

CONFLICT IN THE PRE-INDUSTRIAL LANDSCAPE

The investigation and management of evidence for battlefields, sieges and other fields of conflict in the United Kingdom

Phase 1: Resource Assessment (England)

PROJECT DESIGN

Summary

This is a project to examine how material evidence for military action¹ and the landscape in which it took place can be better integrated into the investigation and management of the UK's historic environment. Whilst the project is concerned with England, it fits into an evolving context of existing work in Scotland and prospective work in Wales,², the three elements together being planned towards an integrated whole.

The project's objectives are to:

- *define the resource*
- *identify research potential*
- *develop a research framework for investigation*
- *develop a methodology for assessment*
- *define a framework for conservation*

The project works in two stages. Phase One is a resource assessment, involving the preparation of a gazetteer, an assessment of condition and potential with more detailed field examination of a number of representative examples, leading to a report that will include a costed design for phase two. Phase One's design builds on substantial experience already gained in Scotland; its outputs will inform policy and assist management of land use change, the work of HERs, planners,

¹ Military action is taken to embrace battles, sieges, skirmishes and events of civil unrest. Because of the very different character of warfare in the industrial period, the project's younger boundary has been set at the end of the 18th century. Sieges are not discussed further at this stage (because of the complex issues of interaction with fixed defensive sites that they raise) but would be scoped through Phase 2 pilot projects. Naval action is excluded.

² In collaboration with Historic Scotland and RCAHMW.

*and the Portable Antiquities Scheme. Phase Two will include more advanced pilot projects to advance investigation aspects, further publication and training outputs.*³

The project will be undertaken through a partnership between the University of Leeds (providing facilities and interdisciplinary expertise through its Institute for Medieval Studies, Centre for Military History and School of History, and links with the Royal Armouries, which in turn has specialist expertise in scientific analysis and finds identification) and the Battlefields Trust (providing a platform for web delivery of the report and other data through the Trust's UK Battlefield Resource Centre (UKBRC). The University will contribute to the project's costs, and plans to develop a training/teaching dimension for the subject from 2006/07.

1 Background

1.1 The subject

Battle archaeology is a remarkable asset. Its archaeological potential lies primarily in the interaction between large-scale artefact scatters and contemporary terrain. At Naseby, Towton and elsewhere, fieldwork largely undertaken on an amateur basis has begun to demonstrate how great this potential is.⁴ Essentially, such sites are much more than spaces in which former events took place: they are important, too, as archaeological monuments bearing evidence that can elucidate the scale and course of individual battles and the wars of which they formed a part. This material palaeography of battle requires specialised investigation, and appropriate measures for conservation.

Battlefields also have powerful contemporary significance as landscapes of memory. In some instances the memories are living and vital; in others, they reflect past manipulation. A rich field opens from the question of why some battle sites have been forgotten while others are remembered or contested. Why, for instance, are so many Anglo-Saxon battlefields lost or disputed - *Brunanburh*, *Maserfelth*, *Hæthfelth*, *Posentesburh*, *Assandun*? Is this because tradition faded, or because it was stifled?

³ See pp.16-17.

⁴ Veronica Fiorato, Anthea Boylston, and Christopher Knüsel, *Blood red roses: the archaeology of a mass grave from the Battle of Towton AD 1461* (Oxford: Oxbow, 2000); Glenn Foard, *Naseby: The Decisive Campaign* (Whitstable: Pryor Publications, 1995).

The present project brings together these different yet complementary dimensions of physical evidence, recollection and explanation.

The means and methods of managing the resource have not kept pace with advances either in its understanding or in the forces that threaten it. There has never been a comprehensive resource assessment of Fields of Conflict in England. English Heritage's pioneering non-statutory Register of Historic Battlefields (1995) was based on the assessment of such places as historic landscapes, not as archaeological monuments, and is inadequate for present needs.

Thanks to registration, archaeological evaluation has occasionally been required. However, this has usually been carried out in the absence of an appropriate methodological framework and in result has rarely produced much of significance. Studies need to be conducted on a large scale, embracing most of a battlefield at once. Progressive methodology has not been widely disseminated because its development has been in the hands of a small number of unfunded practitioners, much helped by consultation with and the example of colleagues in the USA. Fieldwork had largely been left to a few metal detector users, operating with little contact or support from conservation agencies. It is telling that the potential of the distribution of unstratified artefacts revealed at Towton and Naseby has emerged as so great *despite* the coolness of academic or agency interest. To date, not one British battlefield has been surveyed and recorded to the standards regularly applied in the USA. Only at Edgehill is a systematic project now in progress to study an entire battlefield.⁵

1.2 The need

Work by the Battlefields Trust to produce a web-based interpretative resource has involved limited examination of 48 of England's best-preserved battlefields.⁶ This shows that, even for the Registered sites,

- (a) many battlefields are inadequately or inaccurately defined;
- (b) the information held about them by HERs is inadequate for effective management; and that

⁵ The Edgehill research will contribute to the proposed project.

<http://www.battlefieldstrust.com/resource-centre/civil-war/battlepageview.asp?pageid=528&parentid=500>

⁶ <http://www.battlefieldstrust.com/resource-centre/>

- (c) far greater potential exists even on some of the less well-preserved, unregistered sites than has hitherto been assumed.

Historic battlefields and lesser fields of conflict are consequently under acute threat from activities that include development and other land-use change, agricultural activities and treasure hunting.⁷ If swift action is not taken it is likely that the potential of the resource will be lost even before there has been an opportunity to ascertain what it is.

Good information is a pre-requisite for effectual management, and the poor definition of battlefields in Historic Environment Records reflects the absence of any systematic resource assessment, and the absence of opportunity to refine appropriate investigative methodologies,⁸ and to date has not been an explicit target in agri-environment support schemes. England's Register of Historic Battlefields confers 'material factor' status upon 43 of the best-recognised battlefields through the planning process, but even for these there is no effective management strategy nor any up-to-date audit or monitoring. For the other fields of conflict there is nothing - neither definitive gazetteer, nor assessment, nor any research framework or guidance for investigation or conservation.

1.4 Meeting the need

The potential and need just outlined exist across Europe, and while no individual conservation body possesses the expertise to tackle the problem alone, there is scope to make a substantial impact on the problem through partnership. Hence, this project will complement and extend work already being undertaken for Historic Scotland. Through the development of this as part of a UK programme, links will be built between management of the resource in England, Scotland and - in due course - Wales and Northern Ireland.

This project will provide knowledge to inform investigation, management and outreach. In particular, it will:

⁷ G Foard, "Field Offensive," *British Archaeology*, no. 79 (2004): 10-15. *Independent* 22 September 2003.

⁸ A methodology for battlefield study has recently been outlined by Ibid. 'Field offensive' and Glenn Foard, "Sedgemoor 1685: Historic Terrain, the 'Archaeology of Battles' and the revision of Military History," *Landscapes* 4, no. 2 (2003): 5-15. Advances in the study of medieval battlefield, notably Towton have been discussed by Sutherland, e.g: T.L. Sutherland, "The Towton Battlefield Archaeological Survey Project: An Integrated Approach to Battlefield Archaeology," *Landscapes* (2003).

- deliver base data for the whole resource as an essential enhancement to Historic Environment Records
- be a source of conservation advice and guidance for local authority archaeologists and EH Regions
- give help to EH's Battlefields Panel for improvement of the Register
- illuminate the potentials of unregistered sites
- enable English Heritage to frame effective measures to address the Governmentally-recognised threat of random metal detecting⁹
- assist targeting of interpretation, conservation and investigation projects for HLF, agri-environment and other funding streams

1.5 Archiving

The digital archive, comprising the report as an Adobe document and a UK Fields of Conflict GIS/Access database covering all fields of conflict identified in the project, will be deposited with English Heritage, the NMR and each HER.

The digital archive for the project will be deposited with the Archaeology Data Service at the end of Phase Two. However, there will be consultation with ADS at the outset, when methodology is being refined and software development is taking place, to ensure that their requirements for archiving are taken into account.

⁹ Hansard, 17 September 2003.

2 Research design

This is a staged project, its key objectives being to:

- define the resource
- identify and characterise its research potential and contribution to knowledge in the light of national priorities
- develop a research framework for investigation
- develop a methodology for assessment
- propose a strategy and working framework for effective long term management

Phase One, a resource assessment, will primarily be desk-based, but will include field assessment of sample sites to develop the scheme of work to be proposed for Phase Two. This will benefit from an ability to draw on current work in Scotland, where battle archaeologies of transitional type are represented in ways not found in England.

2.1 Scope

Phase 1 will generate a gazetteer of fields of conflict. This will be created by enhancing the currently limited data on England in the Battlefields Trust's existing UK Fields of Conflict GIS database, from which an English extract will be produced. In the main, this will be desk-based, drawing partly upon work already undertaken for the Battlefields Register and by the Battlefields Trust, and by applying and enhancing principles already developed for the Scottish Battlefields Resource Assessment undertaken in 2004-5.

The project will begin work from secondary published sources: the NMR (from which support will be required in producing digital record output) and, with the cooperation of the Local Authorities, records in the HERs. While this will be something less than a comprehensive statement of the current state of knowledge of each site, it will be the fullest thing of its kind. A classification of types of action will be applied, distinguishing battles from other lesser actions, including skirmishes, border raids and other events of civil unrest. A bibliography of secondary sources will be compiled for each action. There will also be an initial assessment of importance, potential and vulnerability, based on a series of explicit criteria which will be refined in the first stage of the project. In this assessment, to simplify the process, each type of action will be separately assessed. Finally, a

report and digital data will be submitted to English Heritage, and subsequently provided to the NMR and to each relevant HER. The project will, as far as practicable, identify all battles, all iconic lesser actions and as many other lesser actions as possible within the available resources. It will also collect further detail in order to be able to assess, as far as possible, all located battles and all 'iconic' lesser actions. In addition it will assess such unlocated battles and other lesser actions as time allows.

