Edward and renewing the Auld Alliance against England. A formidable force of French reinforcements was also deployed to the ongoing conflict in Scotland, bolstering both the military forces opposing the English and the Catholic faction within Scotland.[3]

Inventory Boundary

The Inventory boundary defines the overall area of interest in which the main events of the battle are considered to have taken place and where associated physical remains and archaeological evidence occur or may be expected. [4]

The landscape characteristics are described under *battlefield landscape*: they encompass areas of fighting, key movements of troops across the landscape and other important locations, such as the position of camps or vantage points. Although the landscape has changed since the time of the battle, key characteristics of the terrain at the time of the battle can still be identified, enabling events to be more fully understood and interpreted in their landscape context.

Special qualities are described under *physical remains and potential*: these include physical remains and built features present at the time of the battle such as field walls or buildings, routeways, or elements resulting from the battle itself, including earthworks or graves, and areas of known or potential archaeological evidence.

The Inventory boundary for the Battle of Pinkie is defined on the accompanying map and includes the following areas:[5]

- The land along the western side of the Esk around modern Stoneyhill and Monktonhall. This was the location of the Scottish camp for several days in the lead up to the battle.
- The River Esk, Musselburgh Old Bridge and the area to the east around St Michael's Church, Inveresk. This is the area through which the Scottish army moved as they crossed the river and subsequently reassembled their formation in the area of Inveresk. The English also made camp in this area following the battle.
- The land around Drummohr and Morrison's Haven. This area of the coastline was the approximate location of the English camp the night before the battle, and they advanced westwards roughly following the coastline in their initial attempt to reach Inveresk on the morning of 10 September.
- The slopes and top of Falside and Carberry Hills. The slopes of the hills are the location of the cavalry engagement and some of the subsequent rout on 9 September. On the ~~lower~~ slopes of the hill is the English final position on the 10 September, including artillery further up the hill behind and beside the infantry. Falside Castle (on top of Falside Hill) was also the location of the final conflict of the battle.
- The[6] remainder of the area previously known as Inveresk fields, not including the areas mentioned above, primarily comprising the plain between Inveresk and the lower slopes of Falside and Carberry Hills. This includes the area now known as the Howe Mire and the land around it. ~~The plain between Inveresk and the lower slopes of Falside and Carberry Hills, including Inveresk fields and the area no known as the Howe Mire.~~ This open area was the area through which the Scottish army advanced, where it was engaged by the English cavalry, and where it is ultimately located at the culmination of the battle.

The Battle

[3] We updated this section in response to discussions at the researchers' seminar on the wider context for the battle.
[4] We made changes to the standardised text in the first two paragraphs of 'inventory boundary' to reflect the terminology we use in the current version of the selection guidance for battlefields.
[5] We made changes to this section and the following bullets to reflect discussions at the researchers seminar
[6] We changed the wording here in response to comment 4.

The Battle of Pinkie mainly took place on Saturday 10 September 1547, although a significant cavalry engagement on Friday 9 also played a significant role in the outcome.[7] The English invasion force under the Duke of Somerset had advanced along the coast towards Edinburgh supported by an English naval fleet. In preparation for the English arrival, the Scots army under the Earl of Arran had made camp in a strong position on the west bank of the River Esk.

Although there was some minor contact between the Scots forces and the advancing English for several days prior to the day of the battle, the first significant engagement took place on Friday 9 September, an engagement on the slopes of Falside and / or Carberry Hill between the cavalry of both armies. The light cavalry of the Scots army was beaten in this fight by the heavier horse of the English army, taking significant casualties and being forced to flee, pursued southwest for several miles by the English. Although sometimes thought of as a separate event to the main battle the following day, the outcome of this engagement played a key role in the events of 10 September, with the Scottish cavalry ~~effectively removed~~ significantly weakened as a viable fighting force and unable to successfully make any clear impact on the events or outcome of the main battle[8].~~played a key role in the events of 10 September~~.

For the night of the 9 September, Somerset chose to establish his camp on the coast near Prestonpans, where he was able to connect with his naval support and remain well out of range of the guns in the Scottish camp. Somerset also took the time on 9 September to scout the Scots position, noting that undefended high ground at St Michael's Church, Inveresk on the east bank of the river could allow his artillery to fire directly into the Scottish camp. Somerset resolved to secure this the following day, as this would negate some of the strength of the Scot's position, although any attempted crossing of the Esk would likely still be fiercely contested by both sides.

The English army broke camp early on 10 September and began advancing towards Inveresk. They discovered that the Scots had also broken camp, crossed the River Esk and now controlled the high ground at St Michael's Church towards which the English had been heading. Furthermore, the Scots were continuing to advance forwards from the church at a rapid pace, deployed in three main battles with support from cavalry and archers on the flanks. (Here, "battle" is the word used at the time of Pinkie for what would come to be termed a "battalion" by the end of the 16th century and onwards.)[9] As they crossed the river and advanced, the rearward battle and Highland archers on the Scottish left flank had come under ~~heavy~~[10] fire from the English ships, particularly the *Galley Subtle*, anchored to the north; some of the archers are alleged to have fled at this stage (See *Action* below for further detail), while the rest of these units were forced to move southwards to escape the bombardment. This began a series of gradual realignments in which the advancing Scots battles closed in on each other, eventually coming so close that the cohesion and organisation of their battles began to suffer.

The precise reason or purpose behind the Scots decision to leave their camp and attack is unclear, but Somerset clearly saw the advance as a significant threat, as he chose to deploy his cavalry in a direct assault on the advancing Scottish force. An attack against the pikes of the Scottish vanguard under the Earl of Angus was hampered by the need to pass a cross-ditch or slough located between the English and Scots forces, and the English horse suffered heavy losses in the assault. Despite the casualties, they did succeed in stalling the Scots for long enough to enable Somerset to move his own force onto higher ground first.

At this point came the deciding period of the battle. Somerset now held a higher position than the Scots and was able to begin firing artillery from this position into the Scots, over the heads of his own army. The English also had a force of mounted hagbutters, who began to ride forward, fire their guns into the tightly packed Scottish formation and retreat to reload, all the while never coming in range of the Scot's pikes. The English navy may also have been in a position to fire into the Scottish flank at this stage of the battle, increasing the scale of the bombardment.

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[7] We changed portrayal of Pinkie from a one-day, to a two-day battle in response to discussions at the researchers' seminar.

[8] We changed narrative about the Scottish cavalry to address comment 5 and comment 12.

[9] We provided this explanation of terminology in relation to comment 19

[10] We deleted reference to 'heavy' in response to comment 6.

The Scots' position at this point, although weaker than the English on the higher ground, was ~~still reasonably strong~~ not inherently untenable ~~as their front was protected by the cross ditch, while~~. The cross-ditch would likely have acted as a defensive obstacle to the aid of the Scots, as it did during the cavalry engagement, should the English attempt to advance against their infantry across it. ~~a turf wall appears to have been protecting their right flank and possibly a watercourse on their left~~ They may also have had some protection from the turf banks of the lane on their right flank, depending how far they had moved from the lane during their advance.[11] However, the tightly packed nature of a pike block, while deadly to cavalry, was itself vulnerable to gunfire and archery. Furthermore, the Scots three battles of infantry, having gradually closed together as the advanced appear to have been clustered into almost a single large group by this stage. This impeded their ability to individually manoeuvre and presented an even easier target for the English to fire upon. Although the Scots were attempting to respond, they had fewer troops available, and the position was therefore becoming untenable under fire. At this point it appears Angus attempted to restore the cohesion of the vanguard and align it to face the English head on. This movement was mistaken for a retreat by Scots forces in the rear, who began to throw down their weapons and flee. Panic spread quickly through the Scottish force and soon the entire army was in flight west towards Edinburgh and southwest towards Dalkeith. As the rout took hold, the remaining English cavalry once more came into action, chasing down and slaughtering the fleeing Scots for several miles.

The last conflict of the day took place at Falside Castle. A small Scottish garrison had held the castle throughout, firing upon any English forces that came within range, although they did not seem to do much damage to the overall English force. In spite of this, the English burned the castle with its defenders still inside in revenge for even the small resistance it had presented.

The Armies

Both the English and Scots armies at Pinkie used equipment and tactics that would have been common in other European countries at the same time, although both sides also used remnants of earlier modes of warfare. The deployment of three infantry "battles" (the vanguard, the main battle and the rearguard), each encompassing thousands of men, accompanied by field artillery and supported on the flanks by ranged units and cavalry, was the prevalent form of deployment favoured across Europe at the time. Both armies also contained experienced troops who had been involved in fighting across Europe, including foreign mercenary companies, another common feature of military forces at the time.

In the case of the Scots army, the main infantry battles were armed with pikes and were supported by a reasonably sized artillery train. There were, however, two areas of significant weakness in comparison to an ideal theoretical force at the time. The first was in a shortage of personal firearms in the form of the matchlock arquebus, (also known as a hagbut or hackbut) although the eyewitness account by William Patten does mention some as being present in the Scots force. To bolster this shortage was a substantial number of units armed with bows, primarily in a contingent from the Scottish Highlands. The second area where the Scots force was lacking was in its cavalry division, where only light horse was available to the Scots, while the English had both light and heavy cavalry available. This difference proved costly in the cavalry engagement on 9 September.

In the English force, the core of the army also comprised three main infantry battles, although in their case they were armed with a combination of pikes and 'bills', a hooked polearm that had fallen out of favour with most other armies by this period. Interestingly,[12] the English muster rolls from the 1540s record that pikes were still rare among the county militias, suggesting that Pinkie took place at a point in the late 1540s when the transition to the pike was underway in England, and that bills still outnumbered the pikes within the army during the battle. Pikes were also part of the supplies sent to the English garrisons within Scotland that were established following the battle, supporting the idea that the English forces were in the process of transitioning away from the bill at precisely

[11] We provided this clarification on the Scots position in response to comment 7

[12] We made changes to this section following the researchers seminar to act on advice that the previous version of the record was optimistic in terms of its description of the armoury of the English infantry.

the time of the battle. As noted above, the English also had a strong contingent of both light and heavy cavalry and were well supplied with 'hagbutters' (soldiers armed with arquebuses) including a Spanish unit of mounted gunners. Despite this, the English army also included longbowmen, a classic element of English armies that had often proved devastatingly effective in past battles.

The presence in both armies of units carrying equipment that were considered outdated in most armies, such as bows and bills, makes Pinkie an interesting and potentially unique battle marking a transition between the medieval and renaissance eras of warfare. This implies that the site of the battle could have interesting archaeological potential (see Archaeological and Physical Remains below).

Most of both forces were likely outfitted in a similar fashion, wearing jacks for body protection and a sallet or other helmet for the head. Each man would also have carried a sword as a secondary weapon in addition to their primary weapon, regardless of whether that was a pike, bill, bow or arquebus for the infantry or a lance for the light cavalry. The main exception to this was the English force of mounted men-at-arms, which would have been equipped with plate armour and heavy lances in common with other European heavy cavalry, although Patten notes that they had chosen not to equip barding on their horses that morning, as they had not anticipated going into battle that day. This decision was undoubtedly costly when they were forced to charge the Scottish pike formations during the battle, as their horses would have been unprotected as a result.

