

## 7. CONCLUSIONS AND RECOMMENDATIONS

7.0 Battlefields and other fields of conflict are significant places that should be managed to sustain their values as archaeological sites and historic landscapes as well as historic places. While battlefields have been the focus of the present study, other fields of conflict, especially sieges sites, have been recognised as essential complementary site type in the study of warfare. Assimilation of the conclusions of this report to *Conservation Principles: policies and guidance*<sup>1</sup> will be important.

7.1 Written records tell us that particular battles took place, and may provide evidence as to their whereabouts. Even with the best documented battles, however, textual sources usually enable only hypotheses as to exactly where they were fought. Almost without exception, detailed positioning and – for most battles – confirmation of the site itself, comes from archaeology (7.2). When battles are accurately located, it is possible to integrate the written record with evidence for terrain at the time when the battle occurred, and any material traces that it left. Reconstruction of historic terrain is a prerequisite for such synthesis.

7.2 ‘Battle archaeology’ consists primarily of fragments of projectiles, weapons and equipment that were deposited in the topsoil during or immediately after military combat. Spatial relationships between different items, and overall pattering in the scatter itself, have potential for interpretation beyond what can be derived from individual items. The result can be a new, secure and sometimes remarkably detailed understanding of a battle, where formations are located, fluctuating intensities of action are caught, and the interplay with terrain can be explored in ways not previously possible. This understanding may also assist in the locating of the other key element of battle archaeology, the highly elusive mass graves which contain dramatic evidence of the action.

7.3 Battle archaeology is an important historical resource but is unstable and vulnerable. It follows that

- *Conservation and management of battle archaeology are worthwhile, to care for a resource that will assist future historical enquiry and contribute to public understanding*
- *The converse is also true - practices that deplete or disturb battle archaeology threaten the survival and intelligibility of an historical source. By far the most serious of these are **metal detecting that does not observe archaeological best practice and arable cultivation***
- *Uncontrolled metal detecting has already depleted the potential of some battlefields, and in a few cases it may have destroyed it. **Since such losses are irretrievable, data as to the scale of past artefact removal are needed to determine what has been lost, and detailed study of an exemplar site should be undertaken** to establish the degree to which evidence that remains has been subject to distortion, and what can still be achieved with such evidence*
- ***Guidance on best practice for archaeological survey of battlefields, particularly with regard to the use of metal detectors should be prepared and made available***

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<sup>1</sup> Coincidentally, the *Principles* appeared on the same day that this report was finished; for that reason there is work still to do to ensure closer cross-referencing between the two and with the draft Bill

- *The single most constructive action for conservation of battlefield archaeology will be the introduction of a **licensing scheme to control metal detecting** on the Registered areas of battlefields, with approval being given only for survey that is governed by best practice*
- ***The relationship between chemical and mechanical degradation of metal artefacts needs to be ascertained**, with resulting **guidance for landowners, farmers and DEFRA***
- ***Establish the contamination of or obscuring of battle archaeology by artefact loss through re-enactment and other intensive public use of battlefields through a sampling of Hastings battlefield,***

7.4 Battles of different periods have different archaeological signatures. This is partly because the types and quantities of projectiles used in battle varied from one period to another; it is also because different metals decay at different speeds. The strength and character of signatures are affected not just by what was deposited during the action, but also by what has happened to the land since. In result:

- *Measures for management and conservation should take account of such variations*
- *Management of battlefields and their archaeology calls for multiple approaches and mechanisms*
- *There is potential of local listing to facilitate conservation of battlefields which are not considered of national importance but where there is likely to be a significant resource that will cross-fertilise understanding and so justify closer management. It would be timely for such provision to be included in the current Bill*
- *Since many co-varying influences affect what, how and why different fractions of battle archaeology survive and cause biases in their recovery, clearer **understanding of how these influences work is needed** (cf. 7.3, 7.5, 7.8, 7.9)*

7.5 A corollary of 7.4 is that there is no necessary equation between a battle's political, military or archaeological importance. For instance, some historically minor actions may be of high archaeological significance because of the special quality of surviving physical and/or documentary evidence, which may have potential to assist interpretation elsewhere. It also means that the sequencing of next steps is important, as some steps offer scope to illuminate others. So:

- *The importance of battlefields should be measured by a combination of values (archaeological, taphonomic, military etc), not on a single scale*
- *Conservation mechanisms and management should reflect this*
- ***Systematic survey is needed to identify those battlefields that have especially favourable survival***
- *It would be helpful for the recommendations of this report to be implemented in a logical sequence*

7.6 While some battles of the first millennium may be locatable to neighbourhood, it is doubtful if at present any can yet be exactly located by written records, and none has so far been corroborated by archaeology. The finding and investigation of early battlefields will depend on the degree of success in tackling issues outlined in 7.4. Roman and early medieval sieges may be more amenable to investigation than open battles because the physical evidence of defences should enable archaeological investigation of battle archaeology to be accurately targeted

- ***Assessment of the data collected on late Anglo-Saxon fields of conflict in the UCL project (see pp. 84-87) should be conducted in collaboration with the UCL team to enhance the resource assessment from phase 1***

**and to determine whether an exemplar pre-Conquest site can be identified for field investigation**

7.7 Among later medieval battlefields, only Towton has so far produced substantial battle archaeology. However, although Towton has become a point of reference for the study of late medieval battles, it is still not clear how its assemblages have survived or why they should appear as they do. The failure of fieldwork on other late medieval battlefields at Bosworth, Flodden and Shrewsbury to recover comparable battle archaeology raises fundamental questions over the applicability of the Towton site. Urgently-needed next steps thus include