2.2 Publication/Outputs

The report will give an overview of the resource, an assessment of its importance and potential, detail the methodology applied and the sources consulted. This will be published on the Battlefield Trust's UK Battlefields Resource Centre.

A seminar consultation will take place towards the end of Phase 1, bringing together military historians and battlefield archaeologists, hosted by the University of Leeds and Royal Armouries.

The 4th international Fields of Conflict Conference will be organised at Leeds for September 2006, providing a forum to present the approach and debate in an international context the issues dealt with in the project.

The digital archive, comprising the report as an Adobe document and a UK Fields of Conflict GIS/Access database covering all fields of conflict identified in the project, to be deposited with English Heritage, the NMR and each HER. Metadata will be provided with each data set, based on an enhanced form of the manual presented in appendix 1. Costed proposals for the delivery of the gazetteer over the web will be presented in Phase Two, following discussion with partner organisations to Scotland and Wales.

3. Method Statement

Sub-numbering in what follows relates to tasks identified in the programme and budget.

3.1 Gazetteer

Prepare a gazetteer of fields of conflict in England, in MapInfo (GIS) and Access, as a major enhancement of the existing UK Fields of Conflict database.

Metadata

Metadata for the database is provided in the manual in appendix 1. This will be enhanced in the light of MIDAS guidelines and the INSCRIPTION wordlists and any other shortcomings identified by consultees.

All gazetteer mapping to be conducted to OS Explorer map base.

3.1.1 Consultation & review

Review project methodology in the light of results of the Scottish project, which is reporting in March 2005.¹⁰ Consult on the project design and revise in the light of feedback. Set up Project Board to monitor progress, comprising Richard Morris (University of Leeds), Paul Stamper (English Heritage), Michael Rayner (Battlefields Trust), Prof. John Childs (Head of Centre for Military History, University of Leeds).

Consultees:

English Heritage:

- Battlefields Panel
- Inspector with responsibility for battlefields
- Rural policy (Steve Trow)
- Matthew Stifs re data standards;¹¹
- Martin Newman re data issues
- Alice Froggatt re GIS guidelines for projects¹²
- David Gander re OS digital data sets
- Matthew Wright¹³/ERS re English Heritage GIS data sets
- Mike Evans/Matthew Stifs re archiving with English Heritage
- Martin Newman (Datasets Development Manager) & Phil Carlisle (Data Standards Unit)
- ERS re supply of specific English Heritage digital data sets
- David re OS digital mapping¹⁴

Other:

- Portable Antiquities Scheme
- ALGAO

¹⁰ Positive review in April 2005 with Historic Scotland. Further phase of work underway summer 2005. Seminar delayed to October 2005. No major methodological issue raised which might require significant modification of methodology for English project.

¹¹ Matthew Stifs: 01793014727

¹² Alice Froggatt (02079733095)

¹³ Matthew Wright (01793414603)

¹⁴ David Gander (0207973309)

- Paul Gilman, Chair of ALGAO HER Committee, re HER data exchange issues. ALGAO will be advised of the project and the requests for HERs data at the outset and of data provision to HERs at the end of the project. Any issues of compatibility of data will be resolved at the outset.
- DEFRA
- Portable Antiquities Scheme (Roger Bland)
- National Trust (Mark Newman)
- Martin Newman (English Heritage), EHSNI, Peter McKeague (RCAHMS), Brian Malaws (RCAHMMW), each of whom has responsibility for liaison with the Ordnance Survey over the portrayal of battlefields on Ordnance Survey maps. The objective is to secure broad agreement on UK-wide consistency.
- ADS, with regard to data structure and archiving in phase 2.
- RCAHMS, following up Scottish project with a view to the potential for UK wide delivery of gazetteer using the system developed for Pastmap/Canmap.

Consultation with ALGAO and NMR over data standards, data provision and data exchange.

3.1.2 Database development

Develop Access database linked to MapInfo in a form suitable for future conversion for web delivery, ensuring compatibility with HERs / NMR.

3.1.3 List of battles

Search of the NMR, online via PastScape, and HERs, online where available, for specific battle or other fields of conflict records, not all records in each battlefield area (for latter see 3.3 below). Following initial consultation/briefing via ALGAO, each HER will be consulted in writing / by email.

Search of online bibliographies for battle/battlefield publications relating to England, using Endnote software, including COPAC library index at University of Manchester (which integrates UK indices including the British Library and major university libraries) and Royal Historical Society bibliographic index; a search of a wide range of secondary works on English and UK battlefields and related issues; ADS, IMB and BIAB online.

A list of battles and other fields of conflict will be produced from this with a grid reference for centre point of each located action. Where actions are not sufficiently accurately located then a polygon of the

relevant parish or region may be added, where practicable. Where more than one site is suggested then multiple records will be created and cross referenced.

A bibliography will be provided for each site based on this initial search, in the UKFOC Bibliography presented in Endnote software.¹⁵ There will be a supporting GIS database of key battle-related features (mass graves, commemorative institutions and monuments) and another on significant battle-related archaeological interventions and archives, including museums and private collections. The format and scope of such subsidiary data sets will be reviewed in the light of the Scottish project.

3.1.4 Initial classification and grading

Refine terminology and criteria for classification of type of action (battle, skirmish etc).

Conduct an initial grading of each type of action according to:

- accuracy of location
- perceived cultural importance (as assessed by citation analysis and/or scale of historical discussion)
- character of sources

3.1.5 Enhancement

Work through firstly located battles, from the most 'important' downwards; ensure that within the time any 'iconic' lesser actions and major unlocated battles are also dealt with; finally, as time allows, remaining unlocated battles and lesser actions.

New COPAC and related bibliographic search, as in 3.1.3 but for individual battle names.

Consult key secondary works, including Battlefields Register Reports, on each battle to collect and contextualise key facts and data required for assessment.

Where possible, prepare data in GIS showing deployments (including any major alternatives) from key secondary sources. Define, where practicable, the possible extent of each battlefield, based on initial deployments and any relevant data in battle descriptions.

¹⁵ This can be exported as a txt file for import into Access or other database, or as a Word or html file as necessary

For Registered Battlefields, key facts and some digital data will in many cases already be available from the UK Battlefields Resource Centre.

Determine what research has already been undertaken or is in progress; assess the type and quality of survey and analysis by reference to HERs and published works.

Create a detailed bibliography (mainly secondary works) for each battlefield.

In the light of the experience in the Scottish Battlefields project, it is proposed that the data from the enhancement be presented in the form of a Word document with associated map of deployments and search areas on an OS Explorer map base.

3.2 Assessment

Refine methodology in light of the results of the gazetteer phase. In the absence of primary documentary and archaeological research on the battle and its terrain, this can be but a relatively crude assessment. The Assessment will give an indication, at least for major actions, of:

- political and military importance
- perceived cultural significance
- adequacy of current understanding (event and its site, using defined criteria, including an assessment of extent and quality of documentary survival and a review of historiography)
- likely condition and survival of battlefield terrain & archaeology
 - assessment of nature and scale of damage and destruction to be based on the state of development as shown on Explorer 1:25,000 scale mapping, early mineral extraction as recorded on geological mapping, and any supplementary data provided by HERs
 - taphonomy: special preservation conditions: criteria to enable rapid identification of key factors, based on geological and other data sets, and how to assess this, is to be developed in consultation with Rob Janaway, University of Bradford
- weigh potential for investigation and historic terrain reconstruction. This must take account of the *period* and *nature* of the action in relation to the condition of its site. Pilot

- studies will define what other criteria, if any, could practicably be applied to all
- a location's interpretative potential for academic and popular appreciation. Criteria to include access, state of development and land use. Pilot studies will define what other criteria can be rapidly applied to all
 - existing designation and conservation: correlation with key designated heritage assets (Scheduled Ancient Monuments; Register of Designed Landscapes; Conservation Areas, SSSIs, Stewardship, AONBs)¹⁶
 - battle related
 - coincidental but relevant
 - risk to the resource: proximity to urban and other potential threats. Other criteria to be developed, if practicable, in pilot studies.

3.2.2 Select Pilot Sites

Using the assessment data, select a period-balanced sample of 4–6 sites for more detailed examination.

3.3 Refine methodology with detailed studies

Criteria for assessment will be refined and tested on a small number of sites that are chosen to represent conflicts of different periods and category, and to embody contrasts in quality of understanding and condition. These should encompass both Registered and unregistered sites. Where possible the selection will draw upon continuing detailed studies being carried out under other auspices, like Edgehill and Towton.

3.3.1 Review International Projects

Review key battlefield survey projects in Germany (Kalkresie, Varus battlefield, 9AD) and USA (Revolutionary War / Civil War) to review best practice at first hand.

3.3.2 Pilot Studies

Limited primary research on terrain and battle archaeology to develop understanding of potential and methodology

¹⁶ Dependent upon supply of digital data by English Heritage and other relevant organisations for use in GIS.

This pilot work is also necessary to develop and test the method for detailed investigation and assessment to be applied in Phase Two. Issues for consideration in the second phase include:

- what is of value on battlefields in poor condition ('poor' to be more sharply defined), and how this can be assessed
- the tracing of hitherto unlocated battlefields
- how to define the extent of battlefields for management purposes

The number and selection of pilot sites will depend on the results of the initial classification and assessment. The level of detail will be determined by balancing the number requiring assessment with the resources allocated, which can only be based on a preliminary estimate deriving from the work carried out for the UK Battlefields Resource Centre.

