BAJR

Guide 8

Battlefield Archaeology: A guide to the archaeology of conflict

BAJR Practical Guide Series

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1.0 INTRODUCTION

This document contains a series of guidelines which are intended to assist a variety of individuals, from development control officers, land managers, prospective developers, archaeologists, to metal detectorists and other interested parties in assessing the impact of potential work on sites of historic battles or conflicts. Wherever possible, examples have been given in order to illustrate each concept. This document contains information and a series of proposals, which, if acted upon, will increase the potential evidence that can be acquired from a field of conflict.

This document is not written as a manual of how to carry out battlefield archaeology, but simply as a guide to the understanding of the discipline and the procedures that should be put in place if such sites are to be investigated or potentially disturbed. However, a case study from the Towton Battlefield Archaeological Survey Project is included so that an impression can be gained as to how such a project has developed.

Although many sites of conflict, which relate to standing structures and earthworks, for example Britain's forts and castles, have been archaeologically excavated, this cannot be said of the sites of other engagements, such as battles. Consequently, it is only very recently that this aspect of military history has been substantiated using archaeological investigation (see Section 4).

The problem with many sites of conflicts is that actual remains of the event, the obvious physical heritage, rarely survive above ground. If archaeological evidence cannot be seen, it is less likely to be recorded and protected, as 'popular' heritage sites are generally those where the remains of the 'site' can be viewed. This failing is plainly exhibited in English Heritage's 'Conservation Bulletin of the Historic Environment' (Dorn 2003, 7), entitled *The Archaeology of Conflict*. Of the 64 pages devoted to the topic, only one eighth of one page is devoted to battlefields themselves, that is, to the sites where conflict actually took place. The remainder of that document discusses Britain's defensive sites, prisoner of war camps, cold war bunkers and airfields etc. Very few of these topics cover the physical remains of actual conflict. This example illustrates the problems associated with the archaeology of battlefields – they are rarely discussed because of their *apparently* vague and ephemeral nature. However, the contrary is true: battlefields are repositories of a vast amount of significant and virtually untapped historical information (Plate 1).

Plate 1 Experts from the Royal Armouries, Leeds analyse some of the fifteenth century artefacts recovered as part of the Towton Battlefield Archaeological Survey
(© T.L.Sutherland 2004)

2.0 WHAT IS BATTLEFIELD ARCHAEOLOGY?

Battlefield Archaeology is an all-encompassing term that is popularly given to the discipline of the archaeology

of ancient or historical conflict. The term ‘battlefield archaeology’ is slightly misleading, as the subject generally focuses on the archaeology of the event, such as the battle, rather than the field on which it took place. The term ‘the archaeology of battle’ is therefore often used as a more precise description of the discipline. However, the archaeology of battle should, in reality, be incorporated into one of the aims of a ‘battlefield project’ as it is virtually impossible not to encounter the archaeological remains of other periods or events whilst the project is being carried out.

Plate 2 A modern British military button recovered from the medieval battlefield at Azincourt, France as part of the archaeological survey
(© T.L.Sutherland 2004)

Needless to say, in such cases, as with any other archaeological investigation, all of the recovered evidence should be recorded and not simply ignored because it does not comprise part of the evidence of the conflict under examination (Plate 2). Furthermore, it is often not known if a piece of recovered evidence is related to the conflict in question until additional evidence has been gathered and patterns begin to form within the data. What might initially be considered to be an irrelevant piece of information might later turn out to be unique data related to the conflict under investigation. For instance, it is believed that the first projectile shot from a handgun in a conflict was fired during the medieval period. However, it is not clear what form this projectile took - it might have been a stone ball, an arrow, or fragments of metal - and as a result, this undoubtedly important object might not be recognised upon discovery.

The principles applied to battlefield archaeology might also be used to investigate historical periods of civil unrest. For example, during the ‘Peterloo Massacre’ in early nineteenth century Manchester, many civilians were killed. Although this was partly a civil conflict, which took place in an urban environment, rather than a military battle, archaeological evidence in the form of the skeletal trauma would be expected if the skeletal remains of the combatants were discovered. Such evidence could be used to confirm or dispute the historical records of the event. The term, the ‘archaeology of conflict’, rather than ‘battlefield archaeology’, is therefore a more appropriate general expression.

In a modern context the archaeology of conflict manifests itself all too graphically in the mass graves of those victims of oppression discovered in Iraq following the second gulf war in 2002. In this respect, there is, sadly, all too much continuity between these remains and those found in mass graves from prehistory. For example, a number of individuals who had been attacked and killed using stone axes in *c.*5000BC were recovered from a Neolithic mass grave in Talheim, Germany (Wahl and König, 1987). Although the weapons might have changed, the final results of each conflict are uncomfortably similar.

The archaeological recording of remains of historical or ancient conflict is therefore not unlike that of archaeological practice in a modern forensic context; the only difference being the preservation of the evidence and the time frame in which the events took place. An important difference, however, is that if more than 75

years have elapsed since the conflict took place, it is unlikely that anyone will be brought to justice to account for the events that are under investigation (Pollard 1996).

3.0 WHY IS THE ANALYSIS OF SITES OF CONFLICT IMPORTANT?

The most simple and possibly the most important reason for the study of the archaeology of conflict is that only by searching for evidence of such an event can a close approximation be obtained of exactly what took place on a particular site. This is confirmed by Dyer (1985), who suggests that *'battlefields provide a unique opportunity to study the material by-products of human conflict'*. This analysis needs to be carried out systematically and consistently, and in order to do this methodically, the artefactual residue of both factions need to be analysed leaving aside the propaganda and the over-glorification of the narrative. In this respect Gould's statement is helpful when he suggests that *'artefacts are signatures of particular kinds of behaviour and that consequently behaviour can be identified if the signatures' relationships are studied'* (Gould 1983, 105).

How this archaeological evidence is studied and more importantly, how it is interpreted, is of the greatest importance. It can and should be distinguished from the historical literary evidence, which is usually based on personal accounts of the event and is not always necessarily reliable. Few, if any of those at a scene of conflict, can give an accurate account of the entire event, as sites of conflict are by their very nature traumatic and confusing places. They also often cover large areas of ground. The observer might not even have known how large the conflict was, or how many casualties were taken on another part of the field. The larger picture of the conflict therefore depends upon a general overview and this was usually supplied by one of the leaders of one faction. Apart from the bias inherent in such a view, it also relies upon an interpretation of the event, rather than an objective account.

In order to gain a more accurate understanding of the event, such as its scale or the number of dead, an account should ideally be obtained from something or someone who would not provide, or profit from, a distorted version of it - someone who would provide a neutral viewpoint. Although on a practical level this could be done by analysing the residue - the concentrations of artefacts left on the ground after the conflict - on a personal level, this is an almost impossible task, as the notion of conflict is often distorted by an inability to distance oneself from most of its forms.

Possibly the most graphic description of the results of combat, and a personal perspective on how one might prevent future conflicts, was provided by Technical Sergeant Donald Haguall of the 48th Quartermaster Graves Registration Unit in the second World War. Although disturbingly graphic, this descriptive account is given by someone who dealt with the results of conflict on a day-to-day basis. It is therefore a first-hand account of what it is like to observe the contemporary remains of a field of conflict.

'*Sure, there were lots of bodies we never identified. You know what a direct hit by a shell does to a guy. Or a mine, or a solid hit with a grenade, even. Sometimes all we have is a leg or a hunk of arm.*

The ones that stink the worst are the guys who got internal wounds and are dead about three weeks with the blood staying inside and rotting, and when you move the body the blood comes out of the nose and mouth. Then

some of them bloat up in the sun, they bloat up so big that they bust the buttons and then they get blue and the skin peels. They don't all get blue, some of them get black.

But they all stunk. There's only one stink and that's it. You never get used to it, either. As long as you live, you never get used to it. And after a while, the stink gets in your clothes and you can taste it in your mouth.

You know what I think? I think maybe if every civilian in the world could smell this stink, then maybe we wouldn't have any more wars.' (Purnell undated, 2688)

In order to prevent the over-glorification of wars and conflict, it is therefore important, as Sergeant Haguall advises, to get as close as possible to the residue of a conflict. Rather than ignoring the physical remains of conflict, as has been the case for too long, they should be studied in order to find out more about the darker, uncomfortably unpleasant side of human nature. Reading about a 'glorious' battle in a history book is one thing; seeing the evidence of the same battle on the skeletal material in a mass war grave is something quite different.

3.1 THE USE OF CONFLICTS FOR PROPAGANDA AND MISINFORMATION

The relevance of the remains of battle can be an emotive subject. They have often been used in an attempt to persuade people to take part in further conflicts. The St. Crispins Day speech in Shakespeare's Henry V (Act 4, Scene 3; Wilson 1983) for example, is a fictitious version of an address used to rally the troops in Henry's army prior to the Battle of Agincourt (1415). In the speech, it was suggested that after the conflict with the French, the soldiers could proudly show off those scars that they had received during the battle. The moral-boosting effects of this speech are so effective that the speech or derivatives of it are still used today by troop leaders before going into combat. Of course, they omit to mention that many of them would eventually also have to be confronted by the horrors of war as described by Sergeant Donald Haguall above. The selective use of information that is passed on to the soldiers, as propaganda, is typical during times of war.

An element of caution must therefore be connected with the study of historical sources on the subject of conflict, as the likelihood for its misuse and distortion of the facts for nationalist or propaganda purposes is great. The German National Socialist Workers Party in 1930's Germany, for example, used the historical version of the German victory over the Romans at the Varus Battle (AD9) to promote their own ideology of Germanic superiority. They were not concerned with the fact that the location of the site was unknown at the time and that the actual evidence of the events at Varus lay undiscovered. Winston Churchill, on the other hand, used key words from Shakespeare's Henry V to describe the overwhelming odds faced by the RAF during the Battle of Britain. They were, like Henry's soldiers, to become 'The Few', echoing the earlier English struggles against overwhelming odds at Agincourt in 1415.

More recently, in the unstable former Yugoslavia of the late 1990's, the Serbian President, Slobodan Milosevic, was accused of using the medieval defeat of the Serbians at Kosovo Polje (1389, Kosovo Plain; 'Field of the Black Birds'; Roberts 2003) to fuel Serbian ethnic hatred and to promote ethnic cleansing. The Serbs '*endowed [the battle] with myths of honour and heroism that helped them preserve their dignity and sense of nationhood'* (*ibid*). The anniversary of the battle on June 28, Vidovdan (St. Vitus's Day) is the Serbian national holiday. An international court in The Hague is currently trying Milosevic in an attempt to find out if accusations of war crimes inciting ethnic cleansing are true. Material used in this trial will rely not only upon personal testimonies

but also upon archaeological evidence obtained by the forensic analysis of individual or mass graves of victims of the conflict.

However, having access to the archaeological evidence will not always produce the desired political results. A mass grave discovered in 1943 at Katyn Wood in Poland was used as propaganda by both the allies and axis factions for their own purposes. This led to a crisis that could have divided the Russian, American and British allies at a crucial moment of the Second World War.

'In April 1943 German troops in occupied Russia claimed to have found a mass grave in which the bodies of some 4,500 Polish officers, once prisoners of the Russians, were buried. For the Axis propagandists this was naturally a major opportunity to be exploited, a chance to force a rift in the Allied front. And it succeeded well, for the Russians, confronted with the evidence, reacted with anger, and blamed the slaughter on the Germans. But their awkward handling and presentation of their case only succeeded in embarrassing their allies and increasing everyone's suspicions. When the war ended, the whole question of responsibility was conveniently shelved…' (Jerrard Tickell, undated)

This issue caused a huge rift in the Allied command, as the then Nazi German Government hoped it would. It was not until the late twentieth century that information was forthcoming which proved that Soviet troops had been responsible for the slaughter (Haglund 2002).

The examples above illustrate that propaganda, or a distortion of the truth connected with conflict is often used to sway public opinion and it is therefore a potentially dangerous tool. If this information is not challenged by actual physical evidence, ideally collected by an independent or neutral body, then those wishing to exploit it, as highlighted in the courtroom battle over the issue of Holocaust denial (Gibbons 2000), will attempt to perpetuate the myths or inaccuracies associated with these events.

3.2 BATTLEFIELDS AS MEMORIALS

Battlefields, particularly modern examples, are often viewed as types of memorials. The actor and authority on the medieval longbow, Robert Hardy (in Boardman 1996) suggests that

'A battlefield is…a tomb, holding the bodies of most of those who died there…; a perpetual shrine and memorial which should engage our thought and our reverence'

Many ex-servicemen and their relatives visit the grave sites of their lost relatives and comrades on or close to battlefields around the world. The war cemeteries are mostly well-tended plots of land in tranquil settings, which befit their status as national memorials. The now famous lines of Rupert Brooke's poem 'The Soldier', sum up the emotions and memories such sites evoke:

'If I should die, think only this of me;
That there's some corner of a foreign field
That is for ever England' (Brooke in Jones 1998, 44)

If, however, the memorial itself is not on the battlefield, the focus can become detached from the site of the conflict. The connection between the battlefield and the memorial could later be lost, as the memorial itself becomes the symbol of the event. This highlights the need to physically record where the boundaries of conflicts lie, as there are cases, such as the battle of Bosworth Field, Leicestershire, where the exact location of the battlefield is uncertain and therefore its limits are unknown. On the battlefield of Agincourt, France (1415), the site of the graves is seen as the focus of the battlefield (Plate 3), although there is contradictory evidence to suggest that the battlefield might lie elsewhere (Sutherland, forthcoming 1).