From a tactical perspective, the accounts suggest both armies were adopting typical military tactics for the period, including the division of the infantry into three battles. Although we do not have any indication of the physical scale of each section of the armies, we are able to infer this from the provided numbers by comparing them to some of the standard military tactics and manuals in use during this period of the Renaissance. For example, the English main battle comprised around 4000 men. If this was divided equally (as far as possible) by ranks (each line of troops running side to side across the group) and files (each line of troops front to back in the group), this would result in a deployment of around 63 ranks and 63 files. In practice, deploying in this way would make the battle around 100m wide by around 200m long, as each soldier needed more space in front and behind him than he did to either side. In order to make a battle roughly "square", it was necessary to account for this, and a general ratio of three ranks to seven files was advocated, as this gave one pace to either side of a soldier, and three paces to front and back, the latter then providing space to march forward without interfering with the man in front or behind. If the English main battle was deployed in this way, it would have required around 98 files but only around 42 ranks to would for a roughly square formation around 150m wide and long. Although we do not have precise information on how any of the battles were subdivided, this does at least give us some sense of the physical space that each of them would have taken up on the battlefield. In addition to the size and spacing of the battles themselves, at least 50 metres of space would then have been required between each individual battle. When this additional space is accounted for, along with the presence of cavalry and artillery, it would mean the intended deployment for both the English and Scots armies would likely have been in the region of 800 – 1000 metres wide, and the advancing armies would have stretched a similar distance, if not even further, from the front of the vanguard to the back of the rearguard.[13]

Numbers

Thanks to the detail provided in William Patten's eyewitness account we have a particularly good idea of the size and breakdown of the English army at Pinkie. For obvious reasons he does not provide the same detail for the Scot's army, but between Patten and some of the secondary sources we are able to determine a reasonable estimate for their force.

Scots

[13] In response to comment 8, we have estimated scales of the armies on the ground. We have had to caveat this to a degree as it is not possible to provide accurate measurements from the available evidence, but we have provided rough sizes and information on how we arrived at these, drawing from analysis of Renaissance era military manuals provided in Arnold's *The Renaissance at War*.

A total number of around 22-23,000 troops is likely for the Scots army. The vast majority of this comprised the pike infantry, although there were around 4000 Highland archers also on foot and 1500 light horse cavalry. They had around 25-30 field artillery pieces.

English[14]

The English army seems to have totalled around 19,000 men. Although some sources give numbers as low as 15,000, Patten's account gives a relatively detailed breakdown of the composition of the force, and thus the approximate total. The main body of the force comprised around 10,000 foot soldiers, divided into a main battle of 4000 and a vanguard and rearguard of 3000 each. This was complemented by a substantial cavalry contingent of 4000 heavy cavalry, a combination of mounted men at arms and demi-lances, with a further 2000 light cavalry. 800 firearm equipped troops were also present, a mixture of the 200 mounted Spanish arquebusiers and a further 600 arquebusiers on foot. 15 horse drawn large artillery pieces are recorded, although it is likely that further smaller pieces that could be transported and manoeuvred without dedicated horses were also present. Patten's breakdown of the English force is rounded out by baggage train of 900 carts and "many waggons" and a group of 1400 pioneers to undertake any engineering works required both by the army and in the creation of the planned English garrisons within Scotland. This gives a total of 18,200 troops, including the pioneers, with further unlisted numbers needed to man the artillery and the baggage train, leading to a total force of around 19,000 individuals.

Losses

As with most battles of the Medieval and Renaissance periods, the casualty figures are unreliable. Claims of up to 15,000 dead for the Scots are not very plausible, as this would represent around 75% of their entire army. Scots' casualty figures of several thousand are a reasonable assumption as a considerable number will have been killed during the long rout by cavalry.

The same issue of exaggeration applies to the English casualty figures, although in their case in the opposite direction, as they officially only suffered 250 dead. Given the inherent dangers of the cavalry attack made against the Scottish pikes alone, it is likely that the overall figures should be higher, plausibly in the high hundreds or even up to around a thousand. It would seem highly unlikely to be much higher than this, however, as the English did not suffer the slaughter experienced in a rout.

Action

Although the Battle of Pinkie itself took place on Saturday 10 September 1547, in practice there were key influences and decisions that would impact upon the battle in the days leading up to it. The first of these was the decision by Arran to encamp his army on the west bank of the River Esk. This was partly driven by necessity, as Arran could only call out the Scottish levies for a finite period of 40 days each year, and he had already spent nearly half of this time on a siege of the small but stubborn English garrison at Langholm by 20,000 Scottish troops. He therefore did not summon the levies until as late as possible, to maintain them in the field when they were needed. Concerns about a second English invasion in the west, a feint by Somerset to try and divide the Scots forces, also led to some resistance by forces in that area to respond to the summons. Despite these issues, Arran was able to gather a formidable force of 22-23,000 men to his army.

The delayed summons also meant it made some sense to let the English army come to him rather than spend valuable time marching to meet them, especially given Arran's uncertainty about whether they would invade along the coastline or along one of the inland routes. By the time it was clear which route the English were taking it was probably too late to advance and mount an effective defence further along the coast. Instead, Arran chose to spend time securing a camp on the west bank of the River Esk. The location of the Scottish camp was well chosen and provided them with a strong position from which to resist the invading force. Patten describes the camp as follows:

[14] We made changes to this section following the researchers seminar and comments about inaccuracies in the previous version of the record about the size of the English forces

"The plot whear they lay so chosen for strength, as in all their cuntrey some thought not a better: safe on the south by a great marysh, and on the north by the Fryth, which syde also they fenced with ii. felde peces and certeyn hakbuts a crok liynge under a turf wal; Edeborowe on y west at their backs, & eastward betwene us and them, strongly defended by the course of a river called Eske, running north into the Fryth: whiche as yt was not very depe of water, so wear the bankes of it so hie and stepe… as a small sort of resistauntes might have bene able to kepe doun a great number of cummers up."

From this description we know that the Scots camp was protected on its north by earthworks, on the south by a substantial marshland and to its front by the steep valley of the Esk. (It is also possible that the Scots had built further earthworks in addition to those on the north that Patten describes.) In addition to securing their camp as described, the Scots had also taken control of the stone bridge across the Esk at Musselburgh and placed artillery to defend it.

By the time Somerset arrived in the area on 9 September, he was aware of the Scot's location. Lord Clinton, commanding the naval arm of his force (they had sailed ahead of the army to attack Leith and Blackness) had already advised him the day before of the location of the Scots, before redeploying his ships to a position off Musselburgh, from where they could fire upon the Scottish camp. Rather than immediately advancing into range of the Scottish guns, Somerset's army also made camp "…*nye a toune they call Salte Preston* (Prestonpans) *by y Fryth*" (Patten, 1548). Patten provides less detail on the English camp, but still gives a general idea of its location:

"…our campe and theirs wear eyther within the sight and viewe of oothers, & in distauce (as I gest) a ii. myle & little more a sunder; we had the Fyrth on the north, & this hil last remembered, as I sayd, on the south (the west ende whereof is called Fauxsyde Bray, whereupon stadeth a sory castell and half a skore houses of lyke woorthines by yt), and had, westward before us, the liyng in campe."

Patten also refers to the English entrenching at least part of their camp, and his sketch maps of the battle also indicate that the English entrenched their camp in some manner, likely with earthworks constructed by the pioneers, as its depiction is surrounded by a linear feature on its south and west sides, while the north was protected by the coastline (the east side of the camp is not depicted, but it would be reasonable to assume that this side was also entrenched or defended in some manner).

As the English army established its camp, the first significant engagement of the battle took place. The Scottish light horse had been shadowing the English army for several days, taunting them and occasionally launching probing attacks against its left flank before retreating inland once more. They now took a position on Falside Hill, about a mile from the English camp, and continued their taunts. Lord Grey had sought Somerset's permission to attack the Scots cavalry with his own since at the least the previous day, and Somerset finally agreed to this request. The English light cavalry, accompanied by a small contingent of their heavier units, advanced cautiously towards the Scots. The Scots had for several days been successfully rushing in close to the English army to taunt them, then wheeling and riding away before the English could mount a response, so the English planned to take advantage of the Scots overconfidence in this manoeuvre. The Scots, meanwhile, hoped to draw the English into a pursuit in order to lead them to a concealed unit of 500 Scottish infantry, a tactic which they had successfully used at the Battle of Ancrum Moor two years earlier. On this occasion, however, it was the English plan that was successful, and they launched a devastating charge into the Scottish flank as they wheeled, catching them completely off guard, and forcing them to flee south over the top of the Falside Hill ridgeline and continuing past Cousland Castle for over three miles, pursued the whole way by the English horse. This engagement cost the English around 100 casualties but left up to 800 of the Scots killed or captured, around half of the entire Scottish cavalry force, and ~~rendered them out of action~~ significantly weakened their potential for involvement [15] the following day.

[15] We made this change to the narrative about the Scottish cavalry in response to comment 5 and comment 12.

With any immediate threat from the Scots cavalry neutralised for the moment, Somerset and some of the other English commanders took the opportunity to scout the area and the Scottish camp. Travelling along the high ground of Falside Hill and possibly onto Carberry Hill before descending and heading towards Inveresk, they were able to gain a good understanding of the landscape before them and of the Scottish camp. In the process, it was noted that the high ground around St Michael's Church at Inveresk could be useful to them. This high ground lay on the east bank of the River Esk and had not been claimed by the Scots, but from the position it overlooked Scottish camp and so would permit artillery fire into it. Coupled with fire from the naval arm of the English force, this would negate at the very least some of the strength of the Scottish position. The decision was therefore taken by the English to break camp in the morning and advance on St Michael's Church for this purpose.

On the morning of 10 September, the English force broke camp before 8 o' clock to enact their plan. However, before they were even halfway across the intervening distance, they discovered that the Scots had also broken camp, crossed the river and were now in control of the church and surrounding high ground. The reason behind the Scottish decision to advance is unknown and has been the source of much debate, although it appears Angus, in command of the Scottish vanguard, opposed the decision and he may have been supported in this by others in the Scots army. Among the various interpretations are that the Scots mistook the English breaking camp as the beginning of a retreat and sought to bring them to battle before they could escape, or that the Scots hoped to get into position to attack the English before they could break camp and deploy, this being the reason Patten provides. Other possibilities are that Somerset's reconnaissance the day before, during which Patten notes he came close enough to the Scots to come under fire, may have tipped them off to his plan and they chose to secure the position before the English could, or that the English fleet was putting sufficient pressure on the Scots position that they chose to abandon it and advance rather than wait out the bombardment.

Regardless of the reasons behind the decision, it appears the Scots crossed the river in three places, with the vanguard fording it in the vicinity of the church, where they waited for the rest to cross. The main battle on the Scottish right flank appears to have forded the river to the south of the church, while the rearguard on the left crossed by the bridge at Musselburgh. The Scottish army is described by Patten as mustering *"Betwent the ii. hillockes betwixt vs and the church"*. In the process of moving across the bridge and through Musselburgh itself, the rear battle, along with the Highland archers ~~on their left flank~~, came under fire from the English fleet. One of the English ships, a galley that appears to be the *Galley Subtle* listed in the Anthony Roll recording the English Navy in 1546, seems to have taken advantage of its shallow draft to manoeuvre closer to the coastline than many of the other ships could. From this position it was able to inflict notable damage to the Scots force, with Patten stating the galley[16]:

> *"…slewe the Master of Greym with a five & twenty nere by him, and thearwith so skarred the iiii. thousand Irish archers brought by the Erle of Arguile, that whear… they should have bene a wyng to the forewarde, thei coold neuer after be made to cum forwarde."*

Although the other vessels in the fleet were unable to navigate as close to shore as the galley, it is possible that other ships were also firing towards the Scots. The deeper water still lies within the recorded range of several different variants of 16th century artillery, although it is unlikely they would have had the same deadly accuracy or effect as the galley's closer assault.