Additional tasks for these pilots will include, insofar as practicable:

- a review of primary and secondary sources, to reconsider adequacy of existing interpretations
- HER - a further, detailed search, to refine the data.
- Record Office – assessment of documentary potential
- Assessment of the value of available aerial photographic data for reconstruction of the historic terrain.
 - New reconnaissance will be undertaken on several battlefields where there is good reason to believe that new historic terrain data may be recorded, to determine the degree to which targeted aerial reconnaissance may contribute to battlefield investigation.
- Site visit, to assess potential for historic landscape reconstruction
 - David Hall. To include potential for recovery of field system(s), and specialist input with regard to open fields
 - taphonomy: broader review of criteria to be developed with Janaway and given initial testing
- assess effectiveness of existing management regimes:
 - Battlefields Register: how effectively have the pilot battlefields been managed since 1995? Review EH files and local authority files, in conjunction with map-/photo-based assessment of losses during the decade
 - adequacy of Register boundaries
 - Planning and Agri-environment schemes: discussion with local government archaeologist on management issues

- assess effectiveness of any existing interpretative schemes; develop guidelines for future public explanation
- all additional mapping conducted to Landline OS map base with historic terrain mapping following the methodology applied in the Rockingham Forest Project.

3.4 Final Assessment

In the light of the results of the pilot studies and review of international projects, make (if necessary) a limited revision of the assessment of the sites in the gazetteer.

3.5 Report

The report will provide an overview of assessment results and present costed proposals for work to address key issues in Phase Two (Section 5, see pp.17-18). In particular, it will:

1. Assess the value and potential of battle archaeology and its historic landscape context, within various locales offering contrasting types of action, terrain context, and period. Within this, assess the broad condition, survival and rarity and potential.
2. Formulate research questions – how the ‘battlefield’ can contribute to military studies and history.
3. Describe best practice for the investigation of battle archaeology and historic terrain, for the realisation of research potentials. Identify enhancements needed and outline how these might be pursued in Phase Two, to enable their implementation by the profession.
4. Define principles that should underpin strategies for research, policy, management, education and outreach.
5. Review mechanisms that can or have been used for pro- and reactive management. Assess these within the context of EH policy and strategy.
6. Propose priorities and their development in types of response for terrain & battle archaeology in relation to
 - register planning type
 - SAM type (eg mass grave)
 - stewardship type (specific landscape features like hedges)
 - policy towards metal detecting
7. Training needs: put forward potential means and timetable for delivery including
 - taught modules and MA (Leeds (possibly + Glasgow) from September 2006
 - CPD strands

- distance learning, World Universities Network
- advice on integration of battlefield studies (expertise, methods, results) with existing strands of military history, historical geography and landscape history
- guidance: booklets, online resources, digital media in the field

3.6 Consultation, Publication and Archiving

3.6.1 Consultation

Circulate draft report to relevant original consultees listed in 3.1.1

3.6.2 Seminar

In addition to written consultation with specified organisations, a more intensive consultation will be undertaken towards the end of phase 1 through a seminar that brings together military historians and battlefield archaeologists (hosted by University of Leeds and Royal Armouries).

Wider dissemination and discussion will be implemented in phase 2.

3.6.3 Revise Report

Revise report in the light of feedback from consultation and seminar.

3.6.4 Publication

Publish report online on UK Battlefields Resource centre as an Adobe document.

Public access to relevant data from project to be implemented via the web on the UK Battlefields Resource Centre in phase 2.

3.6.5 Conference

Organise the 4th International Fields of Conflict Conference at Leeds for September 2006, to provide a forum for peer review of the approach in an international context.

3.6.6 Archiving, Data Security etc

During the life of the project data will be backed up daily using Maxtor One Touch external hard drive; on a weekly basis a copy of the database and all other digital data will be copied to Leeds for backing up on the university computer system as a secure backup independent of the working location.

There are no data protection implications for the project as no personal data is to be included in the database.

At the end of the project submit digital copies of the report to NMR and each HER.

Long term archiving of data to be implemented with ADS in stage 2, with discussion and costing determined in discussion with ADS late in phase 1.

3.7 Data Requirements

From English Heritage

- national digital coverage of OS data at 1:25,000 scale (Explorer) mapping and relevant administrative boundaries vector data, as a base data set.
- Landline OS data and 1st edition 6 inch Ordnance Survey mapping for case study sites.

All this will be provided by August 2005 (and case study mapping in 2006 when notified) at no charge via David Gander under EH's OS licence and Landmark licence. A sample of data will be tested in June 2005 to resolve any data transfer issues.

- Vector polygon data on Scheduled Ancient Monuments, Registered Parks & Gardens Registered Battlefields. World Heritage Sites; point data for Listed Buildings.

This will be provided by ERS at no charge.

From NMR

- Cover searches for up to 10 sites for circa 6 sq km each, to be notified 2 months in advance, for retrieval of all vertical photography for case study sites.
- Selected RAF verticals and later vertical photography for specific pilot sites provided in digital form from NMR, to complement that previously provided for the UKBRC. An estimated cost for this digital data is included.
- NMR records for battlefields and other fields of conflict will be accessed through the new online Pastscape system which encompasses all relevant digital data on the Record.
- NMP data for selected battlefields. An estimated cost for this digital data is included.
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From HERs

- a full extract of the digital data on all records relating to battles and other fields of conflict (digital data ideally in the form of an Access table with NGR easting and northing entries which will allow geo-referencing and, where appropriate GIS data in any standard GIS data format)
- information as to the likely types and quantities of data not in computerised form that could only be accessed through personal consultation of the HER

- advice as to any substantial planning issues or interpretive schemes that have been or are being considered in relation to any battlefield
- any significant planning related documentation such as a consultant's evaluation report.
- Historic Landscape Characterisation (HLC) data for selected battlefields, where available. Graham Fairclough/Dave Went of EH to be advised as to which HLCs are being used in the case studies, when known.

In return, a full copy of the project report and the project's digital archive will be provided to each HER and to the NMR.

4. Resources & Programme

4.1 Staff and organization

The project will be based on the University of Leeds and will be overseen by Richard Morris FSA, Director of the Institute for Medieval Studies.

The work will be undertaken by Glenn Foard MIFA FSA, currently Project Officer with The Battlefields Trust.

Consultancy will be provided by

- David Hall FSA on reconstruction potential for field system dimensions of historic terrain
- Rob Janaway (University of Bradford) will advise on criteria for rapid assessment of the taphonomy of battle archaeology
- ISS, University of Leeds: database development
- Royal Armouries: projectile identification

4.2 Timetable for Phase One

Tasks as defined and numbered in section 3.0

| MAIN TASK | SUBSIDIARY TASK |
|--------------------------|---|
| 1 Gazetteer | |
| 1.1 | Consultation Refine methodology |
| 1.2 | Access database design |
| Monitoring point: | Consult English Heritage |
| 1.3 List of battles | All 96 HERs/NMR data collection at 4 HERs per day General bibliographic search |
| | Prepare initial battle list (subject to HER returns) |
| 1.4 classify/grade | Initial grading |
| | Monitoring: Consult English Heritage |
| 1.5 Enhance | Detailed gazetteer compilation from top down Battlefields record; Features |

| | |
|---|---|
| | subsidiary record; Interventions subsidiary record Individual battle bibliographic searches |
| Monitoring point: | Consult English Heritage |
| 2 Initial assessment | Refine methodology |
| 3.2.1 | Initial assessment |
| 3.2.2 | Select pilot sites |
| 3 Refine methodology | |
| 3.1 | Review international projects |
| 3.2 | Field assessment sample - plan inc access - implement |
| 3.3 | aerial archaeology |
| 4 Final assessment | |
| 4.1 | Revise assessment using refined criteria based on sample results |
| Monitoring point: | Consult EH on Assessment |
| 5 Reporting | |
| 5.1 | Report writing |
| 5.2 | Maps/illustrations preparation |
| 5.3 | Prepare proposals and costings for Phase 2 |
| Monitoring point: | Consult EH on draft report |
| 6 Consult, publish & archive | |
| 6.1 | Consultation |
| 6.2 | Seminar – organise / deliver |
| 6.3 | Revise & submit final report |
| 6.4 | Report publication online on UK Battlefields Resource Centre |
| 6.5 | Organisation of 2006 conference |
| 6.6 | Archive Deposition with NMR/HERs |
| Monitoring | Phase 1 completion |

| | |
|---------------|--|
| <i>point:</i> | |
|---------------|--|

5. Phase Two

The exact shape of Phase Two will depend upon the recommendations from Phase One, and the priorities resulting that are agreed with EH. With that qualification, issues that could/should be covered include:

5.1 *Enhanced Delivery Of Phase One Results:*

- Battlefields booklet in the EH/DEFRA *Farming the Historic Landscape* series
- Published guidance/standards document (possibly a book, as well as web based) on the investigation, conservation and interpretation of battlefields and other fields of conflict in the UK
- Mounting of English fields of conflict gazetteer on the web as part of a UK-wide online GIS database, through the UK Battlefields Resource Centre
- Professional training workshop(s)
- Prerequisite knowledge for improved management of metal detecting on registered battlefields
- Archiving of phase 1 data with ADS

5.2 *Pilot projects: investigation*

Phase Two (bid for during Phase One - AHRB, EU or other body) will advance the subject's investigative dimension. This will embrace the detailed investigation of example sites to demonstrate how the principles developed for investigation of post medieval and later-15th century battlefields (as will by then be demonstrated through the Edgehill, Bosworth and Towton projects) can be applied to earlier medieval battlefields. This phase will also examine several earlier sites to consider how, if at all, the principles might be extended to pre-11th century battlefields.