Plate 3 The memorial cross on the battlefield at Azincourt, France
(© T.L.Sutherland 2004)

Currently, national bodies, such as the Commonwealth War Graves Commission, tend and upkeep war cemeteries around the world. The largest Commonwealth war cemetery at Tyne Cot in Belgium contains 11,908 graves (Keegan *et al* 1985, 161). These are, however, memorials to the conflicts of the recent past. How long will it take until these battlefield cemeteries, like so many others throughout history, will become derelict and are then ploughed away or developed due to a lack of visitors who would recognise their former importance? Although such notions presently appear inconceivable, there are currently areas of land in north-west Europe which are known to contain human remains from the First World War that are treated with little respect.

At the Battlefield Archaeology conference at the National Army Museum in July 2003, a paper highlighted the work undertaken by forensic pathologists who attempted to identify the remains of soldiers from the First World War found during development work (Lewis 2003). The skeletal remains, some of which were also identifiable, were given formal burial following their analysis. Another paper at the same conference, however, discussed the fact that personal identification plates, or 'dog tags', from soldiers lost on battlefields were being removed by some metal detectorists from skeletons and sold on the open market. This statement provoked a general feeling of revulsion from the audience with one delegate (Robertshaw 2003 *pers. comm.*) suggesting that this act was 'like killing them twice'. This is because it makes identification of bodies, subsequently found on the battlefield by forensic anthropologists, all the more difficult. In fact, the threat of dying anonymously often drove individuals to attempt to have their remains recognised in the event of their death. For example, before identification tags became generally available, some soldiers wrote their names on pieces of paper and attached them to their own uniforms (*ibid*). Although these paper fragments might not survive archaeologically, the recent advances in the analysis of DNA have led to the repatriation of some of these remains, in some cases closing the book on what happened to loved ones after they died in battle.

These examples illustrate the sentiments surrounding the locations on battlefields of the bodies of known or unknown soldiers. The ultimate reflection of these feelings is exhibited by the numerous and often enormous structures around the world that are known individually as 'the tomb of the unknown soldier'. Such memorials

recognise the deaths of those who have no known grave. It is, therefore, of the greatest importance to accurately record the locations of where the combatants from a conflict lie.

The strength of feeling regarding war cemeteries, and the popularity of historic battlefields, particularly invoked by the media and the current trend to destroy sites of conflict, suggest that the general public support the study of battlefields through their educational, financial and emotional involvement. Additionally, there is now a British 'All Party War Graves and Battlefields Heritage Group' based in the House of Lords, which discusses such issues and how they might be rectified.

3.3 BATTLEFIELD TOURISM

Historic battlefields are often the foci of educational trips and recreational visits. Although this potential has not yet been fully appreciated in Britain, visitor centres around the world attract large numbers of tourists (Plate 4).

Plate 4 Chickamauga Battlefield Visitor Centre, Tennessee, USA (© T.L.Sutherland 2004)

The conflict should not be overtly glorified in the museum; on the contrary, the factual evidence of the actual conflict should illustrate the views of both factions as well as the sequence of events. This can be simply expressed in an educational format that is both informative and interesting. The sites of these visitor attractions also rejuvenate an often rural local economy, and provide individuals of all ages with a greater understanding of a country's, or a specific region's formative periods in time.

Visitor numbers of battlefield centres vary greatly across the world, from approximately 30,000 per year at the visitor centre in the village of Azincourt, France, (Delcusse 2002 *pers. comm.*) to over 2,000,000 annually at the American battlefield at Gettysburg, Virginia (Babits 2004 *pers. comm.*). The concept of the battlefield visitor centre taps into the vein of heritage management, which not only exploits historical sites as a means of aiding their understanding and preservation, but also raises the profile of these important events.

Organisations within the tourism and heritage industry also fully exploit the popularity of battlefields by organising battlefield tours to a variety of sites around the world (Guardian, 1999). A specialist publication, 'Battlefields Review' established in May 1999 (van Hasselt, 1999, 1), encouraged the reader to 'explore the sites where history was made'. It states that '*battlefield touring is now one of the world's fastest growing leisure activities*'. However, if a battlefield is not a pleasant place to visit - such as a site that has been built over - then it will be difficult for even keen visitors to imagine the scene of the battle and the site will not attract either visitors or the ever-increasing number of historical re-enactors. The site thus loses its historical and educational value.

3.4 RE-ENACTMENT

Each year major re-enactments, which are often attended by thousands of visitors, are staged at battlefield sites around the world (Plate 5).

Plate 5 A re-enactment, in Britain, of a battle from the American Civil War (© T.L.Sutherland 2004)

An article in 'The Archaeologist', the Institute of Field Archaeologist's own journal, enthusiastically suggests that

'…re-enactment events are a powerful way to bring historic sites to life. They can recreate past lives, characters and events, transporting the visitor back to the court of Henry VIII or the heat of the battle of Hastings. In short they bring us face to face with history…English Heritage currently stages more than 600 events at over 200 sites. The guiding principle is that events should derive inspiration from sites where they are staged.' (Borman 2002, 22).

The above quote highlights the English Heritage criteria of 'conservation, integrity and accessibility' (see below) for inclusion of a site of conflict into their Battlefield Register. The large number of visitors attracted to these sites illustrates the current interest in battlefields despite the fact that often little physical remains can be viewed at the site of the conflict. Caution must always be applied to such events, however, as conflict should never be viewed or understood simply as a form of entertainment. In archaeological terms, a historically accurate re-enactment should never be allowed to take place on a historical site. The danger lies in the fact that after a replica lead shot, for example, has spent several years buried in the soil it is difficult to differentiate it from an original artefact. The quality of manufacture of replica artefacts is now so good that loosing them on a historical site can distort the genuine archaeological information.

3.5 FOCI FOR SOCIAL ACTIVITIES

At a local level, battlefields can provide a social focus, with many sites having special interest groups that research all aspects of the conflict. The huge number of 'man hours' which groups such as the Towton Battlefield Society (http://www.towton.org.uk) put into such research, exhibits an eagerness to understand and identify with these important events. The diligent checking of records, tracing names and family relationships, and the gathering of physical evidence disturbed through farming or development, is often carried out by such groups. Battlefields thus provide, what are often small associated villages, with a focus that inspires community spirit and generates valuable historical research, which can be tapped into by others interested in the specific conflict.

3.6 VIEWS OF THE NATIONAL BODIES

3.6.1 The Battlefields Trust

The Battlefields Trust gives a number of reasons for preserving sites of historic conflict. Parts of this section are taken from the Battlefields Trust website (Why preserve Battlefields?). The Trust promotes the importance of these sites by stating that '*battles have frequently changed the course of history'*. They continue

'*To study what happened on the day, to stand where the commanders stood, to appreciate the ebb and flow of the battle, and alternative possibilities, the landscape of the battlefield must be preserved.*

Battlefields are a vital original source for historians along with documents such as diaries, despatches, accounts and books.

Frequently the documentary sources alone are inadequate - it is only by walking the battlefield itself that historians can piece together what happened, where and why.

But if a battlefield is destroyed by a motorway, a housing development or a gravel pit then historians and future generations to come will not be able to walk that landscape where the course of history was changed and a vital part of our heritage will be lost.' (Battlefield Trust 2002)

This quote highlights the focus on which the Battlefields Trust is based; that of historians dealing with historical information rather than archaeologists dealing with the physical evidence of the events.

In 2002, the Battlefields Trust, a body set up to preserve battlefields as educational and heritage resources, received grants to employ a Battlefield Project Officer for a two year period to create a national battlefield database and internet site (Battlefield Trust 2002; http://demo.battlefieldstrust.com/resource-centre). The funding of such a post highlights the increasing interest within this field of history.

3.6.2 English Heritage

English Heritage, in their booklet accompanying the Register of Historic Battlefields (1995, 2), the list of 43 of the most prominent English sites of conflict, suggest that the importance of battlefields are fourfold:

- *'Battlefields have been the setting for crucial turning points in English history, for example the Norman Conquest which followed the Battle of Hastings 1066, or the turmoil of the Civil Wars in the seventeenth century which changed the roles of monarchy and parliament.*
- *The reputations of great political and military leaders were frequently built on battlefield success.*
- *Tactics and skills of war still relevant to the defence of the country evolved on the medieval battlefield.*
- *Battlefields are the final resting places for thousands of unknown soldiers, nobles and commoners alike, whose lives were sacrificed in the making of the history of England.'*

The English Heritage Register also makes the important statement that

'*Where they survive, battlefields may contain important topographical and archaeological evidence which can increase our understanding of the momentous events of history which took place on their soil. They can also have a use in education and recreation.*' (*ibid*)

The use of the term ‘archaeological evidence’ is an important step forward regarding the protection of battlefields, as this suggests that there might be important artefacts hidden beneath the surface.

English Heritage provides an explanation as to why each site on the Register (English Heritage 1995, 5-6) should be preserved. Their information regarding the battlefield at Towton is used here as an example.

‘Indication of Importance
The presence of over 100,000 men and upwards of 28,000 deaths makes Towton the largest and bloodiest battle ever fought in England. Even if the figures are incorrect it is clear that contemporaries - who were able to make comparisons with other battles of the Wars of the Roses - considered Towton to have been an exceptionally sizeable and sanguinary struggle. The significance invested by contemporaries in the Battle of Towton had much to do with the way in which it was regarded as the grand climactic not only between the Houses of York and Lancaster - each of which now had its rival kings - but between the prosperous south and the rapacious north.

The sheer scale of the battle, and the fact that its outcome saw one dynasty removed from the throne of England and another elevated in its stead, makes Towton of the greatest importance.’ (English Heritage 1995, Battlefield Report: Towton 1461)

The register also highlights four important criteria, which can guide the conservation of battlefields for current and future generations. These criteria, which make battlefields more important from a heritage management point of view include (for full descriptions see Appendix A):

- Authenticity
- Visual amenity
- Integrity
- Accessibility

It must be remembered however, that the battlefield register is a list that has been compiled with a view to the management of the historical site as a visual amenity. Even if a battlefield remains in a similar condition to the day on which it was fought, it will usually simply be an open piece of land on which there is little 'heritage' to actually see. The physical evidence lies below the surface of the ground and at present, this artefactual assemblage, the real battlefield heritage, is unprotected by law. Even as archaeologists scramble to recover and record this valuable information, it is diminishing at a much faster rate through erosion, ploughing and removal by collectors who do not record what they take away. It is therefore a race against time to record the archaeological evidence before it is too late, and as can be shown below, this race has only recently begun.

3.7 BATTLEFIELDS AND THE MEDIA

Evidence for many battlefields is slowly disappearing due to the development of the land for housing or industry, agricultural practices, or the removal of artefacts by metal detecting and as a result these historic landscapes have increasingly received considerable media attention. Although different media dealt with the issue of historic battlefields prior to 1997, for example a newspaper series in 1994 entitled ‘*The Times Guide to*

Battlefields of Britain', (Young 1994, 6) this was rare. The television series 'War Walks' featuring Professor Richard Holmes, which in the early 1990's led the way in terms of a visual historical narrative of European battlefields, proved very popular. The series has since been re-shown several times and has been expanded to include American battlefields.

Since the late nineteen nineties, the subject of battlefields has become more newsworthy and media-friendly, as the discipline of battlefield archaeology has evolved. In 2002 a television series entitled 'Two Men in a Trench' took the subject to new heights of popularity as two archaeologists investigated many of Britain's better known battlefields.

Although this television series was partly the result of the first 'Fields of Conflict' Battlefield Archaeology Conference in Glasgow in 1999, the program was also partly inspired by the success of the 'Blood Red Roses' television documentary (Angel, 2000 *pers. comm.*). This program showed the 1996 excavation of the mass grave at Towton and was first shown in 1999 as the lead program in the 'Secrets of the Dead' series, in which 'the past is investigated through forensic science, and our understanding of history is changed as a result' (Horwell 1999). The success of the 'Blood Red Roses' program, which attracted 3.4 million viewers or 17% of the viewing audience (Archer 1999 *pers. comm.*) and won the Council for British Archaeology, Channel 4 television program award, led to it being regarded as a benchmark of historical documentary making (Elliot and Pye 2002 *pers. comm*.).