- **Full cataloguing and digital mapping of the artefacts assemblage from Towton to enable the full character of the battle archaeology to be assessed**
- **Taphonomic work and deposit modelling to clarify the reason(s) for Towton's singularity**
- **Investigate Barnet battlefield, because of the expected complementary evidence of projectiles from both small arms and artillery which should enable its accurate location, as a likely paradigm for other late medieval battles**
- **Sample the metal artefact distribution on Hastings battlefield as the earliest apparently securely located battlefield in England**

7.8 Methods appropriate for the recovery, analysis and management of battle artefact scatters under different conditions are neither widely known nor being systematically specified or applied. This increases the risk of loss of the resource itself. Further methodological improvements in investigation are called for, to assist explanation, assessment and management. We thus suggest that English Heritage, in discussion with others as appropriate (for instance, ALGAO), should consider the bringing forward of

- **Guidance on best practice**
- **Guidance on Civil War archaeology**
- **Inclusion of sieges, skirmishes and other unregistered fields of conflict on HERs**
- **Advice on how development-led evaluations can be more effectively contextualised, and thus better inform planning decisions**
- **A prioritised programme to develop and refine investigative methodology as a management tool, to be devised and implemented with special reference to**
  - *the archaeology of sieges (with reference to structures, the impact scars they contain, the battle related artefact scatters around them and their surrounding context, including conflict within urban areas (cf Dussindale))*
  - *battles on enclosed terrain*
  - *large and small skirmishes*

7.9 Factors affecting recovery rates in archaeological metal detector survey are not well understood yet appear to cause major biases in sampling battle archaeology. Because of this

- **Research should be undertaken into influences on recovery rates**

- ***Guidance on metal detecting for archaeological survey should be prepared and made available<sup>2</sup>***
- ***Training events should be organised for the instruction of those conducting and commission such surveys***

7.10 As a foundation for sustainable management, development of the Register would beneficially include

- *Consideration of how **understanding of heritage values, assessment of heritage significance, and management of change to significant places** can be most effectively applied*
- *Production of several paradigmatic worked examples, for battlefields of contrasting type and period*
- *A review of Registration criteria, to ensure that the evidence from and potential for battle archaeology and terrain evidence are taken into account in the selection of sites for the Register, and the definition of the boundaries, to ensure that relevant and important areas of rout, pursuit and attacks on baggage trains and camps can be incorporated, which will in turn assist effective management*
- *The assimilation of siege sites to the Register to ensure that the battle archaeology is effectively managed alongside the physical evidence of the defences themselves*

7.11 Battlefields of the early modern period cannot be studied in isolation from other fields of conflict, including sieges and skirmishes, garrisons and shipwrecks which provide complementary evidence with better potential to answer questions when explored together than alone. Warfare in England is also part of a wider European tradition and so needs to be examined at an international level. Progress will be assisted by:

- *Lifting the field of study to a Europe-wide level, with a European forum for sharing information about methodology and research*
- *A long term home for the existing Fields of Conflict database, which should itself be expanded to embrace the aspects of warfare indicated here and expanded to a European scale*
- *Relevant data from excavated European wrecks around the world should be brought together, to enable better definition the calibres and character of unfired munitions and the character of associated equipment in use by different European armies from the 15<sup>th</sup> to the early 19<sup>th</sup> century, as a reference point for the archaeological study of early modern warfare*

7.12 Siege sites form a large part of the resource. In the early modern period they offer large opportunities. However, no methodology for the systematic investigation of the whole resource has yet been developed. In addition to recommendations in 7.9 (esp. bullet 5) and 7.11 it would thus be helpful to:

- *Conduct a resource assessment for siege sites to complement that produced here for battlefields*
- *Produce handlist of buildings with impact scars and assessment of surroundings*

7.13 Lead bullets are the primary archaeological data set for the understanding of early modern fields of conflict (cf. 7.12). To assist management, there is a need for:

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<sup>2</sup> The several existing sources of guidance on archaeology and metal detecting – from the CLA, CBA, PAS etc – should be revisited to ensure that battlefield issues are properly and consistently gripped.

- *a web based reference collection of bullets and related artefacts, with digital images and descriptive text which can be developed and enhanced on an international scale*
- *a physical reference collection of bullets and related artefacts from fields of conflict and of experimentally fired bullets with related scientific data*
- *publication of a detailed methodology for bullet analysis and archiving*
- *a case study on a battlefield with very good survival and completeness fully to explore the potential of bullet scatters, including particular aspects such as case shot scatters and firing lines*
- *continued experimentation to assist better understanding of evidence of bullet use, especially of impact evidence in all types of context*

7.14 Some themes run across or through the conclusions, and are thus worth restating in their own terms:

- *A small group of battlefields require reassessment: Piper Dene, Lostwithiel, Winwick Pass, Newbury 2.*
- *Exemplar conservation plans are needed for representative sites*
- *Study of lesser actions of the 16<sup>th</sup> century will play into bigger questions and management*
- *Conservation strategy calls for development resting on a wider range of factors and data than hitherto*
- *Several phases of warfare should be the focus of programmes to address questions of methodology and management. They are:*
  - *Battlefields of the Wars of the Roses*
  - *Integration of evidence from arid sites to management schemes for later medieval and transitional battlefields*
  - *The potential and importance of the Berwick hinterland / conflict on the Anglo-Scottish border as a field of study in its own right*
  - *The place of Hastings in relation to battle archaeology and taphonomy*

7.15 To recapitulate, for purposes both of historical enquiry and better management, four themes merit further investigation:

- 1. The origins of firepower, focusing on the 15<sup>th</sup> and 16<sup>th</sup> centuries**
- 2. How to ascertain the archaeological signature of later medieval warfare**
- 3. Rrefining of methodology of investigation of the bullet battlefields of the 17<sup>th</sup> century**
- 4. Fully assimilating siege sites into the investigative and conservation framework**

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