Potential sites for such investigation will have been identified in the report to Phase One.

Investigation might be suggested in collaboration with other organisations such as the National Trust (owners of Maldon battlefield) and other conservation organisations, as appropriate. Steps here may include the development of

- exemplar research resources, to be web-delivered through the UK Battlefields Resource Centre. This to include the data from the Edgehill and Bosworth projects and to add earlier battlefield examples.
- battlefields artefacts online reference collection of all types of battle related artefact and their different attributes, with images and descriptive text, as an essential comparative research resource.

5.3 *Pilot projects: conservation priorities*

- Establish baseline data sets
- Define procedures for monitoring against baseline data
- Develop a detailed manual for management
- Develop model planning conditions and mitigation policies

5.4 *Pilot project(s): interpretation/explanation*

These might be developed in collaboration with the Battlefields Trust and its regional groups, in consultation with local archaeological curators, conceivably with HLF support. Scope also exists for developing the role of the Trust to provide long term detailed professional advice on battlefields issues.

5.5 *Sieges*

The siege sites issue requires scoping and integration with other fields of conflict, to provide the coherent overview for the subject as a whole that is currently lacking.

BIBLIOGRAPHY

- Fiorato, Veronica, Anthea Boylston, and Christopher Knüsel. *Blood red roses : the archaeology of a mass grave from the Battle of Towton AD 1461*. Oxford: Oxbow, 2000.
- Foard, G. "Field Offensive." *British Archaeology*, no. 79 (2004): 10-15.
- Foard, Glenn. *Naseby: The Decisive Campaign*. Whitstable: Pryor Publications, 1995.
- . "Sedgemoor 1685: Historic Terrain, the 'Archaeology of Battles' and the revision of Military History." *Landscapes* 4, no. 2 (2003): 5-15.
- Sutherland, T.L. "The Towton Battlefield Archaeological Survey Project: An Integrated Approach to Battlefield Archaeology." *Landscapes* (2003).

Appendix 1

Fields of Conflict Database: User Manual

The GIS database is designed to contain succinct information. More detailed description and analysis is contained in the report and gazetteer.

Three GIS (MapInfo) databases have been created:

- *'UK Fields of Conflict'*
- *'UKFOC Feature'*
- *'UK Conflict related features'*

The detail for each MapInfo Table is given below. The UK Fields of Conflict database is the primary dataset and includes most of the key facts about each site. Other information such as bibliographic sources will be found in the gazetteer, to be used in conjunction with it and the Report.

The numbers and sub-numbers allocated to records in the 'UK Fields of Conflict' and 'UKFOC Feature' tables are fixed. Should future research determine a new location for a particular action the original record should not be altered or deleted as it will remain valid as having been a potential location. Should a location be proven conclusively to have been the scene of the action the record associated with it will have the value '0' in the sub-number field, all other number being recognised as spurious alternatives.

Users should be aware:

- *of the need to search both the 'UK Fields of Conflict' table and the 'UKFOC Feature' table.*
- *that sources often use different names for any given event or place and names change over time. The name a user is familiar with for a particular battle may not be the one recorded in the 'action name' field. Users must check the 'name alternative' field in 'UK Fields of Conflict' table.*
- *that sites which are unlocated within a parish have a polygon area taken from the current parish boundary. It must be remembered that this may not be the same parish area as described in the earlier sources, and indeed the event may prove to have occurred well beyond this area even though that parish or place name was given to the action.*

As this is a UK database it contains fields that are at present relevant only to England (e.g. BTrust Assessment, and OS map sheet fields). Therefore these fields will remain empty for Scottish battlefields in the current project.

In addition to this the quality of the secondary sources and the resources available for the project will not allow all relevant fields to be completed for all the actions listed. Where practicable, those actions which have received further research and assessment for a gazetteer entry have had some of the additional fields completed.

1. 'UK Fields of Conflict' database

Criteria for inclusion on the database

All recorded battles and other fields of conflict have been added to the database.

Every 'published' action is included, even where it is considered that the event is or is likely to be spurious, so that it can be classified as to validity, to avoid confusion in future. What have not been included are individual acts of violence by a very small number of individuals, for example duels.

Graphic objects

Graphic objects are all point location symbols to enable national scale distribution mapping. Use of centroids for polygons for this purpose has been avoided as they move according to the shape of the polygon; thus the centroid of a polygon may not lie near the centre of the action. Any polygon data is held in a separate table linked by the UKFOC number / sub number.

Polygon data, where required to define the extent of a battlefield, will not be attached to this database but created as a separate data set, to enable the UKFOC database to be used for distribution mapping.

No record to be deleted, only marked as no longer current. This will ensure that there is no loss of data.

The dictionaries of specialist terms have been defined for the specific needs of the battlefields database in the absence of relevant terms in the English Heritage Thesauri. Multiple entries in any field to be separated by commas.

The following are guidance notes for completion of particular fields in the UKFOC database, defined with reference to the MIDAS guidance (version: 30/06/2004). Underlined field names have linked supporting discussion following the table.

In Field Type: mandatory is used to indicate that this particular field must be completed *where the data is known*. For many of the 'lesser' sites little information is available particularly with regard to location and date.

| Field Name | Definition | Additional Information | Field Type |
|---------------------|--|--|-------------------|
| UKFOC Number | Unique identifier for each action within the Battlefield Trust's databases | Non-hierarchical. Numbers are assigned sequentially, starting from 1, as each action is entered into the database. The number is not linked to importance of the action or site | Mandatory |
| Sub number | Subordinate number for actions with more than one possible location. E.g. 174.1; 174.2 etc. Unique within UKFOC number. This is always 0 where no alternative site has been entered. | Non-hierarchical. Numbers are assigned sequentially as they are entered into the database and are not linked to the likely accuracy of site: i.e. Bannockburn 1 is not necessarily a more valid location than Bannockburn 5. Components of the site are held within a separate MapInfo | Mandatory |

| | | | |
|---|---|--|-----------|
| | | database table 'UKFOC Feature' linked by the UKFOC Number & sub number. | |
| <p>Where a site has more than one possible location for an action then sub-numbers are used. Alternative locations will receive the same UKFOC number, to link it to the principle record, with a sub-number to identify it as an alternative site for the same event. No precedence is given to the allocation of sub-numbers but if a site is considered by assessment of the Battlefields Trust to be the probable primary location this will be indicated in the 'comments' field of the record.</p> <p>Where a site location from the HER differs to that from the NMRS the NMRS location will take precedence if the HER location is within 200m or if there is no additional information from the HER that warrants a separate location and sub-record.</p> <p>Where the HER location is at a distance greater than 200m and is based on additional information it is given a separate location with a sub UKFOC number, as at Bannockburn and Sheriffmuir.</p> <p>If the HER has given additional information as to why their location differs to that of the NMRS this will be assessed to determine which location is likely to be the most accurate.</p> | | | |
| Action name | The Battlefield Trust's preferred name for the action, typically the commonly accepted name | Where several actions from different periods have the same name, such as Falkirk and Dunbar, they are distinguished by addition of Roman numerals, as Falkirk I and Falkirk II etc. with the earliest action date taking the number I. | Mandatory |
| <p>The most commonly used/accepted name of the site. However many of the names used for lesser Scottish actions are derived from the NMRS which records the name of a place rather than a name of an action. Often but not always they are synonymous. Where names and alternative names have been derived from the NMRS they have been retained in capitals.</p> | | | |
| Name alternatives | Alternative or former name(s) | | |
| Date | Specific date of primary action | | |
| Year | Year in which action took place | | |
| Year/date alternative | Alternative dates for action | Includes dates of actions where sources disagree | |
| Century | Century in which action took place | | |
| War period | <i>Stuart Uprisings</i> (Post Medieval): 1661-1746 <i>Civil Wars</i> (Post Medieval): 1639-1660 <i>Post Medieval</i> (Early): 1501-1638 | 1066 considered of UK wide significance due to the resulting impact of Norman military action on the whole of Britain. | Mandatory |

| | | | |
|--|--|---|--|
| | <i>High Medieval:</i> 1067-1500 <i>Early Medieval:</i> 411-1066 <i>Roman:</i> AD43-410 | | |
| War | Individual war within war period. E.g. 2 nd Scottish War of Independence 1332 - 1363 | | |
| Individual wars within a war period, e.g. Scottish Civil War 1307 – 1309. Where the term ‘unclassified’ appears it denotes that an assessment has been made of this record but it has not been possible on the information available to make a classification. Where there is no data in the field it denotes that no assessment has been made of this record. Clan skirmishes and other local actions have not been studied in detail and the sources frequently give little detail. Where an action took place during a particular war as at Carn Mharbh Dhaoine in 1691 (during the period of the 1 st Jacobite Rising) but the secondary source used does not indicate that it was linked to the Rising then it has been left as unclassified. Further work is needed on these lesser actions to define associations with war periods. Some are possibly personal feuds between civil parties unrelated to national or international warfare. | | | |
| Campaign | Name of individual campaign within war | Includes the events leading up to and immediately following the primary action | |
| War type | <i>International:</i> e.g. England / Scotland <i>National:</i> e.g. Civil War <i>Local</i> <i>Local (clan)</i> <i>International(border conflict)</i> | | |
| <p>Actions that are classified as ‘International’ will have as the combatants the nationality (e.g. Scottish, English, Norse) with the ‘home’ or defensive force appearing in ‘Combatants 1’. For conflicts between the Scottish and English, Scottish will always appear in the field ‘Combatants 1’ when within the contemporary area of Scotland, where this is known. For conflicts between the Norse and the Scots the situation is more complex and the ‘home’ force is far more dependant on date and geographical location. For the few records of actions between Scots and Norse where no date is given the ‘home’ force has been taken as Scots.</p> <p>No priority is assigned to ‘Combatants 1’ where the action is ‘National’. Actions that are classified as ‘National’ will have as the combatants the name of the principal force/side, e.g. Royalist, Parliamentarian, Jacobite, Government. The latter can imply the Crown or Parliament depending on the period. For periods that are particularly complex the name of the war leader will follow the term ‘Government’, e.g. ‘Government (Bruce I)’.</p> <p>Actions that are classified as ‘Local’ or ‘Clan’ will have as the combatants the name of the Clan, or the name of the principal commander as given in the source but no attempt has been made to establish which was the offensive and which the defensive force.</p> | | | |
| Type of action | <i>Battle</i> <i>Skirmish</i> <i>Raid</i> <i>Massacre</i> <i>Judicial combat</i> <i>Siege</i> | Where the type of action is not given in the source or is uncertain, as at Dunkeld, it is recorded as ‘unclassified’ in the database. | |