4.0 A BRIEF HISTORY OF BATTLEFIELD ARCHAEOLOGY

4.1 INTRODUCTION

In order to assess the importance of battlefield archaeology, one must first understand the way in which archaeology, as a discipline is carried out. This might best be summarised by Hodder (1995, 83), who states that

'*The usual way in which archaeologists discuss developments over long spans of time is to divide up their data into phases and to discuss the reasons for change between phases*.'

Hodder then follows on by using the example of an invasion, a cross-cultural form of conflict (*ibid*) and states that conflicts tend to be a primary reason for change.

It can therefore be argued that there are few historical events which so thoroughly encapsulate the importance of change between such periods, as do invasions, wars, and particularly individual battles. Battlefields can therefore be studied as sites of social and political transition, and the events that took place upon them are the essence of the contemporary determination for change or stability. It was on these sites that lives were laid down for a cause. Throughout history, as today, major changes to the lives of millions of people have been instigated, or indeed prevented, by the onset of armed conflict. These changes, as Hodder implies, are often archaeologically apparent when recording the invasions of foreign forces. One can still see the dramatic physical effects of the Second World War struggle for the German city of Berlin, for example. Many buildings and statues, which were not completely destroyed, were scarred by shrapnel damage and bullet holes (Plate 6 & 7).

Plates 6 & 7 Blast damage and bullet holes (some repaired) on the 19th/early 20th century victory monument in Berlin (© T.L.Sutherland 2004)

Although evidence of this nature has often been repaired in western Berlin, this was not generally the case in the eastern part of the city until the fall of the Berlin Wall. The results of this battle with the invasion of the Soviet troops formed part of the political history of the division of Germany for the next fifty years and these scars can be seen as a stark reminder of that conflict and its consequences. Whether the decision to leave the scars in place was deliberate, or an act of neglect is debatable. However, leaving this evidence in place acts as a stark reminder of the reasons why the Soviet Army initially captured the city. The 'cleansing' of physical evidence of the battle, as in western Berlin, can also be seen as a strong political statement. For example, some of the Russian graffiti on the Reichstag resulting from the 1945 conflict was left in place under Soviet rule. Although some of it is now being preserved, other graffiti, usually containing grossly distasteful phraseology, is being erased. This evidence of destruction and desecration on a national monument resulting from a nation's transgressions are pertinent reminders of an invasion and subsequent conflict, the results of which were presumably never imagined by those who instigated it. In this respect, the destruction layer within the city of Berlin and those of the Boudican revolt in Colchester (AD61) are pertinent in that they represent the backlash of a people who were themselves invaded.

Conflicts can therefore often be regarded as vehicles for the displacement or replacement of national governments, as with the example of East Germany, or of rulers and their dynasties - as evident in the securing of the English throne by William 'The Conqueror' after the battle of Hastings. These historical landmarks are taught at every educational level as important points in history. Winston Churchill suggested that battles are 'the punctuation marks of history' (English Heritage 1995, 1). Andrew Brown, the initial English Heritage Battlefield Inspector, reiterated this quote and added that, '*If "battles are the punctuation marks of history" then battlefields are the fragmentary pages on which those punctuation marks were written in blood*' (*ibid*).

Although Hodder (1995) explains the way in which archaeology is carried out, it is now almost taken for granted that some form of archaeological analysis is practised on important sites and yet this is often still not the case on historic battlefields. This is curious, considering the fact that conflicts have such dramatic and fundamental consequences on society; they are one of the key aspects of history. If archaeology is studied, then surely the archaeology of conflict must rank highly in the list of reasons why it should be undertaken at all. The question should therefore not be why the discipline is studied, but rather why has it not been analysed sooner?

4.2 CASE STUDIES

The history of battlefield archaeology as a discipline is relatively brief. In order to obtain a clearer picture of how it came about, and in which direction it might be heading, some key examples of the history of battlefield archaeology are given below.

4.2.1 Pre-Twentieth Century Archaeological Investigations

Pioneering work, where the distribution of artefacts and burials from a battle were used as evidence to interpret the distribution and nature of the fighting, was conducted by Edward Fitzgerald in the mid 19th century at Naseby (1645). Foard (1995, 19), in his work on the same battle suggests that Naseby may have been the first battlefield where this took place. Unfortunately, the evidence collected by Fitzgerald was not used by the famous historian of the Civil War, Thomas Carlyle, to substantiate his narrative and so the potential of battlefield archaeology was not understood until relatively recently.

It was not until the 1970's that Peter Newman carried out extensive field walking surveys as part of the investigation of the 1644 battlefield of Marston Moor, North Yorkshire (Foard 1995, 19). Using archaeological field walking techniques, he recorded evidence of pistol and musket balls and other artefacts dropped or fired during the battle. However, he did not use metal detectors as part of his early research and it was not until he later worked in association with Paul Roberts that the greater extent of the battlefield was recognised and published in 2003 (Newman and Roberts 2003).

In the 1983 a bushfire on the Little Bighorn National Monument, USA, allowed an archaeological survey led by Richard Fox and Douglas Scott (Scott *et al* 1989) to record evidence of the large battle between the Native Americans and General Custer of the 7th cavalry at the Little Big Horn River, Montana, USA (1875). This survey, one of the first to be published internationally, led to the recognition that evidence from historic battles can be recorded with the aim of gaining an independent interpretation, which can then be compared with the historical documents (http://www.custerbattle.com/sub-pages/archaeo_sub/fieldwork.htm).

In 1987, metal detectorist Major Tony Clunn carried out a metal detector search leading to the discovery of 160 *denarii* (Roman coins) at Kalkriese, an area north of Osnabrück, Germany, which marked the location of numerous Roman *militaria*. Archaeological excavations following this discovery suggest that it was the site of the long lost defeat of three Roman legions under Publius Quinctilius Varus by German tribesmen led by Arminius in AD9 (Wilbers-Rost 2004). It therefore marks one of the earliest large-scale battlefield sites that have been archaeologically recorded from around the world (Plate 8).

Plate 8 A Roman military 'mask' or helmet faceguard from the Varus Battlefield, Germany (© T.L.Sutherland 2004)

In 1995, Foard published evidence that had been collected by metal detectorists who were searching the battlefield at Naseby, Northamptonshire, England (Foard 1995). This was probably the first example of the publication of archaeological evidence gained directly from an assemblage of artefacts, which was used to confirm the site of a major British battle.

In 1996, following the excavation of a mass grave of combatants from the Battle of Towton (Plate 9) by a team of archaeologists and osteologists from the University of Bradford and West Yorkshire Archaeological Services, Tim Sutherland initiated the Towton Battlefield Archaeological Survey Project. This was the first successful multidisciplinary archaeological survey in Britain aimed at recovering evidence for, and the remains of, a specific battle, and possibly the first such project in the world aimed at analysing a medieval conflict.

Plate 9 The skull of Skeleton 9 from the 1996 Towton mass grave (© T.L.Sutherland 2004)

5.0 WHY MIGHT A SITE OF CONFLICT BE DISTURBED

There are numerous reasons why sites of conflict might be disturbed. For example, disturbance might take place during the construction of linear developments such as roads, railways, or pipelines. In 1968, for example, the route of a gas pipeline was cut through West Littleton Down, Tormarton, Southern Gloucestershire and human remains were discovered within the spoil of a ditch or pit. Weapon trauma and fragments of the actual weapons used were found on the bones of two individuals, suggesting that it had been a scene of Bronze Age conflict (Osgood 2000).

In 1992, on the battlefield of Naseby, England (1645), a new road construction cut across the battlefield despite pressure from interested parties, such as the Battlefield Trust, to divert the road. In recent years the A19 motorway extension in Belgium has led to the discovery and recording of extensive archaeological evidence from the First World War.

Several housing or industrial developments have either destroyed or had the potential to destroy the sites of famous British battlefields. In 1997, at Stamford Bridge, England for example, a housing development covered the site of the 1066 battle on Battle Flats (Plate 10). In the same year, however, English Heritage and lobby groups, including The Battlefield Trust, prevented the construction of a housing estate on *'The Gastons'*, the site

Plate 10 Battleflats Way, on the site of the 1066 Battle of Stamford Bridge, Yorkshire, which has been destroyed due to a housing development (© T.L.Sutherland 2004)

of the medieval battle of Tewkesbury (1471).

Other battlefield protection successes include those at Blore Heath (1459) when, in 1992, it faced destruction by the extraction of gravel on the site of the conflict. The Battlefield Trust successfully campaigned against the development and the site was saved.

Remains of conflict are most likely to be disturbed during the agricultural work on a piece of land, such as by deep ploughing or whilst digging drainage ditches. At Towton (1461), for example, deep ploughing that apparently took place by accident over the limestone geology of the battlefield disturbed the otherwise relatively protected contexts of the deeply buried skeletal material in mass graves from the battle (Sutherland forthcoming 2). There are also historical references to the disturbance of human remains discovered during the construction of drainage ditches. During such work at Marston Moor (1644), for example, in 1858 and 1859 '*certain mounds were explored and at a depth of about 1.2 metres hundreds of skeletons were reportedly found'* (Harrington 1992, 52).

5.1 WHAT LEGISLATION IS THERE IN PLACE TO PROTECT HISTORIC BATTLEFIELDS IN THE UNITED KINGDOM?

5.1.1 English Legislation

There is currently no national law in England, Scotland, Wales or Northern Ireland which prohibits development on historic battlefields. There are however, a series of guidance documents which might aid Development Control Officers in deciding whether or not development should be permitted on potential sites of conflict.

A brief history of these implementations is given below. In 1987, a decision to construct the AI-MI link across the battlefield at Naseby (AD1645) was authorized after a public inquiry lasting 143 days. Although the decision was challenged by the High Court, the Court of Appeal and the House of Lords found in the Government's favour. The Naseby inquiry Inspector's report however, forms the first precedent in the consideration of battlefields in the planning sphere, and the phrase, endorsed by the Secretary of State, *'the battlefield is taken to embrace the sum of the events which made up the battle'* is often-used when debating battlefield conservation.

The Planning Policy Guidance note 15 (para. 2.25) later confirmed '*The effect of a development proposal on a battlefield is a material consideration for the purposes of the 1990 Town and Country Planning Act.*'

In 1990, in a response to a series of events at Naseby, the government, in the environment White Paper summary *This Common Inheritance*, (para. 9.13), invited English Heritage to prepare a *'register of historic landscapes* [including battlefields] *which have historic significance but where there are no longer any identifiable remains*' (Brown 1998).

Soon after the 1990 invitation, historic landscapes and battlefields were seen as raising separate designation and conservation issues. A policy statement on historic landscapes was published in 1991, followed soon afterwards by a government consultation paper. This generated such debate and diversity of responses that a series of pilot studies was commissioned to further explore some of the issues.

In parallel with this work, the Countryside Commission developed landscape characterisation methodologies, and the historic component of landscape character was subsequently recognised in their publication *Views from the Past*. The desirability of recognising and conserving the historical elements, which contribute to the landscape character throughout the countryside, was, however, promoted by English Heritage as being preferable to the further designation of particular areas for conservation effort. This approach is reflected in both PPG 15 (para. 2.26), (see Appendix B) and, more fully, in PPG 7 (paras. 2.14-15).

In May 1991, an English Heritage discussion paper by David Morgan Evans gave the English Heritage Register of Historic Battlefields its initial form. In the paper, a basic distinction was drawn between a battle site and a battlefield, only the latter category being susceptible to the drawing of a boundary line. In 1992, Andrew Brown took on the management of the project and in May 1993 the Battlefield Advisory Panel met for the first time. Between 1993 and 1995, the Battlefield Advisory Panel recommended which battlefields should go on to the register.

In the meantime, in 1994, the *Planning Policy Guidance Note 13* advised that when local authorities were developing proposals for new roads, they should '*avoid impacts on historic parks and gardens in the English Heritage Register, and historic landscapes and battlefields.*' (Department of the Environment (DOE) and the Department of Transport (DOT) 1994, Section 5.2).

In 1994, English Heritage published their document *Battlefields – the proposed Register of Historic Battlefields* (English Heritage 1994; see Appendix C), which later developed into the formal register. The *English Heritage Register of Historic Battlefields* (see Appendix A), was endorsed on 15 March 1995 and published on 6th of June of that year.

Although very little in the way of national battlefield legislation has been instigated since this date, several changes have been implemented at a local level. In 1996 the Hampshire County's *Structure Plan* included battlefields as a type of site to be protected under Policy E15. It stated that '*development will not be permitted if it adversely affects the character, integrity and importance of an ancient or designed landscape'* (Hampshire County Council 1996).