To escape the lethal bombardment, the Scottish left flank began to move further south from its original line, bringing it closer to the Scottish vanguard in the centre. At the same time, some of the Highland archers ~~seem~~ are alleged[17] to have broken and fled under the naval fire. Patten suggests above that the remaining contingent did not advance any further after this, but he later describes

[16] Following the researchers seminar, we made changes to this section to give greater emphasis in the narrative to the naval element of the Rough Wooing.

[17] The changes here are in response to comment 6.

them in position ~~on the left wing~~ with the rest of the Scottish army, so it appears at least some of them, if not all, ~~they~~ must have continued to advance along with the rest of the army after this stage.

At this stage, the entire Scottish army appears to have begun advancing ~~eastwards~~ towards Falside Hill,[18] closer to the English force. The initial advance of both armies had been swift, but Patten pointedly states the Scots were moving quicker and that they appeared to be advancing to claim the high ground, seeking the inherent advantage it would provide.

> *"Hereupon dyd their armie hastely remooue, & from thence declyning southwarde, took their direct wey towarde Fauxsyde Brae. Of this, Sir Rafe Vane… quickly aduertised my Lord, whoos Grace thearby did redily conceiue of their meaning: which was to wyn of us y hill, & thearby the wynde & y sun if it had shyned, as it did not (for the weather was cloudy and lowrig). The gain of which iii. thynges, whyther party, in fight of battaile, can hap to obtain, hath his force doubled against his enemie."*

As the Scots advanced, they also began firing their field artillery at the English, which were being pulled by hand rather than spending time reattaching the horses to pull them. Based on the urgency suggested by Patten's account and the subsequent events, it is clear at this stage that the English commanders saw the Scots advance to claim the high ground as a significant and imminent threat. To attempt to delay or halt the Scottish advance, Somerset ordered his heavy cavalry to launch a frontal attack on the Scottish vanguard, to give him time to claim the high ground before the Scots.

This action potentially is the single most decisive moment of the battle. By this stage, the Scots battles had closed further together as they advanced, to the extent that they were hindering each other's movement. Despite this, the vanguard under Angus still retained its general cohesion and organisation and was well prepared to meet any attack by cavalry. Patten describes the Scots' array of pikes as *"…so thick, that as easly shall a bare finger perce thrugh the skyn of an angrie hedgehog, as ony encouter the frunt of their pykes"*. Furthermore, the heavy cavalry had not expected to be engaging in a pitched battle that day, instead anticipating the success of the plan to take control of the high ground at St Michael's Church and the bombardment of the Scots camp, an engagement in which they would have little role. As a result, they had left the barding for their horses with the baggage train, although the men-at-arms themselves were likely fully armoured. Another danger to the cavalry was the presence of a cross-ditch or slough noted by Patten, across which they would have to pass to engage the Scots. A cavalry charge against an organised unit of pike armed infantry could have little hope of any success, and Patten notes that the cavalry are in *"no small dauger (danger)"* in the attempt. Somerset was an experienced commander and would be aware of the almost certain outcome of this assault. Patten notes that around this point in the battle the two vanguards were *"within a ii. flightshot asunder"*, which would be around 500m, and as noted above artillery fire was already coming from the Scots. It is likely that Somerset recognised he had little choice but to sacrifice his cavalry on this forlorn hope, as without it the fast-approaching Scots would have been upon his army within minutes.

The result of the attack was very much as would be expected, with the English cavalry taking heavy losses and, despite pushing the left of Scottish vanguard back slightly, doing almost no damage to the Scots infantry. The cavalry was unable to hold this position for long and soon retreated, some of them fleeing through their own infantry as they did. In spite of the losses, the sortie had succeeded in its main purpose, as the Scots had halted their advance to meet the charge, and this brief period had bought the rest of the English army enough time to be first to the high ground.

Patten gives a description of the English disposition at this stage:

> *"By this tyme had our forewarde accordingly gotten the full vautage of the hilles side, and in respect of their march, stood sideling toward the enemie: Who neuertheles wear not able in all partes to stonde full square in array, by reason that at the west ende of theim upon their right hand, and toward the enemie, thear was a square plot enclosed with turfe… one corner whearof did let the*

[18] We made this change in response to comments about the direction of travel – see comment 11 and comment 16

square of the same arraye. Our battaile in good order next theim, but so as in continuaunce of array, the former parte thearof stood upon the hilles syde, the tayle upon the playn; and the rerewarde hoolly upon the playn. So that by the placing and countenaunce of oure armye in this wyse, wee shewed ourselves in a maner to cumpas them in, that they shoolde no way skape us: the whiche, by our poure and number we wear as well able to doo, as a spynners webbe to catch a swarme of bees."

The English had also managed to move artillery to the top of the hill by this stage, and indeed Patten's account suggests the Master of Ordnance for the English may have gotten some of his artillery to the top of the hill before the infantry had reached their position on the side of it.

The Scots now found themselves at a disadvantage because of losing control of the hill and did not resume their advance. The three battles had now closed together as noted above, and this provided an ideal target for the English artillery, who began firing roundshot and hailshot over the English infantry into the tightly packed ranks of the Scots, tearing holes in their formation. At the same time, the Spanish unit of mounted hagbutters began to ride forward as far as the cross ditch, where they would fire their guns into the enemy before retreating to reload at a safer distance, while the English archers were also able to fire over the heads of their comrades into the Scots array. Patten even notes that some of the English artillery moved into a position on the extreme right wing beyond their rearward, from where it would be able to enfilade the Scots, and began firing at them, creating a wide arc for the English force that was more in line with a late medieval deployment than the period in question. At this point an ~~half-hearted~~[19] attempt was made by around 500 of the remaining Scottish cavalry to attack some of the English artillery, but it ~~did little~~ ultimately had little impact before ~~being~~ the Scottish horse were driven off once more.

Under this bombardment the Scots could not hold their position indefinitely. It appears that Angus may have attempted to reorder and realign the vanguard, possibly to retreat out of range of the English guns or to restore its cohesion and prepare for an advance. However, this movement was misunderstood by Scots towards the rear of the force, who mistook it for the beginning of a full retreat, and they began to flee. This panic quickly spread through the Scots force and soon the entire army was in rout, although it seems some small groups may have retained some degree of discipline and made a fighting withdrawal. As was common behaviour, the fleeing Scots were casting aside equipment, armour, and weapons to speed their escape, some heading southwest towards Dalkeith, others along the shoreline towards Leith and still more towards the strong defences of Edinburgh and the castle. With the Scots now ~~feeling~~ fleeing[20] en masse, and no real cavalry presence to shield their retreat, the English horse embarked on a slaughter, chasing them down without mercy for four hours and across an area nearly 4 miles wide and extending west for 5 miles, almost as far as Edinburgh itself. While the cavalry rampaged, the English also burned Falside Castle and its occupants, who had held their position throughout the battle, firing upon any English forces that came within range.

The English camped that night at *"Edgebuklyng Bray bysyde Pinkersclough"*, east of their intended original destination of St Michael's Church. The following day the English set about burying their dead and gathering up the valuable equipment and artillery of the Scots army, either abandoned on the field or stripped from their bodies. The Scottish dead were left to be dealt with by their compatriots. It reportedly took two days to find enough carts to collect up the Scottish dead for burial, a further demonstration of how high the casualties were for the Scots. On 18 September, the English army passed the battlefield once more as they were beginning their return journey south, and Patten noted there were still some corpses unburied, though he reported that many had been interred in Inveresk churchyard, while there were apparently still some bodies not yet buried a full month after the action (Treasurer's Accounts, ix; 121; 129).

Aftermath and Consequences

[19] The changes here are in response to comment 12 about the Scottish cavalry.

[20] Correction of typo in response to comment 14.

In the immediate aftermath of Pinkie, the English army advanced onwards to Edinburgh, although they were unable to threaten the city, or perhaps unwilling to even attempt to after the castle had successfully resisted an English force just 3 years earlier. There may have been entirely legitimate concerns about beginning a potentially long siege relatively late in the campaigning season, or Somerset simply may have been driven by his original intention, as noted in a letter by the Spanish ambassador in late August 1547, to complete his invasion and return to London within around six weeks. Although Edinburgh remained unassailed on this occasion, the nearby port of Leith was less fortunate. The English army occupied the town,[21] finding its inhabitants had already fled, and were able to capture a number of ships anchored in the harbour, along with valuable cargo, while the English fleet attacked other small towns around the Forth including Kinghorn. While this was underway Somerset appears to have surveyed Leith for its potential as an English stronghold, as the creation or capture of fortifications to provide English control over southern Scotland had been one of the aims of his 1547 campaign, and such works were well already underway at Eyemouth and elsewhere by this time. Strangely the idea of fortifying Leith was never followed, as access to the harbour would have given the English an extremely strong position to control the Forth itself and the surrounding lands, along with providing a secure supply route by sea. (It was the complete lack of such secure supply routes that was a fundamental weakness of the site they ultimately chose for their largest fortification of the period at Haddington.) Instead, Somerset and his army soon marched southwards to return to England, leaving a small English force on the island of Inchcolm with two small boats to control the firth, and establishing further small outposts as they went. Some of these new English garrisons began suffering supply issues within weeks, a situation which would never improve and doomed Somerset's plan to establish an English controlled 'pale' within southern Scotland.

The Battle of Pinkie was to have significant long-term consequences, but interestingly they were the opposite of what the English victory would have suggested or intended. The infant Mary Queen of Scots, who had been safely in Stirling throughout, was sent to Inchmahome Priory by her mother Mary of Guise for safety, and the following year departed Scotland for France, now betrothed to Francis, the young French Dauphin (the title given to the eldest son and heir apparent of the French King). In return, French reinforcements began arriving in Scotland in significant numbers and the ongoing war began to steadily shift in Scotland's favour. Although the English would send large forces to the aid of their beleaguered garrisons on several occasions, particularly at Haddington, they were never able to win a lasting reprieve from the efforts of the combined Franco-Scots forces nor were they able to bring them to a pitched battle like Pinkie. Renewed French attacks against English strongholds on the continent along with the ongoing struggles in Scotland ultimately forced the English to make peace under the Treaty of Boulogne in 1550 and to surrender all their holdings within Scotland under the Treaty of Norham the following year.

Events & Participants

There had been a long history of English claims to suzerainty over Scotland before Edward I had taken feudal overlordship over the kingdom. Henry VIII considered that he still retained that claim. He also considered Scotland an active threat due to its links with France at a time when England was involved in constant conflict with the French. By the mid-16th century, the long-standing pattern of alliances and conflicts between Scotland, England and France had also added a new religious element, with the Reformation in England creating additional tensions between the Protestant and Catholic factions on top of previous dynastic and territorial ambitions. Henry's approach to the problem was the Rough Wooing. By using violence to pressure the Scots into accepting the marriage between his own son and Mary Queen of Scots, Henry hoped to gain two key strategic aims. Firstly, the marriage would unite the crowns of Scotland and England, a long-standing ambition of Henry's, and one which he intended to exploit to make himself effective ruler of Scotland. Secondly, the

[21] We made changes following the researchers seminar to reflect the wider historical context for the battle to address the reasons why Somerset invaded, and the wider aims of the 1547 campaign

marriage, and thus Henry's efforts, were also intended to strengthen the Protestant faction within Scotland, in turn weakening the Scots long-standing links with Catholic France [22].

The most significant participants in the battle were the respective commanders, Somerset and Arran. Arran was Regent of Scotland and next in line to the Scottish throne after Mary Queen of Scots. He had been a Protestant and one of the negotiators of the original marriage agreement in 1543 but had converted to Catholicism and was now pro-French. He had been one of the commanders of the Scottish army that had won the Battle of Ancrum Moor in 1545. In the aftermath of the Battle of Pinkie, he was instrumental in ensuring the escape of Mary to France, preventing the marriage from taking place. In 1554 Arran resigned the Regency to Mary of Guise, the mother of Mary Queen of Scots. Initially allied with her, he changed allegiance to the Protestant Lords of the Congregation and unsuccessfully opposed the decision to have the young queen married to the French Dauphin (later Francis II of France).