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|--|---|--|--|
| | | | |
| Numbers engaged | Approximate probable total number of combatants | Zero indicates undetermined | |
| <p>The total number of troops involved in the battle. This will have been rounded to give a broad idea of the scale of the action. For details regarding numbers on each side, breakdown of troop type, i.e. cavalry, infantry etc, and source for numbers given, the gazetteer should be consulted. There is often a wide disparity between secondary sources, particularly for medieval battles because of the extreme exaggeration of numbers quoted in most medieval chronicles, e.g. Falkirk I has a range of numbers from 6,000 Scottish (Reid 2004), 30,000 Scottish (Smurthwaite 1993), to the ludicrous 80,000 English (Warner 1995).</p> | | | |
| NMR NUMLINK | Unique identifier supplied by NMRS | English & Welsh identifiers to be added | |
| NMR traditional reference | For NMRS: OS quarter sheet (1:10000) number on which a site is located + individual site number | | |
| HER | Name of local HER | | |
| HER Number | Individual local HER record number | | |
| Record Veracity | Reliability of source where primary documentary evidence is scant or non-existent. | Refers to 'traditional' sites where evidence is poor. This field is not completed for secure sites e.g. Culloden | |
| <p>There are a number of sites said to be 'traditionally' the location of a conflict with little or no supporting evidence and often no date and no indication of combatants. This field indicates the type of source on which the tradition is based, as given by the NMRS and assessed by the Battlefields Trust. E.g. place name, OS, Name book, antiquarian (all pre 1900 secondary sources), secondary source (all post 1900), burial, artefact, features. Additional information regarding the type of artefact or feature is given in the comments field for the record.</p> | | | |
| Professional Judgement | Initial grading assessed by professional judgement | Numeric field with a scale of 0 – 3 with 0 being the lowest. | |
| <p>A zero score is given to records that do not have sufficient information to be confident of their veracity. For example there are a number of sites such as 'Bloody moss plantation' and 'Lag Nan Susunnach' that have no data re combatants or date. Many of these sites are based on local traditions and often linked to features such as cairns but with no evidence of an action having taken place. Similarly there are locations that have a tenuous link to a period because of a place or feature name e.g. 'Bruce's Cairn' or 'Wallace's Thorn' but again with no evidence of an action having occurred. Other locations may have additional evidence in the form of artefact finds or the discovery of human remains as at 'Cairnholy'. But where these are undated and cannot be linked with confidence to a particular action, or cannot be securely identified as being battle related then the score has been given as zero as it is not thought that these sites can be judged to be as valid as others that have specific information.</p> | | | |

| | | | |
|--|--|--|-----------|
| <p>A score of zero does not imply that the record is invalid and should be dismissed. Rather the rating is given to those sites that need considerably more research to establish their authenticity but on the present evidence there is sufficient room for doubt.</p> <p>Some of the sites rated as 1 may have little evidence but have been judged as having a high probability of an action having taken place.</p> | | | |
| NGR easting | British National Grid Reference (NGR) eastings specifying site location | numeric 6 figure for the probable focus of the action generated by MapInfo from the location of the map symbol | Mandatory |
| NGR northing | British National Grid Reference (NGR) northings specifying site location | numeric 6 figure for the probable focus of the action generated by MapInfo from the location of the map symbol | Mandatory |
| NGR Traditional | 6 figure NGR with OS 100km sq. numbers. E.g. TL156081 | | |
| Locational Accuracy | Accuracy of location of action as assessed by Battlefields Trust | Numeric field on scale of 0 – 5 with 5 being the most accurate | |
| <p>The likely accuracy with which the point location is positioned:</p> <p>0 unlocated Not identified to a specific place or parish, only to a wide region.</p> <p>1 vague alternatives Not identified to a specific place but alternatives a distance of circa 5km or more have been suggested. E.g.: Brunanburh and Dexastan</p> <p>2 approximate Identified as being in or near a specific place or parish. E.g.: Dalnaspidal or Pitgavenny</p> <p>3 alternative sites Identified as being in or near a specific place or parish but where more than one site has been suggested and where the centres of the sites are within less than circa 5km. E.g.: Bannockburn and Falkirk I</p> <p>4 secure Located with confidence to a specific area where the point location of the centre of the initial main action is likely to be accurate to $\pm 500m$, but where uncertainties remain over exact location and extent of deployments/action and battlefield extent. eg: Dunbar II.</p> <p>5 accurate Located with confidence to a specific area and where the point location of the centre of the initial main action is likely to be accurate to $\pm 250m$. Accurate and secure placing of deployments/action and definition of battlefield extent. E.g.; Culloden</p> | | | |
| Location Source | Source from which the mapped location derives | | Mandatory |
| Country | England Northern Ireland | | |

| | | | |
|--|---|--|-----------|
| | Scotland Wales | | |
| Historic County | Former county in which site is located | England: source Kain & Oliver | |
| Modern Administrative Unit | Current administrative unit: Unitary authority / county | Source: Ordnance Survey digital map data | Mandatory |
| Parish | Current administrative parish in England & Wales, 'historic' parish in Scotland | Source Ordnance survey digital map data Scottish parish from GROS data set | Mandatory |
| Historic Terrain | Probable land use at the time of the battle. List of standard terms to be defined | It has not been possible to complete this field within the current project. For some Scottish sites this can be established with a limited degree of accuracy from the RCAHMS Historic Land Use Assessment. | |
| It has not been possible to assess the historic terrain of individual battles as part of this project. This is partly due to time constraints but also due to the ongoing nature of the HLA survey, meaning large areas of land have not yet been mapped. Ideally the historic terrain should be classified through detailed research on historic maps and other primary data. | | | |
| Designations | <i>Registered</i> <i>Extensive</i> <i>Partial</i> <i>Minor</i> <i>None</i> | <i>Registered Battlefield</i> in England only. <i>Other designations</i> are assessed as to coverage and hence relevance to the management of the battlefield. They are identified in the gazetteer and can include: <i>Scheduled Ancient Monument.</i> <i>Conservation area.</i> <i>Designed Landscape</i> ('Register of Parks and Gardens' – English Heritage data set; 'Historic Garden and Designed Landscape' - Scottish Natural Heritage data set. This has only been completed for the sites subject to detailed assessment or a designation directly related to a battlefield component (e.g.: scheduled mass grave) | |
| Importance: military/ political | | Numeric field on scale of 1-3 with 3 being the most important. Only defined for battles assessed in the | |

| | | | |
|--|---|---|--|
| | | gazetteer | |
| | <p><i>1</i> outcomes of little or only local significance</p> <p><i>2</i> significant in the initiation or continuation of a war but was not decisive in military terms and did not have long term political implications (e.g.: Auldearn or Falkirk II)</p> <p><i>3</i> major political or military impact such as a key turning point in a war (e.g.: Bannockburn or Culloden) and/or long term outcomes such as change of political control (e.g.: Largs or Lumphanan); saw application of important new tactics or military equipment which substantially influenced the outcome (e.g.: Pinkie); a victory determined by the abilities of a commander and/or quality of an army (eg: Dunbar II or Stirling Bridge).</p> | | |
| Battle Importance, cultural perception: (bibliographic quantity) | Quantity of published bibliographic entries recovered from searches of specified general books on battles/battlefields. | See Appendix 3 | |
| Battle Importance, cultural perception: (Individual bibliographic quantity) | Quantity of published bibliographic entries recovered from specified searches of name(s) of individual battles/battlefields | See UKFOC bibliography | |
| Potential: historic terrain | | Requires assessment of the range of documentary and archaeological evidence, which was not part of the current project | |
| Potential: Battle | | Graded 1-3 with 3 as the highest potential. Interim assessment provided here by professional judgement for gazetteer sites only. Requires fuller assessment of the quantity and quality of primary documentary sources for the battle and likely quality and survival of battle archaeology | |
| Battle Array: | Were the combatants arrayed in military formation: Y/N/U(uncertain) | | |
| Combatants Type: | <i>Regular</i> military forces <i>Irregular</i> military forces <i>Civilian</i> | | |
| Combatants 1 | Military force of home of government side e.g. Scottish | Where groups of forces such as individual militias or clans are | |

| | | | |
|--|--|--|--|
| | when in contemporary Scotland | known they will be included | |
| Combatants 2 | Military force of invading or rebel side e.g. English in contemporary Scotland | Where groups of forces such as individual militias or clans are known they will be included | |
| Outcome | Summary result of action | A very brief summary as to which side was victorious. Detail as to losses and later implications of the battle are given in gazetteer entries. | |
| Assessed for Register | Assessed by English Heritage for inclusion in the Register | True/false | |
| Gazetteer entry | Existence of a detailed gazetteer report | True/false | |
| Featured on BT Website | Sites featured on the Battlefields Trust website | | |
| OS Landranger map number | Sheet number(s) on which site is located | | |
| OS Explorer map number | Sheet number(s) on which site is located | | |
| OS 2” Surveyors Drawings number | Sheet number(s) on which site is located | Only relevant for England south of the Humber | |
| Geology 50000 map | BGS map sheet reference | | |
| comments | Free text field | To include additional source data | |

2. 'UKFOC Feature' database

The type of feature recorded in this table is given in the field 'Description'. The terms 'monument' and 'memorial' are followed by the specific type (e.g. obelisk, commemorative plaque) in brackets, where this is known. Cairns are not classified as monuments unless they have been erected to a specific person or action, such as the Jacobite memorial cairn at Culloden.