Soon after, in 1997 following the discovery of an unprotected mass grave of soldiers who fought on the battlefield at Towton (1461), Selby, the District Council responsible for the site, formulated a local planning law which stated that '*Development proposals likely to harm the historical or archaeological landscape interest of a registered historic battlefield will not be permitted.'* (Selby District Council 1997, Policy ENV17)

Within the same year the Government's intention to make battlefields a material consideration in the planning process, and therefore the English Heritage Battlefield Register itself, was tested when development was proposed on part of the battlefield at Tewkesbury (1471), Gloucestershire. By earlier stating, in the White Paper, that *'…through this register the Government, local planning authorities and others will be alerted to the significance of these sites when considering development plans and applications for planning permission'* attention was drawn to the new document. Despite the statement within the document that '*The register does not imply any statutory controls, nor any additional powers to regulate development or other works beyond the normal planning system,'* those who wished to prevent the housing development were successful. Although too late for the earlier and similar planning enquiry at Naseby, the precedence of the Battlefield Register as an

effective, although advisory planning document, had been set (Brown 1998). In November 2002 the Secretary of State announced a review of heritage protection legislation (Dorn 2003).

In 2003 a persistent threat to battlefield conservation was raised, when a large metal detector rally was held on a newly recognized area of the battlefield at Marston Moor, North Yorkshire. Although English Heritage and other conservation bodies were alerted to the impending destruction, no protection was given to this vulnerable site. This situation subsequently led to a question being raised in the House of Lords (see Appendix E) enquiring what plans the government had to protect battlefields from such indiscriminate destruction. During the debate, the Parliamentary Under-Secretary of State, Department for Culture, Media and Sport, Lord McIntosh of Haringey, commented that

'*At present, it is entirely unsatisfactory that we can do nothing about battlefields, metal detectorists or anybody else, if they operate with the permission of the landowner and avoid scheduled sites. I hope that the noble Lord's parliamentary group will see fit to make appropriate representations to our consultation. It would be very welcome.'* (Hansard 2003)

It is therefore apparent that the government's aim was to make sure that any forthcoming heritage protection legislation set in place would deal with such a problem.

In July 2004 the Government published *Protecting Our Historic Environment: Making the System Work Better*, a consultation document containing suggestions for reforming the heritage protection system (DCMS 2004). Some of the enclosed suggestions, it stated, were to be put into effect as soon as possible, and others would need primary legislation and gradual introduction over a period of years (*ibid*). In 2004, English Heritage also launched a further series of pilot projects to review their scheduling policies of archaeological sites (*ibid*), which could potentially affect battlefields.

'*Because we can learn so much from the pilot projects and from continuing to involve the whole sector in our ongoing work, we have decided to defer the publication of a White Paper until nearer to legislation to fully incorporate the results of the programme. It is likely that we would publish a White Paper next year, with a view to seeking Parliamentary time at the first opportunity – probably in 2006/7.'* (DCMS 2004)

On Wednesday 7 April 2004 English Heritage put out a news release advertising the instigation of fifteen pilot projects examining a wide range of archaeological and historical sites. Although not one of the initial fifteen, a later pilot was originally to be implemented; this would be an assessment of the potential for evidence of the Battle of Northampton (1461) (Stamper 2004 *pers. comm.*). No such work has, as yet, been implemented.

Outside the legal framework, it has been suggested that a landowner might want to put in place a voluntary form of farm management plan by agreeing to avoid potentially damaging agricultural practises on the part of a battlefield in their ownership. One possibility might be to place the land under a government's *Countryside Stewardship Scheme*. However, unless all of a particular battlefield was protected in this manner, it would lead to the piecemeal destruction of the parts of the battlefield not under protection.

5.1.2 Scotland

It is not currently possible to legally schedule a historic battlefield in Scotland, although physical archaeological remains on two sites are currently scheduled. These are the graves and cairns at Culloden (1746) and the breastworks from the battle of Glenshiel (1719). There have been recent proposals however, to construct a non-statutory register of battlefields in a similar manner to that in England. An important point, regarding the collection of artefacts in Scotland is that under common law principle of *bona vacantia*, all ownerless objects are the property of the Crown (DCMS 2002, 11)

5.1.3 Wales

None of the historic battlefields located in Wales are currently under protection, although there are potentially proposals to follow the English model of a non-statutory register.

5.1.4 Northern Ireland

Northern Ireland currently has no battlefield resister or other form of protection for such sites.

6.0 IDENTIFICATION OF SITES OF CONFLICT

The exact locations of most British battlefields have not been archaeologically proven. However, the presumed sites of several battlefields are currently undergoing re-evaluation by various specialist bodies. Possibly the most famous of these is that of the Battle of Bosworth Field, where King Richard III was defeated by of Henry Tudor, who subsequently became King Henry VII. This suggests that there is potential to uncover evidence of conflict across larger areas than those currently defined by documents such as the English Heritage register of Historic Battlefields (English Heritage 1995).

At Towton, for example, a mass grave of battle victims was found in the centre of a village, over a mile from the recognised centre of the battlefield (AD 1461) (Figure 1). Unfortunately, this area is not officially recognised as part of the battlefield (Sutherland 2000a).

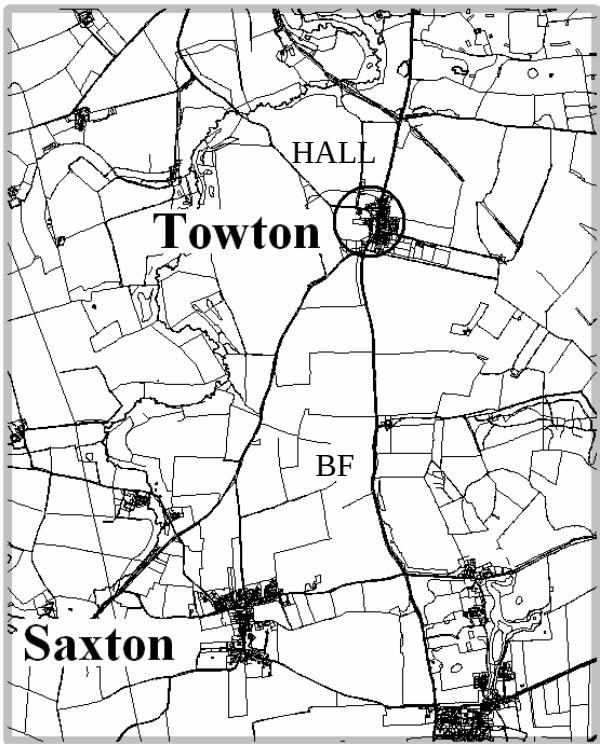

Figure 1 The location of Towton Hall, and the battlefield (BF), which lies between the villages of Towton and Saxton

6.1 EVIDENCE OF CONFLICT

The quantity of available historical and archaeological evidence for a conflict may vary extensively. In Sweden, for example, the skeletons of the Gotland soldiers who fought against the Danes in the battle of Wisby (1361) have been found in mass graves still wearing their medieval armour and mail (Thordeman, 1940) (Battle of Wisby Swedish web site http://www.historiska.se/exhibitions/korsbetningen/index.html).

In Britain, on the other hand, even the approximate location of many battle sites, for example the battle in which Boudicca, leader of the Iceni tribe, fought and was beaten by the Roman army in AD 61, are unknown.

Generally speaking, the earlier the period, the more difficult it is to find evidence associated with a historically documented battle. In specific terms, however, evidence of conflict is available from all periods from the Neolithic (as noted above) to the present day. At Talheim Germany for example, a mass grave provided evidence of a number of a group of individuals who had been attacked by aggressors using Neolithic stone axes (Wahl, und König, 1987).

6.2 HOW LARGE MIGHT A BATTLEFIELD BE?

The word ‘battlefield’ suggests a sizeable and extensive piece of ground. In the Register of Historic Battlefields English Heritage describe the difference between ‘a battle “site” and a battle “field”, only the latter category being susceptible to the drawing of a boundary line’ (Brown 1998, 2).

The terminology ‘site of conflict’ however, eliminates the suggestion that the area has to be extensive. The siege of a castle, for example, is not classed as a typical battlefield, but might still contain similar evidence to that of a medieval battle, with the addition of the structural evidence which would have been fought over. Such a site would be relatively simple to define, as the evidence of the structure could be used as the focal point of the engagement. Battles on open ground, however, need some other criteria upon which to anchor the conflict and this by its very nature is rarely easily available. It is therefore important to be able to identify the types of terrain that were typically favoured in each period. The Roman army, for example, generally chose open ground on which they could use their cavalry tactics (FLAVIUS VEGETIUS RENATUS, http://www.sonshi.com/vegetius3-12.html). This knowledge permitted Arminius, the leader of the Germanic tribes who had been educated in Roman military tactics by the Romans themselves, to ambush and defeat the Roman army led by Varus along a narrow defile in the Teutoburger Forest in AD9 (Wilbers-Rost 2004).

In order to estimate the potential size or extent of a scene of conflict it would, ideally, be necessary to involve an expert in the period in question. Military historians have a great deal of knowledge of particular battles but this should be used in conjunction with battlefield archaeologists who can use the historical information and any available archaeological data to interpret the most likely scenario. This highlights the multidisciplinary nature required to successfully analyse the archaeology of battle.

6.3 DIFFERENT TYPES OF BATTLEFIELD SITES

Conflicts have been fought upon a wide variety of sites. These include examples in towns and cities, such as the medieval battles in Tewkesbury, England (1471) and St. Albans, England (1455) which had minimal impact on the settlements themselves; the Boudicca revolt in Colchester (AD61) which totally destroyed the city; and more recently in cities such as Berlin, Germany (1945) or Baghdad (2002). Other conflicts took place across open ground such as Towton (1461) or expanses of moorland as at Culloden (1746). Some battles such as Stamford Bridge and Fulford (both 1066), or the Battle of the Boyne (1690), near Dublin, Southern Ireland, were fought by or across rivers or watercourses. Other battles such as Maldon, Essex, England (991) have been fought on coastlines, whereas evacuations or invasions such as those at Dunkirk (1940) and Normandy (1944) were fought both on land and at sea. Many naval battles took place in relatively shallow waters leaving archaeological

remains of the event. For example, the remains of Henry VIII's warship, the Mary Rose, was discovered and raised from the Solent estuary outside Portsmouth. This evidence has allowed archaeologists and historians to assess how such a fighting ship was originally built, how it was subsequently modified and how it was equipped for battle. Significantly, the stores of Tudor longbows found within the hull of the ship have allowed scientists to substantiate historical documents which stated that bows with draw weights of over 150lb existed and were intended to be used in battle (Stirland 2000, 124). Although the site of the Mary Rose might not initially be perceived of as a battle site, the fact that it was engaged in conflict when it sank means that it was carrying men and artefacts used in combat. This information can therefore be used to investigate contemporary sites on land. The site of the ship itself is, however, comparable to that of a siege, where the related information is generally confined to within a limited area. The site of the battle, should it ever be investigated, consisting of fired cannon balls, and objects lost overboard from other vessels within the engagement, would cover a much larger area. The bed of the Solent estuary is therefore the repository for the evidence of the battle, of which the Mary Rose is just a part.

In a similar manner, wrecks of the HMS Hood and the German battleship, the *Bismarck*, represented a fraction of the remains of the Second World War battle of the Atlantic. Just as it was impossible to perceive, during the Second World War that the images of these sunken ships would one day be available for analysis, as is now the case, so it was once inconceivable that evidence of ancient battles would be analysed in great detail. This highlights the variable and often unpredictable nature of analysing sites of conflict. It is therefore possible to find evidence for conflict even in unexpected locations.

As the sites of many famous battles cannot be identified with any great accuracy, then archaeological evidence for these conflicts could be found in the future, even by chance. An example is that of Mons Grapius (AD84), fought between the Roman general Agricola and the British chieftain Calgacus, which has not been more accurately located, than being somewhere in Scotland.

A successful example of such a discovery has been cited above, when Major Tony Clunn's metal detector search led to the discovery of, what has been interpreted as evidence of the Varus (AD9) battlefield north of Osnabrück, Germany. However, evidence of Roman *militaria* is also found on British sites that are not, as yet, perceived of as being Roman battlefields. For example, the discovery of what appear to be fragments of Roman military armour and weapons on an archaeological site near York could mark the location of a military engagement (Sutherland forthcoming 2). Only a detailed analysis of the evidence and the context from which it derived, will allow an accurate interpretation of such evidence.

7.0 METHODS OF EVALUATION

Those who study battlefield archaeology need to use a multidisciplinary array of techniques in order to locate physical evidence of conflict. Each site will have its own idiosyncratic type of evidence depending upon what period is being represented. However, it is important to reiterate that the relevant surveys and any resulting interpretation should always be undertaken by experts in the use of a particular type of analysis and thus interdisciplinary team work is often the best way to gain the greatest amount of information on these sites.

7.1 EARTHWORK SURVEYS

Earthworks on battlefields will vary greatly depending upon which period is under investigation. Medieval open battlefields, for example, generally exhibit few, if any earthworks that were constructed for use during the battle, whereas those from the First World War often exhibit extensive evidence of trenches, underground tunnel systems, and mines excavated under enemy trenches. Standing earthworks should therefore be analysed in order to hopefully typologically identify, date them or even eliminate them from the investigation. First World War trenches, for example, were constructed for troop movement along the lines and generally exhibit a zigzag type plan. They were constructed in this manner to prevent shell blasts from travelling down the trench. Second World War 'fox holes' however, were usually constructed by, and for an individual soldier in which to shelter during an advance or in defence of an area. These usually consisted of simple, small and shallow, irregular-shaped pits. Types of these earthworks can also be found on contemporary or now redundant Ministry of Defence training sites across Britain. Their counterparts, used during combat, can still be found across battlefields in various parts of the world.