The Scottish vanguard was commanded by the Earl of Angus, the Red Douglas. Archibald Douglas, Earl of Angus, was one of the most powerful Scottish nobles of the sixteenth century. He first came to prominence on 6 August 1514 when he married Margaret, the Dowager Queen, widow of James IV, mother of James V and elder sister of Henry VIII of England. The marriage was instrumental in breaking the fragile peace in Scotland as Margaret's regency was to last until James V came of age or she re-married. She had been holding a delicate balance between the pro-French and pro-English factions at Court, but her marriage to Angus gave impetus to the pro-French group to push her out and install the Duke of Albany as regent. She eventually fled to England, leaving Angus in Scotland, where he promptly took a mistress and started spending Margaret's money. The ensuing enmity between the couple, coloured Scottish politics for years to come. Angus was charged with high treason by the Duke of Albany and was sent as a prisoner to France in 1522. He escaped to London in 1524 and then returned to Scotland with the support of Henry VIII. In 1524, Margaret made an alliance with the Earl of Arran and Angus had to take refuge in his ancestral home of Tantallon Castle. However, with the influence of Henry VIII from south of the border, Angus was able to force his way back into power and was appointed to the Council of Regency, which looked after the King in rotation despite Margaret's declaration in 1524 of his majority. Angus was the first of the council to have physical custody of the King but refused to hand him over at the end of his three-month period. He imposed himself as the Chancellor of Scotland, filled all positions of authority with Douglas family members and supporters and kept the young King effectively a prisoner. The Battles of Darnick and Linlithgow Bridge were both attempts to wrest control of the King from Angus. Despite his victory in both battles, Angus would only retain his control for another two years. James V escaped his custody in 1528 and began to rule on his own account, with his first order of business the removal of Angus, who had retreated to Tantallon again. Despite considerable effort on the part of James, Angus held out until 1529 when he was able to escape to England under a treaty between James and Henry VIII. Angus remained in England until James' death in 1542, at which point he returned on a mission from Henry to arrange a marriage between the infant Mary Queen of Scots and the future Edward VI. However, in 1544 he was in open conflict with the Earl of Arran, son of his ally in 1526, and imprisoned briefly. The English Rough Wooing (1543-1550), which attempted to coerce the Scots into accepting the marriage between Mary and Edward, hit Douglas lands hard and caused Angus to settle with Arran and the two fought together at the Scottish victory of Ancrum Moor and the defeat at Pinkie in 1547. He eventually died in 1557.

Also present within the Scottish army was George Gordon, the Earl of Huntly. He was Lord Chancellor of Scotland in succession to the murdered Cardinal Beaton. He was captured during the fighting at Pinkie but was able to escape and head for France with Mary of Guise in 1550. He later turned against Mary Queen of Scots when she took the earldom of Moray from him, and later rose in rebellion against her. He died in captivity after being defeated in the Battle of Corrichie in 1562.

Edward Seymour was the Earl of Hertford, the Duke of Somerset, and the Lord Protector of England during the minority of Edward VI. He was the brother of Jane Seymour, the third of Henry VIII's wives; she died from complications in childbirth, which was the reason that Somerset was able to survive

[22] We made changes following the researchers seminar to reflect understanding of the wider context of the battle by historians

the end of that marriage. He had been Warden of the Scottish Marches under Henry, and in this capacity had pursued the Rough Wooing vigorously on Henry's behalf. Somerset was also a leader of what was seen as the Reform group that led the Protestant cause in England. He was a talented military commander with a strong record of military victories; in addition to his successes in Scotland, he led the defence of Boulogne-sur-mer in 1546. However, he was less able as a politician and all his schemes came to an unsuccessful end. He was not able to bring Scots to the English Protestant cause despite the growing strength of Protestantism in Scotland, and his policy of occupation proved to be an expensive failure because of supply difficulties. In 1549, he was stripped of the title of Lord Protector and was subsequently beheaded in 1552.

Lord William Grey led the English cavalry. He was an experienced soldier with distinguished service ~~in the Italian War in~~ during the English expeditions in northwest[23] France between 1544 and 1546. He was wounded by a pike thrust during the cavalry charge against the Scottish ~~schiltrons~~ battles[24] but survived to lead the establishment of the English base at Haddington, which was to be the focus of a prolonged siege. He survived the death of Somerset and involvement with Northumberland's attempt to put Lady Jane Grey on the throne. He was sent to France to defend the Calais enclave but was unsuccessful and ended with the loss of Calais and his own capture by the French. He was finally prominent in the Siege of Leith in 1560, when he led the English troops that participated in the attempts to drive the French out of Scotland, although his efforts here were generally seen as being a failure.

Lord John Dudley, Earl of Warwick, led the English vanguard at Pinkie. A confidant of both Henry VIII and Somerset, he was popular and considered one of the finest commanders in England. Warwick had been Lord Admiral of the Navy and provided naval support for military action during earlier phases of the Rough Wooing. At the time of Pinkie, he was once again a soldier. After Pinkie, Warwick was one of the most powerful of the nobles that ruled England during Edward VI's minority. He supported Somerset as Lord Protector, but as Somerset proved to be a less than able governor who was focused on expensive military policies, he led the efforts to remove Somerset from power. However, he ensured that no harm came to Somerset, although the latter was eventually executed on trumped up charges. Warwick became Duke of Northumberland and ran England for Edward VI and led the attempt to have Lady Jane Grey succeed Edward in preference to the Catholic Mary. When this attempt failed, the Earl was charged with treason and beheaded in 1553 in front of a crowd of 10,000.

The battle itself is significant in terms of tactics. It was the first time in Britain that gunpowder weapons proved decisive in the outcome of a battle; it was also the first time that artillery, infantry, cavalry, and naval support had combined in an action recognisable in modern terms. While, in these terms Pinkie was comparable to contemporary battles in Europe, the use of naval bombardment as part of the battle was a major innovation; the guns firing from the ships out at sea caused havoc amongst the Scottish rearguard and drove off some of the archers that might have replied to the English fire. Artillery had been present in earlier battles, such as Flodden in 1513, but had never been as effectively employed as it was at Pinkie. The English guns made the Scottish defensive position untenable, ripped great holes in the ~~schiltrons~~ battles and made it impossible for the Scots to hold position after fending off the cavalry. The standard English medieval tactics of archery and dismounted men-at-arms were replaced by heavy cavalry charging the enemy and pursuing them as they routed, with arquebuses firing into the sides of the ~~schiltrons~~ battles. As well as being the first time that such a battle had been fought on British soil, it was an early example of such tactics in European terms.

Context[25]

[23] Change made in response to comment 18

[24] We corrected the terminology used here and in following paragraphs below in response to comment 19

[25] We made significant changes to this section following the researchers seminar to explain historians' understanding of the wider aims of the 1547 campaign

The campaign of 1547 was far more than simply another bout of the intermittent cross border warfare that took place between England and Scotland for several centuries across the medieval and renaissance periods. It took place during a time of political, religious, and military upheaval across Europe, and is itself intrinsically linked to this wider context. This was the period of the Reformation, where individuals, groups and nations across Europe split from the Catholic Church and papal authority, turning instead to the newly established Protestant ideology. Religious affiliations in the 1540s led the Scottish Protestant faction to look to England for support, the Scottish Catholics to France. This tied the religious convulsions of the period to the existing benefits and challenges of the long-standing Auld Alliance between Scotland and France, in opposition to England.

One of Henry VIII's long term projects was to unite the kingdoms of England and Scotland, which he attempted to do through the marriage of the young queen Mary of Scotland and Prince Edward (later Edward VI) of England. This was partly because of the strategic issue of avoiding a war on two fronts, where the Scots had long used the excuse of English military action in France to raid across the border. Following the English Reformation, there was also strategic value in using the marriage to boost the Protestant faction within Scotland, as this would also bolster the Protestant position more widely within Europe and weaken the Scot’s links with Catholic France. However, the intended marriage was also driven in a large part by Henry’s personal ambition, as he clearly did not accept the result of the Wars of Independence and believed that he had inherited Edward I's claim to the Scottish throne. In 1543, the English Parliament passed a subsidy act that described the late James V as 'the pretensed King of Scottes being but a usurper of the Crowne' and talked of Henry's 'right and title to the said Crowne and Realme'.

Some military confrontation was inevitable, as it was clear from all of Henry's actions and words at the time that he intended Scotland to become a subject of England. While he was pressing for a marriage alliance between the young Mary and Edward, Henry had every intention of ruling Scotland as his own. It was unlikely that the Scottish nobility would accept this, although there were Protestant nobles who saw an opportunity for the advancement of both their personal ambitions and their faith in the match. Henry would never accept a rejection of his demands, and his response would inevitably be military. It was therefore to no one's surprise that the talks collapsed into open conflict in 1543-5 in the so-called Rough Wooing. The initial phases of this consisted of large-scale raiding, where cattle were stolen and villages and towns destroyed, the inhabitants being slaughtered. In 1544, the Earl of Hertford led a large naval invasion of Scotland, taking Leith as a base to destroy the city of Edinburgh. His army devastated southern Scotland and set fire to Dunbar with heavy civilian casualties.

The raiding continued throughout 1544 and into 1545, until the Scots managed to inflict a defeat on an English army at the battle of Ancrum Moor in February. This reduced the number of raids, but in September, Hertford returned on another devastating raid. Again, the English caused tremendous damage, but got no further with forcing the acceptance of the marriage between Edward and Mary. The violence was halted partly by treaty in 1546, and partly by the death of Henry VIII on 28th January 1547. Edward now succeeded to the English throne as Edward VI, but as he was a minor, power was in the hands of the Earl of Hertford, who gained the title Duke of Somerset in February 1547. Somerset, who continued Henry's attempt to force the marriage of Edward to Mary, had concluded that Henry had failed by tactics solely built on terror; Somerset decided to add the control of territory to the terror, and began preparing for an invasion. At this point England still had effective control of some major strongholds within Scotland, including St Andrews Castle, held by Protestant Scots following their murder of Cardinal Beaton. Relieving or strengthening the garrisons at these strongholds may have been one of the original aims of Somerset’s invasion, as this would have been of great benefit to his strategy of territorial control, and indeed Henry himself had proposed intervening at St Andrews before his death. However, before the invasion could begin the support of a newly arrived French fleet finally rendered the remaining strongholds into submission. In spite of the losses of these strongholds, Somerset continued with his plans and preparations to invade.

The English army was mustered at Berwick and from there, in early September, it crossed the border, marching north along the main east coast route, supported and supplied by the English fleet. At the same time, as a diversionary tactic, a smaller force of about 2,500 had been assembled at Carlisle, feigning a major west coast invasion. In response, the Earl of Arran mustered northern Scottish

forces at Edinburgh and the troops from the south at Fala, about 15 miles to the south-east of the capital. From there he could respond to either a cross country or a coastal advance by the enemy. Once aware of the English route, Arran marched north to block their approach, where the coast road crossed the River Esk at Musselburgh, while the Scottish horse skirmished with Somerset's army as they advanced past Dunbar.

Other Notable Participants

No further information

Battlefield Landscape[26]

The battlefield landscape of Pinkie is fairly well defined through contemporary documentary sources and plans of the battle, and it remains broadly understandable as a landscape today, in spite of landscape changes since the battle. There does remain some debate over the location of certain specific events within the battle, but none of these call into question the general location of the overall conflict.