The criteria for adding a feature to the database is that it must be linked, or believed to be linked, to a specific battle. It may be a monument, mass grave or the like which is actually on or overlooking the battlefield, or at a location directly linked to the action. It can however also include certain features at locations separate from the field of conflict, sometimes at a considerable distance, as for example with the grave of a combatant killed on the field but buried elsewhere.

All records in the 'UKFOC Feature' table are linked to the primary record by the UKFOC number. 169 records in Scotland have been created within this dataset. The data has been drawn from a range of sources including the NMRS 'Battle Names' extract, further searches of the Canmore database and from other secondary sources including historic Ordnance Survey maps.

Where a feature has been identified from any source other than the NMRS then a search was made of the Canmore database to add the NMRS details to the record. There are only 4 sites for which no NMRS record has been identified. As the production of this database was not defined in the project design the HERs were not asked to supply specific data relating to monuments or other battle/battlefield features, therefore the present dataset may be enhanced by further location specific searches of HERs.

The features included in this dataset are typically cairns, burials, memorials etc associated with a particular battle. The association can be direct as in the case of mass graves; secondary as in the case of monuments and memorials, or tertiary as where pre battle or natural features, such as standing stones or trees, have become associated with the battle over time.

In addition to this, some sites will have major subsidiary actions, as at Bannockburn where a substantial engagement was fought on the day before the main battle. These have currently been recorded in the 'UKFOC Feature' table identifying their type in the 'description' field and linking them to the primary record with the UKFOC number. Such sites have not currently been recorded as actions in their own right because of their close association with the main action, which often took place over a wide area. However, where such sites are identifiable/locatable it is important that they are recorded as they can contribute a great deal to the understanding of the action as a whole. *Very few subsidiary actions of this type have so far been entered onto the database and it may be necessary to revise this recording method when more cases have been entered.*

The NMRS dataset is based on names. The UKFOC Feature table is based on the features those names are associated with and an item will only be added to the UKFOC Feature table where there is a particular battle to associate it with. Therefore individual features such as cairns that may be the burial site of someone killed in an individual incident that cannot be linked to a particular battle have not been added. Similarly place names that have no

such link as within the parishes of Newbattle in Midlothian and Morebattle in the Scottish Borders are not included in the database. In the same way Battledykes in Angus where there are several features named Battledykes including a Roman camp but no evidence of a battle having taken place has not been added. At Battleby in Perth & Kinross there is a house and farmstead of that name but no evidence of a battle. There is however a record for the battle of Luncarty (site 1) which lies less than a mile to the east of Battleby. It might be supposed that Battleby has some association with Luncarty but given that the evidence for any conflict occurring at Luncarty is slim at best, no connection has been made and Battleby has not been added to the database. Of note is the alternative location of Luncarty (site 2) in Fife which lies less than a mile to the east of an area called 'Battle Law' which has evidence of a cemetery but again no evidence of a battle having taken place. Battle Law has not been added to the database. It is uncertain whether the locations for the battle of Luncarty (which may never have taken place) have been placed at these sites because of existing names, or whether the names were derived from the association with the battle regardless of how spurious it was. Very minor events such as the 'Battle Fauld' in Aberdeenshire, the location of a dual and burial site of the loser are also excluded. For reference purposes, a MapInfo copy of the NMRS battle names extract is included in the project archive to enable these rejected items to be reviewed. Information regarding administrative units etc is not repeated in the 'UKFOC Feature' database. This information can be retrieved through the NMRS NUMLINK or from subsidiary GIS tables maintained as part of the UKBRC.

The following are guidance notes for completion of particular fields in the UKFOC Feature database.

| Field Name | Definition | Additional Information | Field Type |
|------------------------|---|--|-----------------------------|
| UKFOC Number | Unique identifier for all sites within the database linking Feature to Field of Conflict | Very rarely a Feature will be associated with more than one UKFOC record, as with the 'Crabe Stone' at Aberdeen. Where this occurs only a single number will appear in this field and any other numbers will be recorded in the 'comments' field | Mandatory |
| Sub Number | Subordinate number for sites with more than one possible location. E.g. 174.1; 174.2 etc | Links feature to specific UKFOC record where there are multiple locations | Mandatory |
| Feature Number | Unique number for all records in the database | 0 indicates there is only one feature associated with a UKFOC record. 1 is only used when multiple features are present. | Mandatory |
| NMR NUMLINK | Unique identifier supplied by NMRS | | Mandatory (where it exists) |
| NMR Traditional number | Indicates the map number of the OS quarter sheet (1:10000) on which a site is located | | Mandatory (where it exists) |
| Site | Unique NMRS site record number | To be used with NMRS Traditional reference | Mandatory (where it exists) |
| NMRS Name | Currently the name given to a site in the NMRS. This is usually the site name or the nearest published place or topographic name on the OS 1:10,000 map sheet | Currently NMRS name usually linked to site rather than feature | |
| Alternative Name(s) | Alternative name(s), former names | | |
| HER | Name of local HER | | |
| HER Number | Individual local HER record number | | |

| | | | |
|-------------|--|---|-----------|
| Description | Brief description of feature e.g memorial, granite boulder, graves etc | <i>Monument</i> : a structure such as obelisk commemorating the battle, or one or more of the fallen; only including earlier structures such as standing stones when they are now closely associated as a commemorative feature to the action. <i>Memorial</i> : a plaque or other non structural commemoration <i>Funerary Monument</i> <i>Named Tree</i> | |
| Designation | Type of designation to be specified: | Scheduled Ancient Monument Listed building Registered Park & Garden (England) / Designed Landscape (Scotland) Conservation Area | |
| Accuracy | | <i>Not assessed as part of the current project</i> | |
| X | British National Grid Reference (NGR) eastings specifying site location | | Mandatory |
| Y | British National Grid Reference (NGR) northings specifying site location | | Mandatory |
| Comments | Free text field to include additional information to assist the user | | |

It may be necessary to add an Events field to record the type of intervention that produced some data, such as excavations of mass graves or metal detecting surveys producing bullet distributions.

3. 'UK Conflict related features' database

A third database, the **UK Conflict related features database** has been established for items such as monuments and graves which are not directly associated with a specific field of conflict, and so cannot be entered onto the UKFOC features database, but which have significant association with a period of pre-industrial warfare within the UK.

For example, there are several features associated with the Bothwell Bridge Rebellion which are not linked to an individual action. These are Covenanter's

graves and monuments, and a memorial to Archbishop Sharp whose murder sparked the rebellion. In contrast, the Wallace Monument at Stirling has been added to the UKFOC Features database, because it is overlooking the site of his great victory, the battlefield of Stirling Bridge, and thus is directly associated with that Field of Conflict.

The further development of this third database would be a valuable adjunct to the main databases but its creation was not a requirement of the Project Design for the current project and so only occasional entries have been made where data was retrieved incidentally that was not appropriate to include in the two main databases.

4. UK Fields of Conflict Bibliography database

The UK Fields of Conflict Bibliography is generated in Endnote software. The battle name of each battle featured in the secondary work is listed in the Notes field.

ADDITIONAL FIELDS FOR GAZETTEER ENTRIES WHERE APPROPRIATE:

Battle Name

Battle Date:

1 SUMMARY

1.1 CONTEXT

1.2 ACTION

1.3 NUMBERS

Troops:

Losses:

1.4 COMMEMORATION & INTERPRETATION

2 ASSESSMENT

2.1 LOCATION

2.2 PRIMARY SOURCES

2.3 SECONDARY WORKS

2.4 BATTLE ARCHAEOLOGY

2.5 BATTLEFIELD HISTORIC TERRAIN

2.6 SIGNIFICANCE OF THE BATTLE

2.7 CURRENT STATE OF DEVELOPMENT

2.8 CURRENT DESIGNATIONS

2.9 POTENTIAL

2.10 THREATS

3 REFERENCES

4 BIBLIOGRAPHY

4.1 PRIMARY SOURCES

4.2 SECONDARY SOURCES

APPENDIX 2

ILLUSTRATIVE GAZETTEER ENTRY

AULDEARN

UKFOC number: 343

*Battle Name: **Auldearn***

*Date: **9th May 1645***

1 SUMMARY

1.1 CONTEXT

After the royalist defeat at Marston Moor (Yorkshire, July 1644), by an allied force of two Parliamentarian and one Covenanter army, the Marquis of Montrose returned to Scotland with some Scottish forces who had fought for the king at Marston.¹⁷ Montrose was appointed Charles I's military commander in Scotland and raised the royal standard against the Covenanters on 28th August 1644, to counter their intervention in the war in England. With little more than 2000 troops, through the autumn and winter, Montrose fought a campaign in which he won a series of dramatic successes in the Highlands. Heavily outnumbered, he effectively exploited the terrain to outmanoeuvre his enemy defeating them at Tippermuir, Aberdeen, Fyvie and Inverlochy. When in April he attempted an assault on Dundee a Covenanter army under Baillie responded. Montrose retreated north and an army under Hurry was dispatched in pursuit, getting between the royalists and Inverness. As the royalists advanced across the river Spey, Hurry fought a rearguard action as he moved closer to Inverness to unite with local Covenanter troops before engaging Montrose. The royalist forces withdrew to quarters in and to the east of Auldearn on the night of the 8th May, with scouts out to the west. Hurry, having united with the local forces now advanced against Montrose on the morning of the 9th May 1645.