7.2 GEOPHYSICAL SURVEY

There are several types of geophysical survey instruments used by battlefield archaeologists. Most of these instruments work by identifying the difference between an anomaly under investigation (a metal artefact, a ditch or a wall) and the background material in which the anomaly is located. A general guide to Geophysical Techniques in Archaeological Evaluations can be found in IFA Paper No. 6 (Gaffney *et al* 2002)

7.2.1 Metal Detector Survey

The most commonly used instrument within battlefield archaeology is the electronic conductivity meter more commonly known as a Metal Detector. It uses an induced magnetic field to exhibit the location of fragments of metal within the locality of the search head. It does not, however, generally incorporate a logging device to record the instrument readings. The standard device generally works to a maximum depth of around 20-30cm for an object the size of an average coin, although this varies greatly depending upon the type and quality of instrument used.

The metal detector or electromagnetic conductivity meter, although in common use by the general public, is a sophisticated prospection or geophysical survey instrument. When handled by an experienced practitioner it can be used to locate minute fragments of metal and potentially identify the metal type without the need for excavating the artefact. However, in inexperienced hands misleading information can be recorded or missed entirely, leading to incorrect interpretations of a site's archaeological potential. It is therefore essential that an experienced practitioner should always carry out the metal detection investigation rather than, for example, an archaeologist who is not skilled in the use of a metal detector. Ideally, the practitioner should incorporate all of the skills necessary to record a site of conflict. Teams of metal detectorists and archaeologists working together are possibly the best way of analysing a site of conflict, although detectors of a similar type cannot be used in close proximity as they will interfere with each other. The use of groups of detectors, however, requires a commitment in terms of the necessary resources and so it should not be undertaken lightly. At the Little Bighorn battlefield, USA (1876) Scott *et al* (1989, 25) state that

'The use of metal detectors operated by knowledgeable people has overwhelmingly proved its value, in locating not only metal objects but also non-metallic remains. Scores of non-metallic items such as bone, leather, rubber articles, and shell buttons, were found when metal detectors sensed nearby metal objects. Our recovery methods, which meticulously uncovered artefacts without disturbance, were an integral part of the field procedures….We have repeatedly emphasized, though, that when taken out of context the scientific value of artefacts is seriously impaired.'

It is therefore essential that all of the archaeological information associated with each artefact is recorded at all times by those carrying out the investigation. The irresponsible use of a metal detector on sites of former conflict should therefore be regarded as totally unacceptable. An American sign on a site of conflict goes as far as to associate metal detectors with other tools of potential destruction (Plate 11).

Plate 11 Signage close to the Chickamauga Battlefield Visitor Centre, Tennessee, USA (© T.L.Sutherland 2004)

7.2.2 Fluxgate Gradiometer or Magnetometer

These instruments record differences in the distortion of the earth's magnetic field across a given area. They can be used as a crude ferrous metal detector as they record 'ferrous spikes' when a piece of ferrous metal is in close proximity to the instrument. However, such surveys have been carried out and found to be only relatively useful. At Towton, for example, fluxgate gradiometer surveys carried out over an area of known medieval arrowheads (Plate 12) failed to identify the locations of most of these artefacts due to the natural replacement over time of their ferrous component by mineralised products (Sutherland forthcoming).

The fluxgate gradiometer has been successfully used to record the locations of mass graves on the medieval battlefield at Towton, but the success of similar surveys would depend upon a differential grave fill compared to that of the soil into which it was excavated.

The fluxgate gradiometer is best used for locating sub-surface archaeological features, such as ditches or fired features, such as hearths or kilns. The instrument generally incorporates a logging device to record the instrument readings. It is generally effective to a depth of around 50cm depending upon the strength of the magnetic disturbance. For example, a wire fence or a large ferrous anomaly

Plate 12 Medieval arrowheads discovered during the Towton Battlefield Archaeological Survey (© Royal Armouries 2004)

such as a car will affect the instrument from several metres away, disguising fainter readings that lie within a closer distance.

7.2.3 Electrical Earth Resistance Meter

The electrical earth resistance meter records the difference in the electrical conductivity or moisture content of the soil. Damp ditch fills or dry walls exhibit themselves against a background that is different to that of the archaeological feature. The instrument generally incorporates a logging device to record its readings. It is generally very effective at depths of less than 50cm. It can be used to located graves only when the grave fill exhibits a different moisture content to that of its surroundings. As a grave usually consists of a hole into which the material which was excavated from it is re-deposited within a short space of time, it has been shown that such graves are rarely identifiable on earth resistance surveys. Only when burial is relatively recent is such a grave usually apparent (Lynam 1970)

7.2.4 Ground Penetrating Radar (GPR)

As the name suggests, ground penetrating radar sends out a signal from a transmitter (usually into the ground) and records a reflected signal via a receiver. Although due to its complicated nature the received signal is very difficult to interpret, the instrument can be effective up to several metres in depth. However, as with other prospection instruments, the anomaly under investigation would have to be sufficiently distinct from the surrounding material for this to be observable.

7.3 FIELD WALKING

Field walking surveys are carried out by walking across the surface of a piece of ground looking for any man-made artefacts. The locations of these artefacts are recorded either precisely, using a total station, or more commonly within a gridded square in which they were found. The artefacts can then be either collected, or analysed in situ and then left on the surface so that their context remains undisturbed.

Field walking surveys can cover large areas of land with minimal equipment or technical expertise, although the setting out of a very accurate grid prior to the survey is very important. The more people that carry out the survey the faster the ground will be covered, although the accuracy of the results will then depend upon the productivity and capabilities of each person.

Such surveys have been carried out across a number of battlefields with varying degrees of success. As stated above, Peter Newman conducted an excellent survey in the 1970's on the battlefield at Marston Moor, Yorkshire (1644).

7.4 DESKTOP ASSESSMENTS

A desk-based or desk-top assessment is simply a search through as much of the available literature and documents that relate to the site or period in question as possible. These are usually maps, aerial photographs, historical documents such as primary sources and histories or secondary sources. Such information is generally available in libraries and archives or record offices around the world.

An important point to note regarding battlefield studies is that the outcome of many battles had international repercussions. Many foreign archives therefore hold documents that are pertinent to conflicts outside their own borders. Following the battle of Towton (1461) for example, letters were passed around Europe informing interested parties that England had a new Yorkist monarch (Hinds 1912).

Another source of information involves the old Sites and Monuments Records (SMRs) or as they are now termed the Historical Environment Records (HERs). These are the records of particular sites, artefacts or areas of historical or archaeological interest, which are normally held on a regional basis within a local records office.

8.0 ARTEFACT IDENTIFICATION AND BATTLEFIELD SIGNATURE

8.1 INTRODUCTION

The identification of artefacts within the topsoil is one of the key aspects of battlefield archaeology. However, the types of soil across a given landscape can vary greatly and therefore accessibility to these artefacts can involve differing amounts of labour. For example, ploughed soil is generally looser and therefore easier to excavate than long-standing, uncultivated meadow soil. Artefacts within the plough soil are therefore more likely to be degraded due to the continued action of the plough, although they could also be closer to the surface if the soil is constantly turned over. Artefacts within different types of soil may also be located in distinct horizons or at differing depths. Worm sorting of meadow soil allows the artefacts to effectively ‘sink’ lower down the soil profile. Excavating metal detector ‘hits’ can be very difficult on meadows and permanent pasture due to the soil’s less ploughed and therefore more compacted nature. This rule does not always apply, however, as sometimes burrowing animals, such as rabbits and moles bring small artefacts to the surface as part of their up-cast or molehills. These small mounds can therefore be examined and may provide a sample of what might lie beneath the surface.

8.1.1 The Impact of Local Geology on Artefact Preservation

Differing geological strata below the topsoil can affect the condition of an artefact and human remains. Acid soil, as the examples from the burial ground at Sutton Hoo, Suffolk, indicate, can erode bone until it is only evident by a stain in the ground (Carver 1992). Although more difficult to record, such evidence is still important and should only be excavated and recorded by an expert experienced in this type of archaeological work.

Archaeological prospectors must therefore be aware of the type of geology and acidity of the soils in the area in which a search will take place.

8.1.2 Excavation of Artefacts

It is not always essential to excavate artefacts found during prospection surveys, as concentrations of fragments of metal may alert the prospector to an area of interest. In this respect it is important to differentiate between ferrous and non-ferrous metal artefacts, as there are generally more ferrous metal artefacts on most archaeological sites from the historical era than there are non-ferrous metal artefacts. This information can be exploited on sites such as post medieval battlefields, where lead shot can easily be distinguished from ferrous debris without even excavating the artefact, simply by using the analysis of the by modern metal detector signal.

However, in order to accurately record and date artefacts it would be necessary for each one to be examined. It is during this phase of an evaluation that extreme caution must be applied. Any artefact might be associated with other important archaeological information, which will be left behind, and therefore become disassociated, if artefacts are removed without due care and archaeological experience. At the Little Big Horn Battlefield, for example, fragments of human or animal remains were often found in close proximity to ballistic evidence, suggesting that a bullet struck a bone and shattered it (Scott *et al* 1989, 30). The two pieces of information, the fired bullet and its target, were therefore inextricably linked and this association could easily have been lost.

8.2 THE SIGNATURE OF A SITE OF CONFLICT

Each battlefield will have its own individual, and possibly unique artefactual 'signature', which will be represented by those items that were lost or abandoned before, during or after the conflict. Combatants usually fight with the most efficient and most up-to-date weapons available to them or, alternatively, that they can afford. Formal armies, however, often fought with weapons that were issued to them. This might not be of the most up-to-date type, as the army might only have been re-issued with weapons at specific intervals. For example, at the battle of the Little Big Horn (1876), some of the Native Americans had access to the most up-to-date Henry repeater rifles, whereas the US Cavalry was issued with the slower reloading Springfield Carbines (Scott *et al* 1989). Other Native Americans apparently also used bows and arrows and clubs to attack the soldiers. The signature of this battle is therefore vastly different to other contemporary battles form different parts of the world.

The type of artefacts found should, however, fall into very generalised categories relating to the technology of the period in which the conflict was fought. Several examples are cited which illustrate this concept (Table 1).

Table 1 Summary of weapons technology by period

PERIOD	**TECHNOLOGY**	**EXAMPLES**
Early-prehistoric	**Stone and non-ferrous metal technology**	Stone arrowheads e.g. Crickley Hill, Gloucester (Carman and Harding 1999) Stone axes - Neolithic mass graves axe marks e.g. Talheim, Germany (Wahl and König 1987) or (Bahn, 1996, 48, illustration)
	Early metal technology	Bronze Age weapons (Tormarton, Southern Gloucester; Osgood 2000)
Roman	**Ferrous metal technology**	Fragments or complete pieces of metal alloy or ferrous artefacts - Roman *militaria* e.g. fragments of Roman armour and possible weapons Varus Battlefield (Wilbers-Rost 2004) and (Sutherland forthcoming) Fragments of native British equipment and weapons (Sutherland forthcoming) Collection of ballista (large crossbow) bolts apparently aimed at a large round house in the Iron Age Hillfort at Hod Hill, Dorset, by the besieging Roman army (Frere 1974, 89) Roman ballista bolt in the spine of a skeleton buried in Maiden Castle, Dorset (Bahn 1996, 75).
Medieval	**Ferrous metal technology**	Fragments of clothing fasteners, badges, buckles, etc. and arrowheads (Sutherland 2000a)

Post medieval	**Early firearms technology**	Lead round shot from muskets and pistols and cannon balls (Foard 1995)
Modern	**Modern firearms technology**	Cylindrical or riffled shot eg. Minnie balls; bombs and shells or fragments of each (Scott 2004)

These categories might overlap in places where differing technologies were used by each faction, as at the Little Big Horn Battlefield, USA (archery, clubs, rifles and pistols), Paraguay (lead round shot and cylindrical shot (Pollard 2004).

Sites that have been fought upon on a several occasions might also exhibit evidence of differing types of weaponry. For example, on the medieval battlefield of Agincourt, France there is extensive evidence conflicts from different historical periods (Sutherland forthcoming) (Plates 13 and 14).