The cavalry skirmish on 9 September is recorded on the battle plans as taking place on the sloping ground of **Falside Hill** and **Carberry Hill**[27]. Given the nature of this cavalry engagement, it is plausible that it extended along a considerable part of the slopes of these hills, and indeed the pursuit of the Scots continued for some distance beyond them, passing Cousland Castle to the south of Carberry Hill as it did.

The Scottish camp was located on the west bank of the **River Esk** and is depicted in the plans as relatively close to the Forth on the north. It is unclear how far it extended to the south, but documentary sources suggest it reached towards the vicinity of **Monktonhall**. The English camp, meanwhile, was located just west of **Prestonpans**, again close to the Forth coastline, in what is now the area of **Drummohr** and the Royal Musselburgh Golf Course.

On the morning of 10 September, the Scots army left their camp and moved to the east bank of the Esk. Some of the Scots crossed using **Musselburgh Old Bridge**, while others forded the river below **St Michael's Church** in Inveresk. The Scots gathered in the vicinity of the church before advancing ~~eastwards~~ towards Falside Hill,[28] with the vanguard and main battle passing to the south of the church and the rearguard passing it to the north. At around the same time, the English army also broke camp and began to move ~~westwards~~ towards St Michael's Church.

With both armies now in the field and converging upon each other, the Scots began advancing towards an area of high ground, seeking the inherent advantage this would provide, and the English also began to move to this feature once they realised the Scot's intention. We can identify from the battle plans that the high ground in question must have been part of the arc of sloping ground formed by Falside and Carberry Hills to the southeast of the armies at this time. However, the currently available evidence does not permit us to definitively identify where in this area of rising ground the English army ultimately ended up, having successfully beaten the Scots to the position.

The battle plans also show the Scots crossing a linear road feature during their advance. This is also likely to be the turf banked lane described by Patten and used by Somerset in his reconnaissance of the Scots camp on 9 September. Two modern features have been suggested as the location of

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[26] Significant changes were made to this entire section prior to the first consultation, including to the sub-sections titled *Location*, *Terrain* and *Condition* to take account of the application, supplementary information, and discussions at the researchers seminar to the effect that the previous inventory record was based too strongly in favour of one interpretation of how the events of the battle took place in the landscape. We have revised the record to reflect other interpretations, which we consider may equally be supported by the available evidence at the current time.

[27] Following the researchers seminar, we made changes to identify in the text, additional landscape features related to the various interpretations of the battle These features have been identified in bold text within the document for ease of reference. This is consistent with the approach we take for the inventory of gardens and designed landscapes.

[28] Change made in response to comment 11 and comment 16

this lane. The first is the modern **Carberry Road** running roughly southwards from Inveresk, past the shoulder of Carberry Hill and on towards Cousland. The second possibility is **Crookston Road**, which runs from a similar start point in Inveresk but aligns towards the southeast, running up the slope to the shoulder between Falside Hill and Carberry Hill, although it is now cut in two by the modern A1.

There are also several landscape features referred to in the accounts and the plans that have not yet been definitively identified in the modern landscape. Among these is the slough or cross ditch mentioned by Patten and located in front of the Scots army at the time it was attacked by the English cavalry. Modern features proposed as potentially representing this, include **Colton Dean**, the **possible former course of the Ravenshaugh Burn, potential historic water courses around Crookston**,[29] ~~**Crookston Burn,**~~ and an **unnamed ditch cutting across the Howe Mire** area. In the absence of clearer evidence, it is not possible to definitively identify any of these features as the slough. It is even possible that none of them are the feature Patten describes.

Another unidentified feature recorded in the accounts is a square enclosure adjacent to the English vanguard when it reaches the high ground. There is no modern feature that has been identified as potentially representing this, although it is possible that archaeological evidence could survive of such an enclosure. Patten also describes the Scots army as ~~advancing~~ passing two hillocks as they advanced ~~moved eastwards~~. These are also not clearly identifiable within the modern landscape, although it has been proposed that the area around the southeast edge of Inveresk, where the Crookston and Carberry roads meet, may be what Patten was describing as hillocks. Another possibility is a small cluster of hillocks depicted by William Roy on his *Military Survey of Scotland*, which no longer appear to be extant, but that previously lay somewhere towards the southernmost part of modern Pinkie.

Despite the debate around some of the specific features that would allow us to conclusively identify the location of the two armies at the culmination of the battle ~~to be identified with a high degree of certainty~~, we can still identify the general location with a reasonable degree of certainty. As noted above, the high ground that was reached by the English is somewhere on the ~~lower~~ slopes of Falside or Carberry Hill. For the Scots to have crossed the turf banked lane and be making for the high ground themselves, their army must have been somewhere in the open, relatively flat ground around the modern **Howe Mire** / **Crookston** area between Inveresk and Falside Hill when it was engaged by the English cavalry and ceased its advance. As noted above, the landscape of Pinkie has been changed to a degree since the battle, including the enclosure and improvement of the agricultural land, the expansion of settlements such as Musselburgh, Pinkie and Wallyford, and the creation of modern infrastructure such as the A1 trunk road and the East Coast Main Line railway. There has also been a large amount of mining activity in the area from the medieval period through to the 20th century. The impact this has had upon today's landscape is sometimes clearly defined and understandable, but unfortunately in other areas this impact is not fully understood. Despite these changes, the broad landscape and terrain of the battle can still be understood, with much of the area remaining agricultural land and key features such as the **River Esk**, **Falside and Carberry Hills**, **Musselburgh Old Bridge** and **St Michael's Church** allowing an observer to easily place the events of the battle in their general landscape context on the ground. Key views within the landscape also survive, such as **to and from the high ground at Inveresk**, **the slopes of Falside Hill and Carberry Hill** and **from the location of the English camp towards Inveresk**.

Location

The location of the battle of Pinkie presents an interesting problem, as it combines elements and locations that are easy to identify and define within the modern landscape with areas of activity where there remains some debate over the location. Defining the landscape for the battle of Pinkie is significantly aided by the presence of several detailed plans of the battle, among the earliest battlefield maps in existence. These are supported by a range of documentary sources, such as Patten, that name or otherwise identify specific physical features that remain within the modern

[29] Changes made in response to comments 24-28

landscape. This allows for a definition of an overall area of interest for the battle of Pinkie with a high degree of certainty, despite the uncertainty about the specific location of certain events.

The first major landscape feature we can definitively identify is the **River Esk**. The Scots specifically choose the river as part of their initial strategy, as it presents a significant obstacle to any military force. To take advantage of this, the Scots placed their camp on the western side of the river, close to **the coastline of the Firth of Forth**. A contemporary English source places the camp on Edmiston Edge. Although ~~this~~ a specific feature with this ~~location is no longer identifiable~~ name is no longer identified, there is a strong likelihood that at the time it was the name of ~~it may represent~~ the steep scarp immediately west of the river, and its described relationship to other named places that are identifiable supports this.[30] Meanwhile, multiple Scottish individuals present for the battle made wills beforehand that were recorded at **Monktonhall**, suggesting the Scottish camp may have extended quite far to the south. Although the full extent of the Scottish camp is harder to define, its broad location is clear, and this also marks the western limit of the battlefield area.

The second major landscape feature we can identify from the sources is **Falside Hill** and **Carberry Hill**, a long slope rising to a crest that arcs around the east and south side of the battlefield. This feature is clearly marked on the plans of the battle and described in the primary accounts. The English camp is depicted as lying on the coastline below the eastern end of Falside Hill. ~~and~~ Along the slopes of Falside Hill and Carberry Hill is the location of the initial cavalry skirmish, and some of the subsequent rout, on 9 September, before it continued south past Cousland Castle. The lower slopes are also likely to represent the high ground that both armies look to claim on 10 September, while **Falside Castle** on the top of the hill is the location of the final conflict of the battle. Although the precise position of the events on both days remains debatable, we can be confident they did not take place beyond the high ground of either hill (although the cavalry rout extended further this way once it was well underway) and so the ridgeline of Falside Hill and Carberry Hill stretching around the east and south of the area marks the boundary of the battlefield on these sides.

The final feature that allows us to define the extent of the overall battlefield is **the coastline of the Firth of Forth**. Although this has been significantly altered through land reclamation etc. since the battle, we have sufficient evidence of the original coastline to define this against the modern equivalent, and hence the northern limit of the battlefield.

Within this broad area, there are further identifiable features that we can confidently locate. Of these, the most prominent in relation to the battle are the old bridge across the Esk in Musselburgh and St Michael's Church in Inveresk. **Musselburgh Old Bridge** (LB38378) was first built in the early 16th century and was used by the left wing of the Scots army for crossing the River Esk early on 10 September. **St Michael's Church** (LB10880) is a 19th century building, but it is located on the site of an earlier ecclesiastical building, and on a crucial area of high ground overlooking the Scottish camp that the English army aimed to occupy on the morning of 10 September, although the Scots were able to take to control of it first.

As noted above, we are also able to locate the English camp from the sources available. Its location near the northern end of Falside Hill is clearly shown in the plans of the battle. Patten's account also states the English camp was around two miles from the Scots, and "*…nigh Salt Preston*," which is now **Prestonpans**. This would put the English camp in the modern area of **Drummohr** and the Royal Musselburgh Golf Course, which would also provide direct access to the small harbour at **Morrison's Haven**. This would provide an important link for the English between the army and their supporting fleet, as much of the East Lothian coastline in this area is extremely rocky and unsafe for ships.

Other features recorded in the primary accounts and plans are less definitively identified in the modern landscape, and in some cases cannot be associated with any modern landscape feature at all.

As noted above there are two modern roads, **Carberry Road** and **Crookston Road**, that have been suggested as the location of the turf banked lane described in Patten's account. Part of the reason for the two options remaining plausible is that both roads are known to be old routeways, recorded on William Roy's *Military Survey of Scotland*, for example. It is also complicated by the fact that the

[30] Changes proposed in response to comment 30.

primary accounts and maps refer to Falside Hill only, and do not mention Carberry Hill. However, the evidence suggests they do mean the entire length of the sloping ground including both hills. If Carberry Hill is excluded it would suggest the Crookston Road is the one depicted on the maps running past the end of Falside Hill, but with Carberry Hill included the Carberry Road running past the end of it becomes the more likely candidate. Another key feature is the presence of a castle on the battle plans that this routeway is heading towards. Carberry Tower may well not even have been built by the time of the battle, but **Cousland Castle** was in place, and would generally match with the location on the battle plans, as the castle is depicted as next to the hill, rather than on it, and between the hill and the Esk. Patten himself labels it as Cousland, and although some previous analyses of the battle have suggested that Patten was mistaken and it should be Carberry, the evidence suggests it is more likely to be Cousland.[31] If Crookston Road were the lane, then this castle ~~would~~ could ~~presumably~~ potentially be Carberry, as it would sit to the side of Falside Hill as depicted, but this does not fit as well with the depictions given in the battle plans, nor does it resolve the lack of clear evidence that Carberry had been built by the time of the battle. It is also important to note that the previous route of Crookston Road may have been further to the east than its modern equivalent.[32] In summary, a~~A~~lthough in the absence of further evidence it is not possible to rule out Crookston Road entirely, it seems more likely that Carberry Road is the modern equivalent of the route depicted on the battle plans.