1.2 ACTION

When news arrived from the scouts of the Covenanter approach MacColla, who had the most advanced royalist position, in Auldearn village itself, led his troops westward. They took up a strong position

¹⁷ The main source used for this battle is Reid Stuart, *Auldearn, 1645: the Marquis of Montrose's Scottish campaign* (Oxford: Osprey, 2003).

west of Auldearn, probably on Garlic Hill, protected from cavalry attack by a marsh and an area of bushes.

The action, relatively unusually for a battle of this period, probably lasted much of the day, but in the form of periods of intense fighting interspersed by lulls. It began with a Covenanter attack in which, after an intense fire-fight, they drove MacColla's heavily outnumbered troops back close to Auldearn village. Here, from the village enclosures the royalists maintained musket fire to hold back the Covenanters, aided by the difficult, marshy ground. MacColla then made a counter attack, it too becoming bogged down in the marshy ground and, after intense fighting including Covenanter cavalry as well as foot, was forced back to the village. The fighting apparently continued house to house through Auldearn.

Having finally mustered the main body of his army to the east of the village Montrose now moved into a counter attack. Contrary to other secondary works, Reid interprets Montrose's account to suggest that there were outflanking attacks to north and south of Auldearn village by the royalists. A flank attack by cavalry drove the Covenanter cavalry, with the royalists in pursuit, through some Covenanter infantry units and provided some relief for MacColla's hard pressed men in the village. A cavalry attack on the Covenanter left then dealt with their left flank cavalry, exposing both infantry flanks to attack. A combined attack of horse and foot on the Covenanter infantry saw many killed in intense fighting, but a substantial number may have kept order to retreat south westward, retreating over the River Nairn at How Ford. The next day Montrose's army retreated eastward across the Spey.

1.3 NUMBERS

Troops:

The troops on both sides seem to have been largely equipped, trained and to have fought according to contemporary European practice, rather than with the Highlanders' equipment and tactics seen in some later battles, except that some troops apparently carried bows rather than muskets. There is some dispute over the numbers with primary and secondary sources giving significantly different numbers for each side but the following are based broadly on Reid's discussion.

Royalist (Montrose): possibly c. 2000: c.1440 foot; c.600 horse: a mixture of experienced Highland and Irish troops with raw recruits.

Covenanter (Hurry): possibly c. 3000: c.1700 regular & c.1300 local foot; c.300 horse.

Losses:

Reid provides some figures on casualties but there are considerable uncertainties. The order of scale may be:

Royalist: c.200

Covenanter: c.500

1.4 COMMEMORATION & INTERPRETATION

The battlefield is signposted and there is a car park. An interpretation panel has been erected on the motte near the dovecote on the NW edge of the village, maintained by the National Trust for Scotland. This was a vantage point used during the battle itself and is said to be the best vantage point on the battlefield to appreciate the terrain and its influence on the outcome. There is also a memorial to fallen Covenanter troops in the old church at Auldearn.¹⁸

2 ASSESSMENT

2.1 LOCATION

The general location of the battlefield is well known and this is supported by the discovery of possibly battle related burials on or near Garlic Hill. The Ordnance Survey modern mapping does place the battle to the south of Auldearn, but no other secondary source examined supports such an interpretation.

For the present purposes two broad areas have been defined as the first stage of definition of the battlefield:

- an inner search area likely to encompass the main action
- an extended search area required for terrain reconstruction and to encompass manoeuvres etc
- a wider area to the west to encompass any skirmishing associated with the flight / retreat towards Inverness has not been included due to the substantial uncertainties, but this remains an issue to be tackled

The exact deployment of the forces and detail of the action is open to dispute. Thus the exact extent of the battlefield is difficult to define without further documentary and archaeological investigation of both the battlefield terrain and the battle archaeology. Resolution of the variation in location of the detail of the action is critical if there is to be implementation of any effective management of the battlefield as an historic landscape or an archaeological monument.

¹⁸ Ibid.

The extent of deployment and thus the action north westward of the village is in dispute between Reid and others secondary works, though the potential extent of marsh would tend to support Reid's interpretation. However with the detail of cavalry action shown by Reid the potential extent of marsh may raise difficulties, as may the fact that primary sources show action continued as far south as Brightmony, with Covenanter troops being killed there and near Kinstearry. Other troops retreated westward but the extent of action, both in formation and disordered and hence in the form of ancillary skirmishing, is undefined in this direction. It does appear fairly certain that the action did not extend to the north east of Auldearn village.

These uncertainties make difficult the definition of the extent of the battlefield, particularly on the south east and on the west. The lack of secure terrain reconstruction for 1645, including the location and extent of the marsh and the exact extent of Auldearn village and its enclosures, also means that even in the central area of the battlefield there remains substantial uncertainty as to the interpretation and placing of the fine detail and extent of action.

2.2 PRIMARY SOURCES

There is one detailed Covenanter report and several royalist reports on the battle. They are not presented in full in any of the sources consulted for this assessment and need to be made easily available.

2.3 SECONDARY WORKS

The most substantial discussion of the battle is by Reid (2003), who makes good use of the primary accounts, though unfortunately he does not reproduce them in full. The use of '3D' perspective depictions makes the accurate mapping of his suggested deployments very difficult. The terrain features shown on his plans are not sourced and seem to be as spurious as similar terrain detail provided in other books in the Osprey campaign series, such as Edgehill. Some of the detail appears to be direct reproduction of modern colour aerial photography, for it includes cropmarks. All the terrain features depicted must therefore be taken as spurious until proved otherwise.

Guest & Guest's review is highly derivative and the plan very stylised, however they show the infantry action focussed further north across what is now the A96. Both they and Bennett broadly follow Seymour's depiction of the deployments. This interpretation may be seriously compromised by the possible extent of marsh as suggested by the extent of alluvium.

2.4 BATTLE ARCHAEOLOGY

The only battle archaeology identified during the research for this report is the report of human remains noted on the 1st edition 6" Ordnance Survey mapping (1871) as having been found on Garlick Hill and recorded on the NMRS.

The geology of the battlefield is largely sands and gravels and as such the site is likely to have a low pH, which will have been aggressive towards preservation of ferrous artefacts in the topsoil. There are, however, several areas of alluvium which are likely to relate to the area of marsh reported in the accounts of the battle which could have preserved artefacts from mechanical damage from cultivation. The past land use history, if largely one of pasture, may also show whether there is an increased potential for good preservation of ferrous artefacts. There may also be potential here for exceptional preservation of waterlogged deposits. It should however be noted that most bullets recovered from a battlefield are probably retrieved from within the top 10cm and almost all from within the top 30cm, thus alluvial burial would make metal detecting survey work difficult in these particular areas, with negative results not necessarily reflecting lack of action but rather masking and thus exceptional preservation beneath alluvium. Thus a key survey strategy should be to sample any intensive battle archaeology following the distributions from the sands & gravels into the alluvial area.

Some of the Highland levies in the Covenanter army are said to have been armed with bows and so the potential for iron arrowheads should be taken into account. There would appear to have been no study of a 17th century battlefield which has so far recovered significant evidence of archery, as the bow was largely obsolete by the 1640s in Western Europe. IF the bow was actually used in any significant numbers at Auldearn in conjunction with musketry then this site might offer unusual potential for investigation of the issue of ferrous arrowhead survival and distributional patterning on the battlefield. The issues regarding potential for preservation of ferrous artefacts discussed above may be relevant here.

2.5 BATTLEFIELD HISTORIC TERRAIN

Research is required into the major road network in 1645 as there appear to have been significant changes. In 1776 the main route from Aberdeen to Nairn apparently ran along the coastal route, now just a minor road, but in 1830 a second route also seems to be shown running south of Auldearn, through 'Peniclara Park'. If the latter is not

on the course of the 20th century A91, the course of the roads may modify our understanding of the exact approach of Hurry's forces to the field and thus the likely location of deployment and direction of attack and retreat/flight.

The 5m contours on the OS Explorer mapping appear to give an adequate impression of the relief which will have provided one of the key factors determining the tactical potential in the area. However lesser scale features than Garlic hill that still have significant military importance may only be visible from ground inspection and by use of a high resolution digital terrain model (NEXTMap Britain).

The marshy area that MacColla used to protect his initial position and which will have influenced the distribution of later action is likely to be broadly defined by one or both of the alluvial deposits immediately north west and south west of Auldearn village depicted on BGS mapping. The geological mapping taken together with the accounts mentioning the marsh obstructing the left wing of the MacColla's counter attack might indicate that the marsh lay in the alluvial area to the south east of Garlick Hill.

Determining the extent of settlement and of ancient enclosures around the village of Auldearn in 1645 will be important in pinpointing the action in the middle phase of the battle.