Plates 13 & 14 Musket ball and Second World War bullet recorded on the Agincourt battlefield (© T.L.Sutherland 2004)

8.3 A LACK OF ARTEFACTS: AN IMPORTANT NOTE

If no artefacts from a conflict are found in a given area it does not mean that the conflict did not take place on that site. A multitude of factors dictate whether or not a site incorporates such evidence, many of which are not predictable. For example, most or all of the artefacts might already have been removed from the area by metal detectorists or farmers, in which case it will be increasingly difficult to find any remaining evidence. However, the person or persons who removed such artefacts might be willing to discuss such evidence, if they could be contacted, and could point to where it was found. During the initial stages of the Towton Battlefield Archaeology Survey, Simon Richardson, a metal detectorist who had been working on the site for many years, provided information, which helped to map the evidence recovered from his previous searches

Plate 15 A small number of the recorded artefacts from the battlefield at Towton, Yorkshire (© T.L.Sutherland 2004)

(Plate 15). This evidence has been used to construct hypotheses as to where other artefacts might be located, eventually leading to other and increasingly successful prospection surveys. Richardson now records all his finds using a satellite, GPS (Global Positioning System), therefore helping to construct an ever-increasing accurate location map of the battlefield at Towton (Plate 16).

Plate 16 Recording the location of an artefact found during a metal detecting survey, with a GPS, as part of the Towton Battlefield Archaeological Survey (© T.L.Sutherland 2004)

On some American battlefields, anecdotal information has been used to estimate the former artefact density of sites that are now virtually artefact free and therefore no longer easily located (Babits 2004). Although this strategy appears to rely upon inaccurate second hand information it is highly probable, as with the Towton Survey, that this method would aid the discovery of further battle-related evidence. However, not all metal detectorists are as forthcoming, as some guard the whereabouts of a 'productive site' quite jealously.

8.3 ARTEFACT DENSITY

It is likely that it will be the density of a particular artefact that will alert the prospector to the possibility that a scene of conflict has been discovered. However, it must always be remembered that one arrowhead or piece of lead shot does not make a battlefield; one bone does not make a skeleton or one skeleton a former army. Expanding the search in an area of an individual find, however, might lead to the discovery of other similar artefacts and thus direct one to the identification of a scene of conflict.

On later battlefields, such as First or Second World War sites, live ammunition might also be encountered. There are several groups, which have been set up specifically to excavate and record the archaeological evidence of the First World War, who have experience in such matters (e.g. the 'Durand Group' or 'No Man's Land').

8.4 MAPPING ARTEFACT LOCATIONS

Ideally, every artefact found on or within the ground can lead to the recognition of important archaeological information. The three-dimensional location of every artefact is therefore of the utmost importance. Forensic ballistic evidence from the Little Big Horn battlefield, for example, has allowed the movements of individual weapons to be tracked across the battlefield (Scott *et al* 1989). Although similar evidence is not yet available for lead round shot from a musket or pistol, the advancement of forensic sciences in the past few years suggests that one day in the future this might be possible. It is already possible to provenance the location from which the lead was mined and therefore potentially to divide the bulk of the shot as used by each faction, if the lead came from very different sources. The exact location of each musket ball could therefore extend the knowledge of a

specific part of a large engagement. Most metal detectorists do not generally undertake this practice. At a metal detector rally of the battlefield at Marston Moor (1644), North Yorkshire, in 2003 over 300 metal detectorists recovered hundreds of musket and pistol balls form a newly recognised area of the conflict. None of these were accurately recorded and the loss of archaeological information from this site was incalculable (Keys 2003).

9.0 HUMAN REMAINS FROM SITES OF CONFLICT

Occasionally, human remains are found on or in close proximity to battlefields and if these are studied osteologically, they may provide invaluable data on the nature of the conflict.

9.1 THE IMPORTANCE OF HUMAN REMAINS FROM SITES OF CONFLICT

Human remains are a vital source of information on past conflicts, as they can provide evidence, which might support or dismiss historical documents or propaganda. Human remains can provide evidence for the ferocity of battles, the types of weapons used, and the way prisoners were treated, supply information on either disrespect by mutilation, or by careful treatment, dignity and respect. They can also offer information on the sex and age of the combatants, as well as their health status. For example, the soldiers may have been of a specific height, or may have been chosen at random from the general populace. The skeletal remains can also give an insight into whether individuals had fought in earlier battles and were experienced soldiers, or whether they were young and inexperienced. Analysis of human bones may also provide particulars on the type of treatment available in a given period for injuries following a conflict.

The discovery of human remains from conflicts can also provide a glimpse into post-battle practices. Were the dead combatants buried where they fell, taken to a cemetery and buried individually, gathered together and placed in a mass grave on or off the battlefield or left unburied and exposed on the battlefield? Were the combatants stripped before burial, interred in an apparently religious manner or simply dumped into pits? Or were they taken back to their ancestral burial grounds to be interred in specially constructed elaborate tombs as befitted their status? Following the Battle of Agincourt, for example, the body of the recently killed Duke of York was boiled down and his bones returned to England for burial (Curry 2000, 165). Evidence of such treatment to the skeleton might, to the untrained eye, resemble practises similar to those of cannibalism.

Human remains from battle sites are thus extremely important in order to understand the archaeology of conflict and should not only be treated with the respect that human remains demand, but also as a valuable archaeological resource.

9.2 POSSIBLE CIRCUMSTANCES OF SKELETAL DISCOVERY

Human remains have been reported from battlefield sites from a variety of contexts. These include the following:

9.2.1 Mass Graves

Mass graves are the most well-know form of burial of dead combatants. This type of burial has been applied to individuals who died as a result of conflicts from a range of periods, from the Neolithic to the present day. Mass burial is an effective manner of disposing of a number of individuals who have died at the same time.

Individuals may be laid out in mass graves in an orderly manner side by side or head to toe, or may be completely intermixed. It can often be observed that human nature has taken over from religious practices and individuals were interred using the most space-saving method possible. This is especially so if a large number of dead require burial. Similarly, pre-existing negative features, such as ditches or pits might be used in order to speed up the disposal of the dead.

9.2.2 Exposure on the Battlefield

A common type of disposal of human remains in some periods following a battle was simply to leave the dead on the battlefield. This might have been done deliberately, with the aim of using the dead as an example of one's power and brutality, or alternatively to be able to leave the area quickly and avoid further conflict. Following the Battle of Agincourt, the English army, fearing they were not yet out of danger from the still larger French forces, left most of the dead on the battlefield (Curry 2000).

Exposure might also have been practised for religious or cultural reasons, such as in the Viking period, when ravens were supposed to pick at the dead warriors, thus it was believed that they would be able to enter Valhalla, the eternal hall of the slain (Simek 1996).

9.2.3 Human Remains in Pits

It is also possible, as in an example from the battlefield of Towton (1461) that individuals had been interred in pits in the centre of the battlefield, but had later been disinterred, in order to be reburied in a Christian manner in consecrated ground. There are historical records from Towton, which suggest that such burial pits were opened in 1484, 23 years after the battle, on the orders of King Richard III. These have been discovered and archaeologically evaluated as part of the Towton Battlefield Archaeological Survey. The pits contain human remains, which consist almost entirely of disarticulated teeth, small bones or bone fragments, with the exception of a few articulated bone elements. The discovery of semi-articulated bone elements suggests that the bodies were still at least partly fleshed upon excavation in 1484. The archaeological and osteological interpretation of these bones infers that they were missed or were disregarded by the medieval excavators who emptied the graves.

9.2.4 Other Burial Contexts

Other battle-related contexts containing human remains include those of ships, such as the seventeenth century Swedish warship, the *Kronan*, which sank with 500 seamen and 350 soldiers on board. Excavations of the ship started in 1981 and the human remains discovered have shown that a vicious struggle took place to get off the ship before it sank (During 1997).

Battle victims may also be interred within buildings, possibly under collapsed walls, such as at the 12th century crusader garrison of Vadum Iacob Castle, Galilee, Israel, where individuals bearing sword and arrow injuries were found under a collapsed wall within the castle (Mitchell *et al* 2004).

Individuals may alternatively be buried in individual graves near the battlefield (several individuals were found in such graves at Towton) or within a churchyard cemetery, such as at the medieval cemeteries of Fishergate House, York (Holst 2005), and Hull Magistrate's Court, Hull (Holst *et al* forthcoming), where several of the male skeletons bear fatal weapon injuries.

Charnel houses or burial chambers may also contain battle victims. In these cases, it is probable that the bones are disarticulated, and it is therefore unlikely that individual skeletons can be reconstructed. The caves at Baumes-Chaudes and L'Homme Mort in France were used during the Neolithic period for charnel and contained individual bones exhibiting injuries (Wilson 1901).

9.3 LEGISLATION REGARDING HUMAN REMAINS

A principal assumption is that all human remains should be treated with dignity and respect at all times. They should also not be disturbed without good reason. However, when they have been disturbed, it has been shown that they are a vital source of scientific information (Church Archaeology and Human Remains Working Group 2004). The basic legislative framework regarding human remains is listed in Appendix F.

9.3.1 English Law

It is against the law in England to disturb human remains without lawful authority (English Heritage and the Church of England 2005). The Home Office can authorise the disturbance of human remains (Church Archaeology and Human Remains Working Group 2004, 6), although both Planning Conditions and Ancient Monument consent (Ancient Monuments and Archaeological Areas Act 1979) may also affect authorization to disturb human remains. Ecclesiastical law applies to those cemeteries subject to the legal effects of consecration, although this is not necessarily so if the burial ground is no longer in use (see the Disused Burial Grounds Act 1884 and its Amendment Act of 1981, English Heritage and the Church of England 2005).

9.3.2 Scottish Law

In Scotland, it is a crime to disturb, or attempt to disturb human remains without lawful authority (Historic Scotland 2003, 21). In Scottish law, there is no distinction between burial in formal cemeteries and interment in other places (*ibid*, 22). Any human remains discovered should be reported immediately to the local police or Procurator Fiscal's office and further disturbance must cease until permission to continue has been granted by the legal authorities (*ibid*, 11). If human remains are known to be at a site, which is about to be disturbed, the police should be informed prior to commencement of work at the site.

9.3.3 Welsh Law

There is currently no law, which applies specifically to human remains discovered in Wales, although generally speaking laws that apply in England should be seen as being pertinent to Wales. It is therefore important to seek advice in specific cases.

9.4 EXCAVATION OF HUMAN REMAINS FROM SITES OF CONFLICT

Any human remains should be treated according to the guidelines listed below. The Institute of Field Archaeologists Technical Paper No. 13 in particular, lists how human remains should be excavated and treated during post-excavation processing and analysis.

During the excavation of human remains from sites of conflict, a metal detector scan should always be undertaken at regular intervals, so that fragments of metal associated with the bones can be identified *in situ*. These might represent complete artefacts or fragments of artefacts that have broken off during the conflict. It is also important to radiograph all, especially ferrous, artefacts found in association with the skeletal remains as soon as possible following their discovery before they deteriorate further. Instant artefact interpretation should be avoided, especially if such an interpretation has an influence upon how the artefact should be treated. Some medieval arrowheads look remarkably similar to square section carpentry nails. The false assumption that the excavation has been contaminated by the latter might allow important evidence to go un-investigated.

Human remains from sites of conflict can present particular problems, such as mixing of individuals in mass graves, danger of loss of those bone elements that were severed during the conflict and essential reconstruction of fragmented skulls. Consequently, it is paramount to have trained osteologists on site, or to work with archaeologists who have been sufficiently trained in osteology to be able to separate the bones of intermixed individuals. The order in which the skeletal material in a mass grave is lifted and bagged is also important. For example, the small bones of the hands and feet should always be lifted prior to the rest of the limbs to which they belong as it is easy to forget which hand or foot belonged to which individual when several are in close proximity to each other.

At the mass grave from the Battle of Towton (1461), it was found that excavation of separate individuals would have been extremely difficult for non-osteologists. Excavation of mass graves without osteologists can lead to the loss of the integrity of individual skeletons, thus causing enormous loss of information, including age, sex, general health, previous injuries and so on. Such was the case when the mass graves from the Battle of Visby, Gotland, Sweden (1361) were excavated in the early decades of the twentieth century (Thordeman 1940). The burial area at Visby was divided into grids and all the bones from one grid square were excavated and recorded by the square in which they lay, leading to the fragmentation or complete loss of information on individual skeletons.

It is vital to excavate mass graves from the edges of the graves, or from planks or cradles above the grave, with the aim of causing the least amount of disturbance as possible to the skeletal remains. Each skeleton should be exposed individually, in stratigraphical order. If feasible, as many skeletons as possible should be exposed at once so long as the integrity of the information remains intact. The skeletons should be photographed vertically using photograph markers, such as a scale of set length. Ideally, four markers, photographed and surveyed in place using a Total Station, or electronic theodolite should be used. The photograph can then be downloaded onto a computer, rectified using the four recorded points and the outline of the skeleton drawn using a Computer Aided Design (CAD) program. These can then be superimposed upon each other to view the deposit, as it would have been before excavation (Figure 2).

However, in cases of mass graves, it is vital to survey in as many points as possible on the skeleton so that it's three dimensional aspect can be recorded. At the mass grave at Towton, sixteen set points of the skeleton were surveyed using an EDM (Sutherland 2000b). These included a point on top of the centre of the sphere of the skull, one on each shoulder, elbow, wrist, hip joints, knees and ankles and three on the length of the spine. This enabled the excavators to reconstruct the skeletons in 3D form on the computer, providing a model of the mass grave, which could be viewed from all angles. This model aided in establishing the sequence and manner of burial.