In the context of understanding and locating the events of the battle, ~~the location of~~ the slough or cross-ditch is potentially the most vital landscape component for which the location ~~that~~ is currently uncertain. ~~Although~~ Several identifiable modern[33] landscape features have been proposed as possibilities. However, our understanding is compromised by the extensive transformation of the landscape through both natural and man-made processes, even by the time of the earliest reliable maps of the area in the mid-18th century. This process continued and further impacted upon the land by the time of the Ordnance Survey 1st Edition, through activities such as land enclosure, agricultural improvements and the channelling and rerouting of watercourses. The issue is further complicated by the unclear meaning of "slough", as it has several potential definitions, in terms of landscape features, all of which could present an obstacle for a military force. These definitions include soft or muddy ground, a ditch or a drain. Patten does also describe the feature as a "cross-ditch", which clarifies the description slightly, but not sufficiently to specifically identify its form. It is also not clear if this is a natural or artificial feature, as a ditch could originate from a number natural or man-made processes, knowledge of which would potentially help identify the feature in question.

In considering the options for the "slough" and how they would influence the final positions of the armies at the culmination of the events, three other parts of Patten's narrative are useful. The first is his statement on the Scots army departing Inveresk. Patten's description of this initial movement is:

> "Hereupon dyd their armie hastely remooue, & from thence declyning southwarde, took their direct wey towarde Fauxsyde Bray"

This statement receives a high degree of attention in research into the battle, as it appears to be a very specific direction for the Scots advance. However, the precise meaning that Patten intended is less straightforward than it may at first appear. Much of the difficulty hinges on Patten's choice to use the word "decline", as there are two potential meanings for this phrase, which in this context are mutually exclusive. Among the definitions of decline that fit in this context could be either "to descend" or "to refuse". Unfortunately, both of these definitions would be entirely valid readings of Patten's phrase, as the Scots could have descended from the high ground at Inveresk in a southerly direction to Falside or could have chosen not to travel in a southerly direction and instead go directly to Falside. The presence of the comma after "southwarde" even opens a third potential reading, as it could indicate two independent clauses, namely that the Scots descended from the hill southwards and then changed direction to head directly to Falside.

Even when attempting to factor in that Patten was not using modern English we cannot resolve this dual meaning. The Oxford English Dictionary (OED) definition confirms "declyne" is a Middle English

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[31] Changes proposed in response to comment 34

[32] Changes proposed in response to comment 35.

[33] Changes in this section are proposed in response to comments 24-28

spelling of “decline”, and that its etymological origin is from the Latin “dēclīnāre” (to turn or bend away or aside from the straight course), but also notes that there are instances of decline being used to mean descend or fall away. We are also able to refer to A Table Alphabeticall, the first dictionary of the English language, including definitions of each word, written by Robert Cawdrey and first published in 1604. Crucially Cawdrey himself was born around 1537, so his understanding of the usage of English words in the 16th century will have been based upon his own live experience of the language, in contrast to a modern researcher’s analysis. Cawdrey defines “decline” as “fall away or swarve from”. Fall away is clear, while “swarve” is defined as “awry” or “erre” with the original meaning of awry being a turned or twisted direction or position, and the archaic form of err means to stray, making swarve an alternative spelling of the modern swerve. This is also consistent with the OED, which also recognises swarve as a Middle English spelling of swerve, and with the etymological origin of swerve as coming from the Old English sweorfan (depart, leave, turn aside), itself related to the Middle Dutch swerven (to stray). Therefore, both are still legitimate readings of Patten’s words, i.e. the Scots fell away towards the south or the Scots strayed away from the south.

In addition to this, there is a discrepancy between the suggestion that the Scots could travel southwards and still be travelling directly to Falside, as even to reach Carberry Hill from Inveresk requires them to travel in a south-easterly direction, and to travel southwards would not only miss the hill entirely but also put them on the wrong side of the Carberry Road to match any of the illustrated depictions. It could be argued that this shows Patten meant “decline” to mean that they chose not to travel southwards, however it is equally feasible that Patten erroneously listed the direction as south when his intention, and the Scots direction of travel, was southeast, and we cannot rule out this possibility with the information and evidence we have available.

The second important section of text within Patten when trying to position the armies in relation to each other is his description of their distance apart at a key point in the events, specifically the launching of the cavalry attack against the Scots front. Patten describes the plan for and intention behind this manoeuvre, and then states:

> “…and so with their bandes these captayns took theyr wey towarde the enemie. By this, wear our forewarde and theyrs within a ii. flightshot asunder…”

The bands and captains in question in this section are the cavalry units that Patten has discussed immediately before this section of his text. Therefore, at the point where the cavalry begins their manoeuvre to attack the Scots, the vanguards of the two armies are at a distance of “ii. flightshot” apart. As noted above, this distance would only be around 500m.

The final key section of Patten is his description of the relationship between the two armies after the English finish their move to the high ground. As noted above, Patten describes the final English position in relation to the Scots as follows:

> “Our battaile in good order next theim, but so as in continuaunce of array, the former parte thearof stood upon the hilles syde, the tayle upon the playn; and the rerewarde hoolly upon the playn. So that by the placing and countenaunce of oure armye in this wyse, wee shewed ourselves in a maner to cumpas them in, that they shoolde no way skape us: the whiche, by our poure and number we wear as well able to doo, as a spynners webbe to catch a swarme of bees.”

This description very strongly states that the final position of the English army prevents the Scots from easily escaping in any direction. Since any escape to the north was obviously impossible due to the Forth, and the route to the west was still covered by the English fleet, this means that the English army was positioned in a way that would restrict any line of retreat east or south for the Scots. We can therefore consider how the interrelationship between the two armies based on the different possibilities for the slough reflects this description by Patten.

Each of the~~se~~ possibilities discussed below has an influence on the precise position of the English and Scottish armies, and so there is value in dissecting them each individually. Unfortunately, each of them also has potential problems when compared with the available information and evidence that make it impossible at this time to definitively support any one over the others. As can be seen, they are all reasonable interpretations based on what we know of the battle, but highlight that we

can only really confirm that the “high ground” that is described in the primary accounts was located somewhere on the wide arc of Falside and Carberry Hills as they rise up from the flat plain below.

The first of the suggested features is in the vicinity of ~~**the Crookston Burn**~~ Crookston. This was also the ~~first~~ earliest of the ~~three~~ features currently proposed as possibilities to be associated with Patten’s slough, for example by Dr David Caldwell in 1991. ~~The burn~~ Due to landscape changes, it is hard to clearly identify any specific feature that represents the slough in the modern landscape under this option. However, the likely existence of such a feature in antiquity is indicated by the presence of . multiple modern field drains within this area, created presumably by necessity, ~~has been~~ by channelling ~~channelled~~ in the process of enclosing and improving the agricultural land, and further altered during the building of the A1. There is also a stream that runs along the southern boundary dividing Inveresk fields from Carberry immediately west of Crookston. The details of the water flows in this region before the improvements to the landscape are not clear, but based on historic contour data and the modern artificial channel, a historic water feature appears likely to have potentially run ~~The~~ Its original route is not entirely clear ~~previous route of the burn~~ but based on historic contour data and the modern artificial channel, a historic water feature appears likely to have ~~been broadly~~ potentially run from the southeast to the northwest in this area, beginning on the slopes of Falside Hill and passing to the north of modern Crookston farm.

~~and~~ T~~t~~he section of ~~the~~ ~~burn~~ a water course ~~in question~~ here that would have represented the slough would have been between **St Clements Wells** and **Crookston** ~~in the vicinity of Crookston~~. In this interpretation, the section of the slope reached by the English army was also therefore somewhere between **St Clements Wells** and **Crookston**, placing the burn between them and the Scottish army to their west around the modern Howe Mire. This interpretation is not without issues, however, when compared with the available evidence. It would appear to place the cross-ditch closer to the English army’s front than the Scot’s, in contrast to the situation that Patten describes. It also requires the English cavalry to loop around to the east to engage the Scots from their front. This would be a more time-consuming manoeuvre than a direct advance towards the Scots ~~would be~~, and that seems somewhat at odds with the sense of urgency that necessitated the cavalry charge implied by both Patten’s account and the extremely high-risk nature of the assault. It is also unusual as the cavalry could likely have slowed or stopped the Scot’s advance by engaging their exposed flank directly, as the Scots would have had no real choice but to halt their movement to turn and face the incoming horse on their left, calling into question the need for a longer manoeuvre to facilitate the frontal assault. However, this is one of two interpretations that most closely matches Patten’s description of the Scots having no feasible escape route, as it places the English army southeast of the Scots. This would force the Scots to pass the English army with their flank exposed to move either east or south. In this interpretation, the Scots army move in a broadly southeasterly direction towards Falside Hill, which means that both interpretations of Patten’s statement about the Scots army declining southwards can be understood to fit, if his compass direction was incorrect as noted above. Finally, it is also feasible in this interpretation that the armies had closed within 500m of each other at the beginning of the cavalry attack, as they would be advancing broadly towards each other in their chosen routes.

More recently, Dr Caldwell and others have suggested a different interpretation, in this case proposing **Colton Dean** as Patten’s slough. This feature lies on a water course that also begins ~~in a similar area to the Crookston Burn~~ on the slopes of Falside Hill and initially runs northwest, running through a steep defile known as Colton Dean, before turning sharply to the southwest. Although it has also been partly channelled during landscape improvements, Light Detection and Ranging (LIDAR) and contour data of the area suggests that it broadly follows its original route until it reaches the modern settlement of **Whitecraig**. Under this interpretation, the English army would still have arrayed in the area between St Clement’s Wells and Crookston, but the Scots would have advanced along a route closer to the Carberry Road, placing them in the vicinity of Colton Dean to the southwest of the English. This proposal does resolve one of the issues with the previous interpretation by placing the cross-ditch much closer to the Scots than the English. However, it still requires a time-consuming manoeuvre by the cavalry to the reach the front of the Scots army. Indeed, under this proposal the manoeuvre would be even more challenging, as the cavalry would ~~either~~ have to cross the Colton Dean itself which would be an extremely significant and dangerous obstacle for them ~~twice, once to engage the Scots as described but also earlier in their route to get~~

~~into position in front of the Scots, or alternatively take an even longer and slower route around the head of the stream high on the slopes between Falside and Carberry Hill.~~ This option also makes it difficult for the cavalry to be engaging the Scots front, as either the Scots would have to turn from their south-eastwards route of advance to face Colton Dean and the approaching English cavalry, or the cavalry would have had to head further uphill to come down against their front, but in so doing they would not need to cross Colton Dean in close proximity to the Scots. If the Scots were in the vicinity of Colton Dean, it would also seem to weaken the dominance of the English position as the Scots would also be at least partially on the high ground. ~~seems to run counter to the urgency suggested by the available evidence, nor does it resolve the question of why the cavalry did not simply engage against the exposed left flank of the Scots from their original position~~. Of the options, this is also the deployment that is most at odds with Patten's suggestion that the Scots could not escape, as although the English army prevented any eastward movement, it is hard to argue that the Scots could not plausibly retreat south from the position they were in. It is also extremely difficult to position the armies within 500m of each other until after the cavalry attack has concluded in this variant, as the English force advancing towards Inveresk and the Scots moving southeast close to the Carberry Road does not easily bring them within a distance of less than a kilometre at any point. This interpretation is, however, the variant that would have the Scots advancing on the most southerly route available without crossing Carberry Road, which would thus most closely match up with Patten's statement *if* he meant that the Scots descended southwards.