2.6 SIGNIFICANCE OF THE BATTLE

At Auldearn Montrose defeated a significantly stronger force, even if at a substantial cost. Though the numbers involved were relatively small, the battle was another important element in the development of Montrose's reputation as a highly skilled commander. It set the scene for a series of new royalist victories, as the campaign moved south towards the Lowlands, and Montrose's campaign was the one significant royalist success story in the later stages of the First Civil War.

2.7 CURRENT STATE OF DEVELOPMENT

Auldearn village has expanded significantly, to the south, south east and north west, and a bypass has been constructed skirting the village to the north. However the vast majority of the probable battlefield remains open ground. A key area of the early action adjacent to the village, where MacColla held off the early attack, has probably been largely lost under the modern housing, though the mapping of the ancient enclosures may lead to some revision of this conclusion. There is a small of surviving open ground around the Doocot, which may

prove to be an archaeologically critical area for the understanding of this phase of the action if it enables the character and density of action close to the village to be assessed. Other than this, the battlefield seems to be fairly complete, with no obvious evidence on modern or late 19th century mapping for significant mineral extraction or other such destruction.

2.8 CURRENT DESIGNATIONS

Martin claims the site is already well covered in the Local Plan, but this has not been assessed here.¹⁹ There are several listed buildings within the village and, immediately to the north west, a listed dovecote on the Scheduled motte. The site of the church in the village is also scheduled. Martin claims that the battlefield has been designated as a Conservation Area, but none is shown on the Conservation Areas digital data set provided for the project by Historic Scotland. No other designations have been identified.

2.9 POTENTIAL

The battlefield appears to have high potential both for investigation and interpretation.

It is clear from Montrose's own account that the terrain severely restricted the room for manoeuvre, allowing him only to deploy in two wings in his critical counter-attack. Given this and the terrain information in the primary accounts, it seems likely that a far clearer picture of the location and extent of the initial deployments and of the various phases of the action could be established by a detailed reconstruction of the historic terrain as a context for the re-interpretation of the primary accounts. This applies equally to the wider context of the battlefield as to the battlefield core. For example, there were probably two major roads leading east from Nairn past Auldearn towards Aberdeen, one running north and the other south of Auldearn). Knowledge of the exact course of these roads in 1645 would assist in the understanding the likely approach of Hurry's Covenanter army to the battlefield and thus the reconstruction of the initial manoeuvres and even the exact location of the initial deployments. Reconstruction may also assist in resolving the conflict between the interpretations in the secondary works, as for example where Reid interprets Montrose's account to suggest that there were outflanking royalist attacks around either side of Auldearn village.

¹⁹ Martin, "The Battlefields of Scotland: A report on their preservation for Historic Scotland."

Any interpretation would need to be tested by sampling the battle archaeology. Given the frequent reference in the primary accounts to intense fire-fights, there should be extensive evidence of battle archaeology in the form of lead bullets of varying calibre, which should be very amenable systematic survey. One problem with the interpretation of the battle archaeology is that there were apparently three separate stages when attack and counter-attack flowed across Garlick Hill and the area up to the village, and distinguishing the evidence from each is likely to be impossible, unless there is some distinctive attribute of calibre or firing marks to the different phases. First however an assessment needs to be made to establish what metal detecting, if any, has been undertaken on the battlefield, if it has then whether any of the finds have been recorded and thus what damage is likely to have been done to the distribution patterns. In addition, given part of the action was through the village then, if there are any surviving buildings or other structures from the period, they should be examined for evidence of shot impacts.

Needs:

- Define a research strategy for the battlefield.
- Make primary sources readily available.
- Establish through local consultation whether any metal detecting has been undertaken on the battlefield and, if so, seek cooperation of the detectorists to recover and make available for management purposes as much information as possible as to the discoveries and their location.
- Conduct primary research on the historic terrain to more accurately place the documented action from evidence in the primary sources and to establish if waterlogged marsh deposits might remain anywhere on the battlefield.
- Determine broad land use history, soil chemistry and assess the chronology of alluviation to establish what if any is likely to post date the battle and thus bury battle archaeology, to determine the likely state of preservation of the battle archaeology.
- Test any hypotheses on deployments and action thus developed by a structured sampling of the battle archaeology, including metal detecting for unstratified bullet distribution patterns and examination of any 17th century buildings for bullet impact evidence.
- Define a boundary for conservation and recording action, which may not be the same boundary, for both the main action and ancillary skirmishing and important preliminary manoeuvres.

2.10 THREATS

- The high probability of survival of extensive non ferrous battle archaeology renders the site particularly vulnerable to treasure hunting and unrecorded/poorly recorded metal detecting surveys.
- Should any potential exist for the survival of waterlogged deposits from the former marsh then any intention for further land drainage could prove destructive.
- Further housing development, including infilling in remaining paddocks around the village, especially to the west and south would be very destructive of the battle archaeology.
- If past land use has been predominantly pastoral then conversion to arable now or in the recent past may represent a threat of rapid destruction of otherwise well preserved unstratified ferrous battle archaeology.

Ideally there should be an overall study of the battle prior to the determination of any significant planning application or any broader decisions on allocation of land for development. Any small scale development in the battlefield area should be assessed to determine the need and potential for intensive metal detecting. Any substantial planning proposal involving one house or more should be assessed to determine the need and potential for historic terrain reconstruction of the area and its context, and reconnaissance metal detecting survey, according to current best practice for 17th century battlefields. The problems posed by long term permanent pasture for the recovery of battle archaeology by metal detecting needs to be borne in mind. If development is to be approved then intensive metal detecting should be undertaken to recover a detailed picture of the distribution of battle related artefacts prior to development. In sample areas follow up detecting may also be appropriate integrated within the stripping programme, to test the full population of battle artefacts to provide a control on the sample provided by the intensive metal detecting survey.

3 REFERENCES

Reid 2003

Guest & Guest, 1996

Seymour, 1979

4 BIBLIOGRAPHY

4.1 PRIMARY SOURCES

Fraser provides the only Covenanter report of the battle. Ruthven gives a detailed royalist report.

Fraser, James, and William Mackay. *Chronicles of the Frasers : the Wardlaw manuscript entitled 'Polichronicon seu policratica temporum, or, The true genealogy of the Frasers', 916-1674, Publications of the Scottish History Society ; v.47.* Edinburgh: Printed at the University Press by T. and A. Constable for the Scottish History Society, 1905.

Gordon, Patrick, John Dunn, and Club Spalding. *A short abridgement of Britane's distemper : from the yeare of God M.DC.XXXIX. to M.DC.XLIX, Spalding Club (Series) ; 10.* Aberdeen: Printed for the Spalding club, 1844.

4.2 SECONDARY SOURCES

Bain, George. *History of Nairnshire*, 1893. 14-22.

Baker A. *A Battlefield Atlas of the English Civil War*. London: Ian Allan, 1986.

Bennett M. *Traveller's Guide to the Battlefields of the English Civil War*. Exeter: Webb & Bower, 1990.

Black, C. Stewart. *Scottish battles*. Glasgow: Brown Son & Ferguson, 1936.

Brander, Michael, and Jimmie Macgregor. *Scottish and Border battles and ballads*. London: Seeley, 1975. 143-4

Buchan, John. *The Marquis of Montrose*. [S.I.]: Thomas Nelson and Sons, 1913.

Clark, David. *Battlefield walks : Scotland*. Stroud: Sutton Publishing, 1996.

Dodds Glen Lyndon. *Battles in Britain 1066-1746*. London: Arms & Armour, 1996.

Fairbairn, Niel, and Michael Cyprien. *A Traveller's Guide to the Battlefields of Britain*. London: Evans Brothers Ltd, 1983.

Gaunt, Peter. *The Cromwellian gazetteer : an illustrated guide to Britain in the Civil War and Commonwealth*. Gloucester: Alan Sutton, 1987.

Guest, Ken, and Denise Guest. *British battles : the front lines of history in colour photographs*. London: HarperCollins 1996, 1996.

Hamilton, J. *Scottish Battles*. New Lanark: Geddes & Grosset, 2004.

- Kinross, John. *Discovering Scottish battlefields, Discovering series ; no.174*. Aylesbury: Shire, 1986.
- . *Walking & Exploring the Battlefields of Britain*. Newton Abbott: David & Charles, 1988.
- MacLeod R. H. "The battle of Auldearn, 9 May 1645." In *The Seventeenth century in the Highlands*, edited by L. MacLean, 105-35. Inverness,, 1986.
- Maclean, Fitzroy. *Highlanders: A History of the Highland Clans*. London: Adelphi, 1995.
- Marix Evans, M. *The Military Heritage of Britain & Ireland*. London: Andre Deutsch, 1998.
- Martin, David E. "The Battlefields of Scotland: A report on their preservation for Historic Scotland." Historic Scotland, 1997.
- McNeill, Peter G B, and Hector L MacQueen. *Atlas of Scottish History to 1707*. Edinburgh: The Scottish Medievalists & Department of Geography, University of Edinburgh, 1996.
- Ó Danachair Caoimhín. "The battle of Auldearn, 1645." *Irish Sword*, no. 1:2 (1950): 128-32.
- Reid Stuart. *Auldearn, 1645 : the Marquis of Montrose's Scottish campaign*. Oxford: Osprey, 2003.
- Rogers, H C B. *Battles and Generals of the Civil Wars 1642 - 1651*, 1968.
- Saddler, John. *Scottish Battles: From Mons Graupius to Culloden*. Edinburgh: Canongate, 1996.
- Seymour W. *Battles in Britain and their political background 1066-1746*. London: Book Club Associates, 1979.