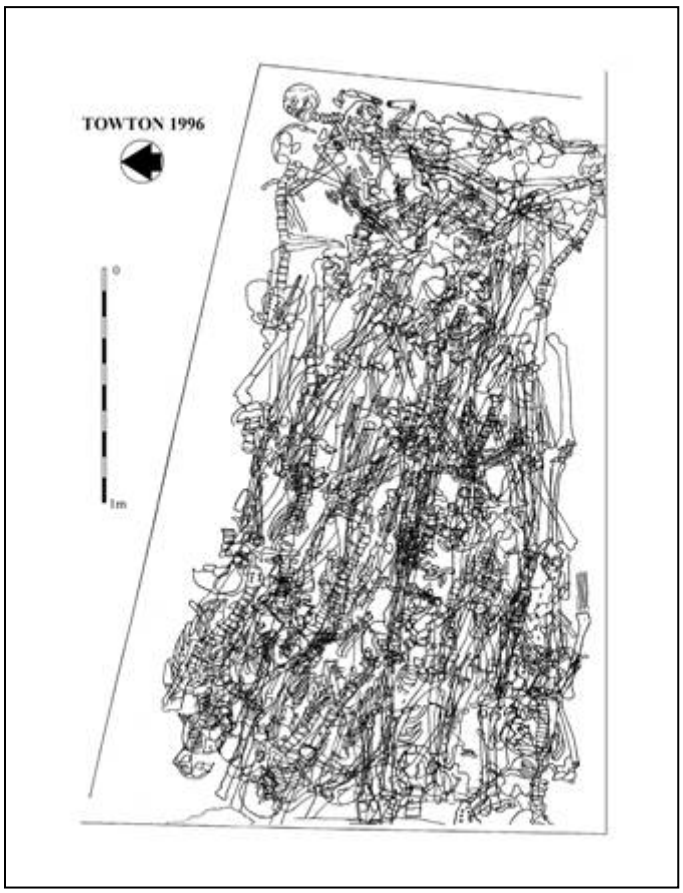

Figure 2 Illustration of the contents of the 1996 Towton mass grave as it would have appeared prior to excavation (© T.L.Sutherland 2004)

Each individual skeleton should be lifted separately and the bones should be placed into clearly labelled finds bags, stating the individual skeleton number. It is paramount that all bones and fragments of ossified cartilage belonging to the skeleton, such as the thyroid, are carefully sought, with the aim of gaining the maximum scientific information possible on the individual skeleton. Care must be taken not to lose fragmented skull elements, or elements within the skull such as the small bones within the ear, finger and foot bones, as well as those bone elements, which have been severed from the main parts of the skeleton at the time of death or during any subsequent disturbance by human means or taphanomic processes, such as tree roots, rodent activity, etc.

Disarticulated human remains in pits should be excavated with the same care as individual skeletons. In such cases, it might be possible to establish whether some of the bones were still anatomically connected when the primary excavation of the burials took place. Again, it is important that individuals with thorough osteological training excavate the skeletal remains. In this instance it is also vital not to lose those bone elements that have been severed or fractured off. Surveying of a 3D position of each bone fragment, which is then placed in a small bag with the survey data on it, can aid in the later creation of a computer reconstruction model. In case of charnel burials, it is essential to attempt to identify, whether it is possible to recognise the bones of individuals on site, or in which order individuals have been deposited. This may aid in matching the bones of single individuals and in interpreting the deposit.

10.0 TOWTON: AN EXAMPLE OF THE SUCCESSFUL ARCHAEOLOGICAL ANALYSIS OF A BRITISH MEDIEVAL BATTLEFIELD

10.1 INTRODUCTION

In August 1996, building work at Towton Hall, Towton, North Yorkshire, disturbed part of a medieval mass grave from the battle of Towton (fought between the rival factions of the Houses of Lancaster and York, AD 1461). The builders are reported to have removed 24 skulls and the bones from an indeterminate number of skeletons. In September of the same year, a team of osteologists and archaeologists from the University of Bradford and WYAS Archaeological Services excavated the remaining part of the grave. This resulted in the recording of parts of at least 38 skeletons (Sutherland 2000a).

In early 1997 Tim Sutherland, a member of the original excavation team, began research into the battle of Towton, specifically aimed at placing the evidence from the mass grave within the archaeological battlefield context. In late 1997, Sutherland began intensive archaeological investigations as part of a PhD thesis in an attempt to locate and record physical evidence of the medieval battle (Sutherland forthcoming 2), under the title of the 'Towton Battlefield Archaeological Survey Project'.

10.2 METHODOLOGY

The project initially began by assessing the landscape in which the battle was fought. In most battles, the faction that chooses the location of the battle should have a distinct advantage, as it can use landscape features, such as steep terrain, wet ground, enclosed land and settlements to defend its flanks and rear. At Towton, the steep slopes leading down to the River Cock protected the Lancastrian right flank (see Figure 2), who were on the field first, whilst the low-lying wetter ground, which was also highly visible from the raised central ground, protected their left.

If the unknown location of a battlefield is sought, then it is important to analyse the landscape topography and the contemporary road network: the larger the army, the greater their dependence on a good road for the movement of large quantities of equipment and provisions. Existing major road networks allowed access and the movement of troops and, more importantly, baggage trains, to the site of engagement - there are few large historic battles that did not utilise well-constructed roads.

The archaeological survey work at Towton began by looking for ferrous artefacts using archaeological geophysical magnetic surveys. However, when excavating a sample of the ferrous anomalies discovered during several of these surveys, it was concluded that the artefacts were either unrecognisable or were generally a result of modern farming or dumping practises. They were thus perceived of as a form of 'contamination' within the battlefield assemblage. This form of battlefield prospection survey was therefore considered inefficient (Sutherland 2000a).

An archaeological field walking survey was also initiated but, once again, virtually all of the artefacts recorded were found to be either unidentifiable, related to manuring practices, or were from a period other than that of the battle. Additionally, in order to examine each unidentifiable ferrous artefact more effectively, expensive and time-consuming radiographs would have to be taken. This procedure was considered to be prohibitively costly.

It was therefore initially considered that this method of locating evidence of battle might be too time-consuming as a prospection method alone. However, it later proved effective in the detailed analysis of smaller areas, so its use was adapted (see below).

A decision was then made to alter the method of investigation from the search for ferrous artefacts to those of non-ferrous metals, as non-ferrous artefacts usually have a better rate of preservation compared to ferrous items and can therefore be more easily identified. It was also considered that the site was likely to contain fewer non-ferrous metal artefacts, be they fifteenth century or once again 'contamination', so that they would be more straightforward to isolate.

As magnetometers will not locate non-ferrous metals, electromagnetic (EM) prospection surveys were initiated using a specific EM survey instrument (White's TM 808, a large metal detector). The advantage of this instrument was that it could be 'tuned' to an infinite number of settings and, with a certain amount of expertise; a logger could be attached to it in order to record the results. Although this instrument was then in its initial stages of development this 'loggable' metal detector proved productive in its ability to locate archaeological features and record non-ferrous metal artefacts.

At an early stage of the research (1997) a metal detectorist (Simon Richardson) was approached, who had already been searching the battlefield for several years and making sketch maps of artefact scatters he found that related to the battle. He was asked if he would join the survey project and transfer all of his data on to 1:2500 scale OS maps. From then onwards he marked the location of where he found any fifteenth century artefacts on these maps. Although time spent searching the battlefield in this manner was limited, due to it being a part time, and unfunded occupation, it proved successful in that details of artefact scatters, not noticed before, became evident. This eventually developed into a more accurate survey method by employing a small hand held satellite navigation instrument to record a relatively accurate location (plus or minus a few metres) for each artefact. However, a balance had to be achieved between randomly searching the battlefield when fields became available to be detected and a systematic survey of the area. The latter is difficult to achieve, when only a single individual is searching the land and the former produces a bias within the data, as the searcher tends to remain longer in areas that produce a greater quantity of artefacts.

Concurrent with the metal detecting, an additional multidisciplinary array of archaeological prospection techniques was instigated, including aerial photographic analysis, excavation of test pits and the full archaeological excavation of individual features, in an attempt to locate evidence of the battle. Earthworks were also analysed, former fields systems that would have been contemporary with the battle were recorded, and the geology and topography of the landscape was mapped out to assess which areas of land were most likely to assist or hinder medieval armies as they prepared to engage in battle. The geology of the landscape was also analysed to gauge what the rate of artefact decay would be for artefacts buried in the soil covering the battlefield - there would be little point in searching for artefacts that would have corroded long before they could be located and recorded. Fortunately for the survey results, the buried soil at Towton (soil lying on the surface is open to additional metrological effects) is excellent at inhibiting the corrosion rate of buried metal artefacts and degradation of human bone.

An important part of the investigation was the search for the historically documented mass graves from the battle, the location of which had been lost for over 150 years. The historical archive was searched for primary

documentary evidence of the battle and the results analysed. Subsequently, all of the historically documented sites of the suspected mass graves were identified and investigated using geophysical survey and trial excavation. All of these previously recorded sites were, however, found to be erroneously associated with the battle. Many proved to be either prehistoric or Romano-British features that had no association with the conflict. The historical archive, where appropriate, was therefore reinterpreted. Eventually it was determined that the search for the graves would have to continue on alternative, and so far un-investigated areas of the battlefield.

Meanwhile, newly identified (mainly non-ferrous) artefact concentrations were proving interesting. Rather than the ferrous military artefacts scatters, which were initially envisaged as marking the general site of the battle, it was confirmed that the non-ferrous, non-military artefacts in fact highlighted the battlefield site (Sutherland 2003). Rather than arrowheads and weapon fragments pointing to the areas of conflict, clothing fasteners and buttons, belt fittings and badges suggested where further investigations should take place (*ibid*).

These non-ferrous artefact concentrations sometimes formed specific patterns within the landscape. These patterns were subsequently investigated using the previously mentioned array of archaeological prospection techniques, with successful results. For example, one concentration of artefacts formed a relatively narrow line across the landscape in, what appeared to be, an ideal location for medieval armies to be arrayed in the initial positions of engagement for battle. This area was subsequently re-investigated using metal detector surveys, recording both non-ferrous and ferrous artefacts in an attempt to find small ferrous fifteenth century artefacts. Although the ferrous 'contamination' was still great, a number of medieval ferrous arrowheads were discovered. Further surveys were carried out in other areas close-by, resulting in the identification of a distinctive square anomaly, fifty metres across, which was defined by arrowheads alone. Further geophysical surveys were undertaken over this 'square'. Additionally, as the surveys were carried out, other important finds found on the surface, were also located and recorded, thereby carrying out an alternative, simultaneous field walking survey, which produced important results. During one of the metal detector surveys, the lower part of a human arm bone (distal ulna) was located within this 'square' feature. Additionally, during a subsequent earth resistance survey, two human teeth were discovered. These teeth were seen to coincide with the location of a long narrow rectilinear anomaly found using a magnetic survey, which was interpreted as a possible linear pit. A trial trench was excavated across this anomaly and one side of a ditch was encountered. Within the fill of this feature were hundreds of disarticulated human bones and teeth. It is probable that this feature, a former grave, contains the disarticulated human remains that were left following a clearance operation described in an unpublished grant by King Richard III. This refers to the removal of the bones from Towton Field in 1484, 23 years after the battle. The full excavation of this grave is due to take place in 2006.

The discovery of this former mass grave and the concentration of artefacts, and particularly the arrowheads, provide compelling evidence for the location of the battle of Towton. This proves that the methodology used has been successful in locating extensive archaeological evidence of a medieval battle. Furthermore, there is no reason why the application of a similar methodology to examine and identify other historic battlefields should not be as successful, if the evidence is still preserved and can thus be located.

Once significant archaeological evidence of a historic battle has been located, it should be possible to re-evaluate the historical evidence to assess whether or not it is verified by the former. The research at Towton, for example, has proven invaluable, in that features formerly associated with the conflict have been shown not to be

so. Additionally, new information has subsequently been used to interpret historical features within the landscape that had not previously been fully understood. For instance, it has since been established that the location of the graves on the battlefield lies very close to a feature marked on early Ordnance Survey maps as 'Lord Dacre's Bur Tree', the site of a legend associated with a leading Lancastrian noble who fought and was killed in the battle of Towton. It is therefore probable that the approximate location of this former tree stood on the site of a grave marker of the mass graves. It is therefore also possible that similar features or structures on other medieval battlefields mark the location of other unknown mass graves from those conflicts.

The Towton Battlefield Archaeological Survey research is the first multidisciplinary archaeological survey of its type, which has successfully located physical evidence of a medieval battle. It has proved so successful that other similar surveys have been, or are about to be initiated on other medieval battlefields (Azincourt, France; Bosworth, England) using the methods formulated and information gathered during the Towton survey.