A third possible variation was proposed by Dr Ryan McNutt in his doctoral thesis.[34] In this analysis, McNutt identifies a feature on LIDAR data running roughly southwest to northeast along the base of **Falside Hill**, as it levels out into the **forebrae**, as the slough, and that it may be a former route of the **Ravenshaugh Burn**. His interpretation would then place the Scots army on **the forebrae** in the vicinity of Wallyford, on the west side of this feature, with the English army arrayed on or near the top of **Falside Hill** above them. This interpretation results in a similar disposition of the forces as the first example, although with both armies on higher ground and located further to the east than that variant. This means it also faces the same questions against the primary accounts when it comes to the cavalry engaging the Scot's front instead of their left flank and the choice of interpretation of the phrase "declyning southwarde", as this variant requires a slightly more easterly direction for the Scots advance than the first. In keeping with the first variant, however, it also provides a good match to Patten's suggestion that the Scots had no escape route, as the relative positions of the armies broadly remain the same, creating the same challenges for any Scots retreat as the first variant. Also in keeping with the first variant, the armies broadly advancing towards each other again makes it simple to reach a distance of only 500m apart in the process, although in this variant we can clearly see that the distance between the armies would subsequently have to increase, as the English manoeuvre up the hill while the cavalry attack buys them time to do so. However, placing the English force on top of **Falside Hill** in this variant makes it hard to match this interpretation with the description (and Patten's sketch depiction) of the English vanguard being on the high ground, the middle battle being partly on the hill and partly on the plain and the English rear as wholly on the plain as they approach the culmination of the battle. An interesting opposing point in favour of this interpretation is the proximity in which it places the English army to **Falside Castle**. The Scots within the castle are clearly noted as harassing any English troops that come within range, to the extent the English burn the castle and its occupants at the end of the battle in revenge. Yet in the other variants presented here, there would appear to be significantly less reason for English troops to either enter or stay within firing range of the castle, as the majority of their force would have been farther down the slope of **Falside Hill**, and the top of the hill provides sufficient space for observation by a scouting party or the English commanders, for example, while remaining outside of the effective range of any small arms within the castle.

Another feasible interpretation is based on **an unnamed ditch feature** that is now far less visible on the ground than the ~~previous two~~ some of the examples above but can be traced ~~through~~ on both historic contour mapping as far back as the OS 1st Edition and also traced on modern LIDAR data. It runs southeast to northwest across the Howe Mire area, starting from the vicinity of the memorial off **Salter's Road**, and it is ~~potentially the original route of the Crookston Burn before it was~~

[34] This section is proposed for addition following research in response to comment 31.

~~channelled~~ possibly a continuation of the potential water course identified in the first option. Archaeological investigations of this area did not detect the presence of any artificial cut features such as drainage that would account for this ditch, suggesting its origin is natural rather than man-made. If this feature were to represent the cross-ditch, it would move the English army further northwest than the previous interpretations, with the high ground on which they deployed being the small hill on which modern Wallyford sits, itself part of the **forebrae of Falside Hill**.[35] In turn, the Scots army would be located to their west or southwest, once again in the region of the Howe Mire. ~~The **Wallyford hill**~~ This hill is much smaller than Falside, which it sits around half a kilometre northwest of, but it is one of the highest areas of the forebrae before it reaches the steeper slopes of Falside, and is of sufficient height that it would provide a tactical advantage to either army, at around 20-30m above the plain below (For a comparative example, the English position at Flodden in 1513 lies only around 10-20m above the low valley where the culmination of the battle took place). It is also the closest point of "high ground" to both the English and Scots army at the moment when Patten states they begin a 'race' to reach it ~~to either army when they begin their 'race' to the high ground~~. This interpretation also does not present the same manoeuvring and timing challenges regarding the cavalry charge a the previous two, as from the initial English position the most direct route to engage the Scots would be more directly against their front instead of their left flank. Despite this, this interpretation is not without its own challenges. For example, although the English cavalry manoeuvre in this variant is more direct, the Scots advance would be more difficult as the most direct route would require negotiating significant obstacles such as the defile at **Pinkie Cleugh** and the **Ravenshaugh Burn**, (although as noted in McNutt's interpretation above, the route of the burn may not have been through this area at the time) yet Patten describes a rapid and orderly advance that does not seem to suggest the Scots had any such difficulties. ~~t~~The battle plans also depict the English army as deployed partially on Falside Hill, so this interpretation requires that the artists interpreted the forebrae as Falside Hill, where the previous two options have them reaching the main slopes of Falside itself. ~~hill now occupied by Wallyford as simply a forward projection of the main slope of Falside, when it is more of a separate feature. This interpretation would also create potential additional challenges for the Scots advancing from Inveresk that are avoided in the previous interpretations, as the most direct route would require negotiating obstacles such as the defile at Pinkie Cleugh and the Ravenshaugh Burn, yet Patten describes a rapid and orderly advance that does not seem to suggest the Scots had any such difficulties~~. In this variant the armies would be moving broadly towards each other once again, and thus making it feasible that they could reach a 500m distance apart by the time the cavalry begin their attack. However, this deployment again has the difficulty of the possibility that the Scots could potentially retreat southwards from this position, at odds with Patten's implication that they were essentially surrounded when the English army reach their final position. The roughly eastward route of the Scots advance in this variant also means it can only work if Patten's meaning for declining southwards was that the Scots chose not to travel in that direction, instead heading directly to Falside. Finally, this option also requires us to consider why the armies would not choose to aim for the higher ground of **Falside Hill** nearby as a notably stronger position, however circumstances on the ground could potentially be responsible for this.

Unfortunately, the currently available evidence does not allow us to fully confirm or refute any of these different interpretations, and indeed it is entirely possible that none of them have correctly identified the cross-ditch. Future research or archaeological evidence may allow us to identify if one of these possibilities, or another feature entirely, represents the cross-ditch. It is also important to note that ~~if~~ other archaeological or historic evidence may help us locate the events more precisely, for example if ~~were found for~~ the currently unknown location of the square enclosure on the English left flank was identified this would also aid in more definitively locating the positions of the armies at the culmination of the battle.

Terrain

As noted above, the broad form of the terrain at Pinkie remains largely unchanged, with the River Esk and the high ground at Inveresk on one side of the battlefield, the slopes of Falside Hill and

[35] The changes proposed in this section are in response to comments 31-33

Carberry Hill on the other, and a relatively flat plain stretching between the two. However, there have undoubtedly been changes to parts of the terrain since the battle, through land use changes and developments such as the A1 and the expansion of various settlements.

Using historic mapping, we can track the changes to the landscape from around the mid-18th century to the modern day, including the enclosing of many of the fields in the area. For example, William Roy's *Military Survey* in the 1750s shows a landscape of unenclosed areas of rig and furrow, interspersed with some areas of enclosed fields and several designed landscapes and parks. However, Roy's map still dates to more than 200 years after the battle, and some of the features identified in the records of Pinkie have clearly already been lost by the time of Roy's work.

One terrain feature within the battlefield which is particularly curious, and which may have influenced the events on the day, is the area now known as the Howe Mire. [36]~~A marsh would obviously present a potentially significant obstacle to the movements and coherence of any army attempting to pass it.~~ This place name would suggest an area of marshland, and Roy does show a small section of what appears to be marsh in this area. LIDAR data also indicates the former routes of several watercourses entering from the south and east, while other watercourses drain towards the Forth from the north, but in the area between these it is harder to trace distinct watercourses. The land in this area is very flat and could potentially form a marsh because of water flowing off the slopes of Falside and Carberry Hill, in keeping with the place name. However, research undertaken by Stirling University in 2008 was unable to find any clear evidence for the existence of a marsh in this area historically. This is an unusual discrepancy between the place name evidence and the physical evidence and further research may provide useful information on the historic character of the terrain in this area and its potential impact on the battle. A marsh would obviously present a potentially significant obstacle to the movements and coherence of any army attempting to pass it, and it would be wise to attempt to avoid such an obstacle, but if the area was not a marsh at time of the battle the ground would instead seem to be extremely well suited for manoeuvring an army through.[37]

Condition

Much of the battlefield area of interest for Pinkie survives relatively intact, although there have been obvious changes since the battle. Among the most substantive changes are the creation of two major infrastructure routes, in the form of the railway line and the A1 trunk road, along with the expansion of various areas of settlement within the area, including Musselburgh, Pinkie, Inveresk, Stoneyhill and Wallyford. There is also evidence for significant mining activity within the area in the past, although these operations have since ceased. It is almost certain that these various changes to the landscape will have had an impact upon the archaeological footprint of the battle, but there remains high potential for archaeological evidence, as much of the battlefield has remained as agricultural land, albeit in some places returned to agriculture following other uses such as mining. The landscape changes have also had some impact on the ability to interpret and understand the battlefield on the ground in certain areas, although the overall landscape of the battle remains broadly understandable.

There are a number of other designated historic sites within the battlefield area, including a substantial collection of Roman features in and around Inveresk, protected as scheduled monuments (SM3610, SM3612, SM3285, SM3267, SM1182, SM3293), while Inveresk itself is also a conservation area (CA286). The designed landscapes of Pinkie House (GDL00313), Carberry Tower (GDL00085) and part of Dalkeith House (GDL00128) also lie within the area of interest for Pinkie battlefield, along with several listed buildings.

[36] Change proposed in response to comment 40.
[37] Change proposed in response to comment 41.

Archaeological and Physical Remains and Potential[38]

As the largest battle fought within Scotland in the 16th century, and likely the largest ever, the archaeological potential at Pinkie is high. As the battle is one of the very few major battles to occur within the British Isles during the 16th century it is an important site for our understanding of warfare in this period, and the interesting and unique overlap between the use of earlier weaponry such as archery with newer elements such as firearms that can be easier to identify in the archaeological record, Pinkie may provide valuable information on the discovery and understanding of archaeological evidence for medieval battlefields. Despite this, there are several challenges that require consideration when considering the site, and that have thus far prevented a definitive identification of many artefacts potentially connected to Pinkie.

The earliest artefacts that have been attributed to Pinkie are in the Ordnance Survey Name Book for the Parish of Inveresk (Midlothian Vol. 8). It states:

> *"From time to time large quantities of human bones have been found, in the tract of land described and at present, some are finding in a quarry at the foot of Pinkie Brae Also pieces of spears, swords, Horses shoes and officers' epaulettes have been found in a flat piece of land, then a moss lying immediately south of Pinkie Burn House."*

This location would lie on the western side of the Howe Mire, and so within an area we would anticipate the high potential for a concentration of battlefield artefacts. Unfortunately, and as is common for such antiquarian accounts of archaeological discoveries, the artefacts themselves have been lost. Without access to these items, we cannot say for certain as to whether some or all these items originate from the Battle of Pinkie or not (although it remains a possibility) as in the absence of more detailed information on the items described they could easily date from any point within a lengthy period of history. One item we can rule out from this group is the officer's epaulettes, as epaulettes as part of military uniforms date from a much later period than the 16th century.[39]

In the more recent past, there has been a substantial amount of metal detecting activity within the area of the battlefield, both by amateur detectorists and as part of archaeological field research. These efforts have utilised varying methodologies, but they have uncovered a wide range of artefacts that may relate to the Battle of Pinkie. Items recovered include lead shot from firearms, artillery rounds, items of horse fittings and personal accoutrements such as buckles and buttons. In some cases, these artefacts have subsequently been clearly identified as unconnected to Pinkie, such as identifiable buttons of a more recent date, but there remains a substantial body of artefact material that cannot yet clearly be identified in its date of origin. This is a particularly acute issue with the large amount of lead shot from firearms recovered from across the site. Lead balls were the primary ballistic ammunition for firearms used from the 15th to the 19th century, and there are very few diagnostic features that allow such a shot to be clearly identified as belonging to a particular period. As an example, other potential sources of lead shot in the Pinkie area include skirmishing during the Wars of the Three Kingdoms in the 17th century, a Napoleonic era barracks in the early 19th century and the common use of guns for hunting and sport for several centuries. Later examples of shot can often be identified due to refinements in the casting technique and comparison with other dated typologies, but such information does not yet exist for 16th century munitions. The recovery of the extensive collection of ammunition from the wreck of the *Mary Rose*, sunk in 1545, may in future provide a better understanding of the key characteristics of 16th century ammunition that would allow such identification of artefacts from the Pinkie area, but a very small percentage of the ammunition from the wreck has been analysed. For the moment we remain in a similar situation as the antiquarian references of archaeological finds, in that we cannot clearly state one way or the other whether many of the known artefacts are related to Pinkie or not.

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[38] Significant changes were made to this section prior to the first consultation, to include information on additional archaeological finds made within the battlefield and additional discussion of the potential and challenges relating to the archaeological and physical remains on the site.

[39] We propose this addition in response to comments following the researchers' seminar.

More promising evidence than the lead shot from personal firearms is found in the recovery of several artillery rounds from the area. Artillery was far less common than personal firearms, and thus can generally be identified as linked to more significant military engagements, such as Pinkie. Among the artillery rounds recovered from the Pinkie area are several examples of composite roundshot. Composite roundshot was created by wrapping a ball of lead around a core of stone or iron and it was mostly used in the 15th and 16th century. This date range, coupled with the much rarer use of artillery compared to personal firearms, allows us to associate these items more confidently to the Battle of Pinkie than we can currently conclude for many of the other identified munitions from the area, as there are far fewer potential alternative sources for these items. In addition to the composite shot, a single solid lead artillery roundshot has also been identified as originating from the battle (Foard & Morris, 2012) and there is good potential for further artillery munitions from the area that could provide further information on the events of the battle.

Another piece of potential evidence recovered in the recent past is a number of potential Tudor era badges and other pieces of military equipment from the area to the east of Crookston, although further analysis would be required before any definitive identification or date for these artefacts may be given.[40]

Given the significant casualty figures at Pinkie, there is also good potential for the recovery of human remains relating to the battle, and these may potentially be found across a wide area given the nature of the rout. Patten also notes the bodies of the Scottish dead were stripped before burial, a process which itself may have deposited further artefacts within the area. Historic discoveries of human remains were associated with the battle in the OS Name Book but cannot now be definitively linked, as noted above. More recent discoveries are also potentially linked to the battle, with the remains of two adult skeletons discovered during cable trenching works in 1989 (Canmore ID 53741). They were severely disturbed by earlier service trenches, and no analysis appears to have been undertaken on the remains. The area of Pinkie has been occupied from the prehistoric period onwards, and other unrelated burials have been recorded, for example cist burials in 1865. It is therefore possible that these other periods of activity may also be responsible for these two skeletons, however the lack of any associated grave goods or of a stone burial cist or coffin traces means it is not possible to definitively conclude this either. A further set of human remains, potentially from two different individuals, were uncovered during the construction of Queen Margaret University in 2005 (Canmore IDs 281623, 281653, East Lothian HER Number MEL8835). Radiocarbon dating provided a date range of 1430-1630 CE, and artefacts found within the grave fill suggest an early 17th century date for these remains, although in the circumstances a connection with the battle cannot be fully ruled out from the available information.[41] Should future burials come to light within the area, more detailed analysis may permit a better identification of their date of origin, and whether they may be associated with Pinkie.

There is the potential for remains relating to the Scottish and English camps the night before the battle. Both camps appear to have been at least partially entrenched, and as such there should be good potential for archaeological remains of these defences to survive. However, as yet, no remains of these defences have been found during archaeological excavations in the areas in 2016.[42] The nature of a military encampment also provides particularly good potential for the recovery of items that were either lost or discarded during its occupation. At Pinkie, this is particularly acute for the Scottish camp, as it was occupied for a longer period than the English camp before the battle, and was subsequently ransacked by the English force, although development of the west bank of the River Esk since the battle will also have impacted upon this survival.

Falside Castle and its immediate surroundings also have good potential for a concentration of archaeological evidence, related to the fighting between its small garrison and any nearby English forces. This could include ammunition fired at and from the tower, damage to the tower stonework from gunfire, and evidence of the burning of the tower at the end of the battle. Falside Castle was

[40] We added this paragraph to take account of research by Caldwell (2016) and Mclaren (2017) on metal detected finds from Crookston

[41] Added following researchers seminar to address discoveries referenced in the East Lothian HER.

[42] This section was revised to reflect archaeological evaluation of the English Camp by CFA Archaeology Ltd (2016)

fully restored and harled in the 1980s, so it is not currently possible to examine the stonework for any potential damage from the battle, however any future restoration or maintenance work on the castle may provide opportunities to examine some of the archaeological potential relating to the battle.

Cultural Association

Given the scale of the battle at Pinkie, and its undoubted historic importance, it has surprisingly little representation from a modern cultural standpoint. There are now several different memorials relating to the battle at different sites within the area, all relatively recent in date, with the newest installed in 2021. There is also a local group dedicated to the battle, the Pinkie Cleugh Battlefield Group, a collaboration between the Old Musselburgh Club and Musselburgh Conservation Society. The group have been involved in the creation a variety of interpretative and commemorative elements for the battle, including interpretation panels, a battlefield walk, digital information and commemorative events.

Unlike many other battles between Scotland and England, there does not seem to be much in the way of contemporary or historic cultural creations or traditions around Pinkie either. The sole exception currently known of is a surviving fragment from an English ballad titled *Musleboorowe Ffield*, the original of which is found within Bishop Thomas Percy's folio collection in the British Library. The surviving seven verses contain several factual inaccuracies regarding dates, but the broad narrative of the events given is in line with Patten's account.

Commemoration & Interpretation[43]

A memorial stone to the battle was erected in 1998, and now stands beside Salter's Road, on the short unnamed road leading to Eskfield Cottages, and overlooking the battlefield between Wallyford and Inveresk. This memorial now forms the focus of commemoration for the site, and a commemorative event is held here on 10 September every year.

A second memorial is built into a stone wall in Lewisvale Public Park, to the east of Inveresk Church, marking the English camp the night before the battle. However, as noted above, this area is in fact the location of the English camp the night after the battle (the battle as described by Patten could not have taken place had the English army camped in this location on 9 September) and the memorial is thus incorrect. Another memorial stone sits on top of Carberry Hill, where it marks the alleged remains of the English camp. The ramparts and ditches in question at this location are in fact the remains of a prehistoric hillfort, now known as Queen Mary's Mount ~~and the location of this marker is also thus incorrect~~. It is not clear where the association between this hillfort and an English camp connected to Pinkie originates, although in Buchanan's account of the later encounter at Carberry Hill in 1567, the army of Mary Queen of Scots took position on top of Carberry Hill and is described as having "entrenched itself within the ancient camp bounds of the English. It was a place naturally higher than the rest and fortified besides with a work and a ditch" (it is from this incident that the modern name of the fort originates). It is possible that a subset of the English army at Pinkie was deployed to hold this position during Pinkie, although none of the primary eyewitness sources mentions this. Another possibility is that Somerset's scouting manoeuvre on the 9th took him to the top of Carberry Hill, from where he would certainly have had a useful vantage point for the area, and the association stems from this. It is also plausible that the location was used as a camp by an English army or raiding party at another point during the Rough Wooing and that this is the source of the association, and this later came to be incorrectly associated with Pinkie.[44]

The final memorial currently in place was installed on Battlefield Drive in 2021 as part of a new housing development within Musselburgh. Titled *Rough Wooing*, it is a stone sculpture in the form of a pair of fighting foot soldiers, created by a local stone carving company.

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[43] This section was revised following information received after the researchers' seminar

[44] This change is proposed in response to comment 36

As noted above, the Pinkie Cleugh Battlefield Group (PCGB) have been involved in the creation of a significant amount of new interpretative and commemorative material on the battlefield in the last decade. These include a battlefield trail, with four interpretation panels, that was created in 2013, and an illustrated guide booklet to the Trail is available on the Musselburgh Conservation Society website at:

http://www.musselburghheritage.org.uk/PCBGBattlefieldWalk.pdf.

The PCGB have also created an introductory video, *The Battle of Pinkie Cleugh*, visiting key sites relating to the battle, and a geolocated audio tour available through a mobile phone app (https://explore.echoes.xyz/collections/pI0Ils390IsDbSyy).

In September 2017, an inaugural battle reconstruction and commemoration event took place at Newhailes House, Musselburgh, and further events like this are planned.

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The main primary source of information for the Battle of Pinkie is the account given by William Patten in *The Expedicion into Scotland of the Most Woorthely Fortunate Prince, Edward, Duke of Soomerset*, written in 1548. Patten himself was an eyewitness to the battle with the English army, although not a combatant himself, and he had access to both the senior commanders and the extensive notes written by Sir William Cecil when creating his account. Patten's account is obviously pro-English and is partially written to honour Somerset's role as commander, but regardless of this bias he provides a detailed account of the entire campaign as well as of the battle itself. Enhancing his account still further is the three sketch maps of the phases of the battle that he includes in the work. These sketches are supported by a series of five battle maps now held by the Bodleian Library, Oxford, which depict the events of the battle consistently with Patten's own sketches. A further map, of which a print is held in the British Library (the original may be held by the National Army Museum), conflates all the stages of the battle into a single image, and its information appears to be drawn from the Bodleian map series. Regardless, in terms of mapping Pinkie is the best represented battle within the British Isles prior to the 18th century.

There are further primary accounts from eyewitnesses, including the account of Le Sieur de Berteville, a French Protestant in the English army, and the Harlean manuscript account by an unnamed Englishman. Both accounts are confusing in certain areas, but when combined with Patten they further enhance the understanding of the battle given by contemporary sources. Additional shorter accounts also exist, including one providing more information from the Scottish perspective,

including that of Arran as the commander, and some 16th century historians and authors provide additional information or insight into the events of Pinkie as part of their wider works.

Pinkie has also been examined in detail in several valuable secondary sources during the 20th and 21st century, including those by Sir Charles W.C. Oman (1933), Gervase Philips (1999) ~~and~~ Professor David Caldwell (1991 and 2015) and Dr Ryan McNutt (2014). Of these, there are now some questions over the usefulness of Oman's work,[45] as he does not appear to have a strong understanding of the physical landscape of the area, and although he does use Patten's account as a base for his research, he does not appear to have made use of some of the other sources available. Considering his research into the battle now requires a degree of caution as a result. In the more recent past the area has also been subject to a wide range of archaeological activity. In the more recent past the area has also been subject to a wide range of archaeological activity. As noted above the range of methodologies and aims involved in these projects has made comparative analysis and understanding of the results of the different projects more difficult, but there is still valuable information to be found within some of the available results.

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Bodleian Library

Set of 5 manuscript plans of battle phases. Published in Oman, *The Archaeological Journal, Vol. 90* (1933), 1-25

National Army Museum

~~Print, probably same as the British Library print above. Source was possibly the Bodleian plans, but compressed into one image, reducing its value as a source.~~ Coloured line engraving, artist and publisher unknown, published by the Bannatyne Society (vol X) in 1825, after a print published in 1547. (NAM Accession Number 1971-02-33-296). (This is believed to be a 19th century copy of the British Library copperplate print above.) Published in Crookshank's appendix to Oman, *The Archaeological Journal, Vol. 90* (1933), 1-25; Also published by Crookshank in *The Journal of the Society for Army History Research, Vol. 12, No. 46* (1933), 102-3.

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Plan of Pinkie Mains and adjacent farms, 1790, NAS RHP82669

[46] This reference and one below has been changed in response to comment 38

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[47] Prior to the first consultation, the secondary sources section was revised to include archaeological reports and other documents produced since 2011.

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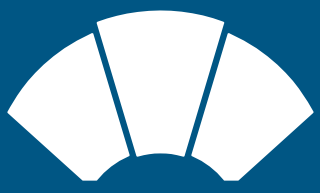

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