10.3.1 Concise Methodology

1 Locate the approximate area of a former battle by analysing the geology, topography and road networks and comparing this information with historical descriptions of the site
2 Locate and record diagnostic artefacts from the battle using field walking or metal detector surveys
3 Collect more of these artefacts until patterns become apparent within the assemblage
4 Once a pattern or an area of interest become apparent attempt to understand the reason for this patterning by carrying out other types of survey. Analyse these patterns with a multidisciplinary array of archaeological techniques specifically designed to maximise the available data for the type of evidence already gathered
5 Prove that the evidence is from the battle in question. For instance, people also shot arrows and fired lead balls from firearms during target practice or during hunting, resulting in small non-battlefield related assemblages. Human remains of those who engaged in combat provide good evidence. However, these are more often found individually in cemeteries rather than on battlefields and so they will be difficult to locate. Fragments of disarticulated human remains may indicate locations of former conflicts but may also indicate the presence of an unknown and ploughed out former cemetery. The early dating of any human remains discovered in a potential search area is therefore very important. Human teeth can remain in a good state of preservation and can be easily identified even when they have become disarticulated from the rest of the skeleton. The search for human teeth rather than human bone might aid the location of former mass graves.
6 Once a battlefield has been identified re-check the data with historical sources to tie the two types of information together. It is possible that two battles were fought on the same site and the evidence obtained is not from the battlefield under investigation (e.g. at Towton there is potential evidence of three different conflicts).

11.0 FUTURE RECOMMENDATIONS

Those involved with historic battlefields, as part of their work or leisure interests should be aware that many activities could have an effect on the preservation of archaeological evidence on such sites. These include ploughing, metal detecting, re-enactment and development, which incorporate excavations and constructions such as pipelines and structures.

Threats to battlefields from the abuse via metal detectors can be combated in several ways. These include close working relationships between archaeologists and metal detectorists, which aid in the education of all parties as to the accurate recording and reporting of finds. Many organisations, such as the Battlefield Trust and the All Party War Graves and Battlefields Heritage Group, are attempting to find a strategy that would lead to the protection of battlefields as landscapes, both in Britain and abroad. It is envisaged that English Heritage will take a proactive stance regarding their landscapes policy, which would ideally restrict the uncontrolled use of metal detectors in 'archaeological areas', such as battlefields (their potential pilot project would ideally address this problem). This is clearly necessary to avert the current threat of large-scale metal detecting rallies on these sites.

It must also be remembered that only 43 English battlefields are on the English Heritage register and thus currently receive some form of nominal protection from development. However, as these are only a small proportion of battlefields and are all located in England, it is vital that all sites of conflict are archaeologically evaluated as to their location and potential and are eventually protected by law. This must mean that neither metal detecting nor development would be possible in these areas. Before that time arrives, it is important that everybody should work towards three-dimensional recording of all artefacts located on these sites.

There also needs to be a closer liaison between the different groups that are interested in large archaeological landscapes. This would include bodies such as English Heritage, The Battlefield Trust and The Portable Antiquities Scheme, who, by working together could disseminate a unified statement, which would advise on archaeological procedures and guidelines that would limit the potential damage to such sites.

The Conflict Archaeology International Research Network (CAIRN) has been founded by Tim Sutherland to promote the work of specialists in the field of historical conflict. The network is promoting greater understanding of all issues involved in the subject, including the protection, investigation, recording, and dissemination, of the evidence.

It is necessary to consider the possibility that human remains will be located on a battlefield, or in its vicinity. If such a case arises, the appropriate excavation and analysis of these remains should be carried out in the light of the proximity of a site of conflict, although such a link must not be presumed without the appropriate evidence. In such cases it is vital that qualified osteologists excavate the skeletal remains, as these can be so mutilated that it can often be difficult to identify all the relevant parts of each individual. Commingling of parts of different skeletons is also a possibility. In such a case the post-excavation analysis should have the ability to analyse all the records to be able to interrogate the data so that separated fragments can be reunited with those to which they belong (Sutherland 2000b).

It is envisaged that, wherever possible, as more visitor centres are constructed near to sites of conflict, then more people will reflect upon the degree of archaeological evidence that a site might contain and it will be more likely that the battlefield is protected. The promotion of such centres should therefore be encouraged. It is also important, however, that re-enactments are not carried out on these historic sites as contamination can occur, which would confuse later surveys.

It is anticipated that this guide will make archaeologists and other interested parties more aware of both the value of and the threat to battlefields, which will aid in the protection of these unique sites.

12.0 CONCLUSION

Historic battlefields and sites of conflict are part of our heritage. They can be promoted as amenities, as teaching aids and as memorials. However, they are too important to be ignored. By allowing the evidence from them to be destroyed or to be removed unrecorded, promotes the assumption that such evidence is not important, and furthermore, that it will not be important in the future. This is a very bold and dangerous assumption to be made considering the nature of historic information this evidence represents. The ignorance of details relating to historical conflict can lead to the falsification of the historical record by those who wish to promote a false history. Such considerations are so strong that promoting such false views, for example holocaust denial, are illegal in certain countries.

In centuries to come, future generations might find it difficult to believe that millions of people were systematically executed by government decree simply because of the hatred of them by those in control. In the distant future will the mass graves of Second World War Europe exist to provide physical evidence of the holocaust or will they be wiped away prior to the development of a shopping precinct or a new motorway?

Will we remember the sites of conflict and the thoughts they invoke, which now appear to be so unforgettable? Or will we feel that the past should simply remain a curiosity to be recounted like folk tales that have no valid provenance? Will we record the location of every arrowhead and musket ball found on a field of conflict so that a larger picture will eventually emerge of this violent part of our past or will we erase that past bit by bit by chipping away at our common heritage? Will we teach our younger generation that historical conflict was glorious and noble or that it was bloody, dirty, brutal and mentally and physically traumatic? Will we be able to prove how our ancestors defended themselves against Romans, Saxons, Vikings, political opponents, or anti-parliamentary Royalists and the manner in which they influenced the diversity of our common heritage? And most importantly, will we be able to demonstrate the consequences of the immortal words carved on so many war memorials……. 'Less we forget'.

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APPENDICES

Appendix A

THE REGISTER OF HISTORIC BATTLEFIELDS (ENGLISH HERITAGE: 1995)

CONSERVING HISTORIC BATTLEFIELDS

The English Heritage Register of historic battlefields identifies over forty areas of historic significance in England where important battles took place. This leaflet describes the role of the Register, how it was drawn up, and offers advice to owners, occupiers, planners, and other interested groups on ways to conserve and enhance the value of England's historic battlefields. The need to take into account the effect of development on historic battlefields has been highlighted by the Government in Planning Policy Guidance note 15.

The role of the Register

Like the Register of parks and gardens, also compiled by English Heritage, the Register of historic battlefields contains information for the conservation of areas of special historic interest. It provides expert guidance for those involved in conserving the sites on both the extent of the areas of historical significance and the most important amenity features within and around these areas. However, the Register does not imply any statutory controls, nor any additional powers to regulate development or other work beyond the normal planning system. Each Register entry is based on the best available evidence and includes a map of the battlefield area showing the position of the armies and features which were part of the original battleground. These maps are intended to be the starting point for battlefield conservation by identifying the most visually sensitive areas. They highlight particularly valuable features that should be conserved for understanding the battle and, where appropriate, emphasised for visitors in displays or information boards. They also make clear the extent of current public access.

The importance of battlefields

If, as Winston Churchill wrote, battles are 'the punctuation marks of history', then battlefields are the fragmentary pages on which those punctuation marks were written in blood. Their importance is four-fold.

• Battlefields have been the setting for crucial turning-points in English history, for example the Norman Conquest which followed the Battle of Hastings in 1066, or the turmoil of the Civil Wars in the seventeenth century which changed the roles of monarchy and parliament.

• The reputations of great political and military leaders were frequently built on battlefield success.

• Tactics and skills of war still relevant to the defence of the country evolved on the medieval battlefield.

• Battlefields are the final resting places for thousands of unknown soldiers, nobles and commoners alike, whose lives were sacrificed in the making of the history of England.

Where they survive, battlefields may contain important topographical and archaeological evidence which can increase our understanding of the momentous events of history which took place on their soil. They also have a use in education and recreation.

Selection of entries for the Register

The National Army Museum has researched 69 possible battlefields for the Register. Each candidate was considered by a small panel of invited experts with diverse skills and perspectives. For each battlefield they considered whether the fighting constituted a battle rather than a lesser level of engagement, and then whether or not the extant evidence, physical or documentary, defined the geographical area within which the battle took place. In order to be considered for the Register, an engagement must have involved recognised military units. Incidents of civil unrest, while undoubtedly of historical importance, are impossible to include consistently because frequently examples of these have no real boundaries and documentation is often poor. Sieges are better considered separately from battles because they are usually associated with physical remains which can be conserved through existing statutory mechanisms such as scheduling or listing. Having passed these hurdles, for an engagement to qualify as a battle three criteria have been used:

• the political significance of the engagement; was it, in fact, 'a little local difficulty' or can its impact be traced nationwide?

• its military historical significance; were the tactics of particular note, such as the turning of the table at Blore Heath?

• the biographical significance; was it the crowning glory of a military career, or was a famous leader killed or captured?

If an engagement was assessed as being not a battle but, for example, a skirmish instead, we have not listed it on the Register. The reliability of the detailed evidence for each battle was then considered. Where the evidence of documents, archaeology, topography, and landscape history was sufficient, the outer reasonable limit to the area within which the bulk of the fighting took place has been defined as the battlefield area. In those cases where the general location of the battle was known but where the evidence did not allow a boundary to be drawn, we have added the engagement to an appendix to the Register as the 'site of a battle. A small number of battles cannot even be located generally, and these will not be included on the Register until further evidence emerges. The 43 candidates which passed these tests to form the Registered battlefields are listed on the back of this leaflet.

Conserving battlefields

Battlefields rarely have identifiable remains. The land on which they took place was often farmland at the time of the battle and has continued to evolve since. English Heritage does not wish to prevent such changes, nor do we advise the 'restoration' of battlefields to a form consistent with the date of the battle. For the conservation of battlefields, as for the countryside in general, continued management is both desirable and necessary. Where detailed presentation to visitors is being considered English Heritage can provide only limited further information on the battlefield sites; we recommend that owners and developers bring in appropriate consultants to any such projects. Any proposal for development, of course, has to be considered in the context of the specific circumstances. Nevertheless, there are four themes which can guide the conservation of battlefields for current and future generations.

Authenticity

An essential part of the experience of visiting battlefields, whether for educational, recreational, or research purposes, is the knowledge that the landscape is essentially the one in which the battle took place. Superficial changes since the battle, such as the creation of enclosed fields, do not diminish the authenticity of the battlefield. However, a largely synthetic landscape, for example following quarrying or the creation of a golf course, will have lost most of its historical significance. We recommend, therefore, that large-scale changes to battlefield topography should be avoided. Cumulatively, small-scale changes can, over time, have a similarly damaging effect.

Visual amenity

The best-preserved battlefields are those where visitors' appreciation of history is least distracted by inappropriate elements in the landscape of the battlefield. These can include buildings sited in key views. Tree plantations or other barriers such as road embankments can be equally disruptive to the ability to appreciate the course of a battle. Conversely, carefully placed screening can enhance greatly the look of battlefields. Where new buildings are necessary, grouping them with existing structures can reduce their visual impact on the landscape.

Integrity

Archaeological methods, especially combined with historical research, can increase our understanding of battles by reconstructing the contemporary landscape and by studying the spread of battle-related objects such as musket balls. With inadequate information, for example from unscientific use of metal detectors, there is a risk of reducing rather than increasing the understanding of the battles. For this reason, we recommend that only planned field research should be carried out. While small-scale ground disturbance such as pipeline laying is unlikely to diminish the value of battlefields, it should be remembered that earlier archaeological remains may exist in the same area.

Accessibility

Providing and maintaining public access to battlefields deserves to be encouraged, while respecting the interests of owners and occupiers. Even where there is little prospect of visitor access to battlefields at present, conserving their educational and amenity value for future generations is consistent with principles of long-term development. Their long- term conservation will be helped by proper consideration of the effects of development through the planning system.

The best prospect for battlefield conservation, however, is the early recognition of their value to local communities and to local tourism. There will be circumstances where the potential of battlefields can be realised in the near future, whether through owners' or occupiers' initiatives, through the policies of local authorities, through the work of local amenity groups, or through a combination of all of these. Where such initiatives coincide with broader conservation and interpretation priorities, English Heritage may be able to give financial and technical assistance. In any case, we will retain an overview and will offer strategic advice.

Into the future

The Register will be periodically reviewed by English Heritage in consultation with a panel of expert advisers. If you have proposals for entry to, or exclusion from, the Register, please write with full details to English Heritage (Battlefields Register), 23 Savile Row, London WIX IAB, or telephone 0171 9733214.

Local planning authorities, however, are the best agents for ensuring that battlefields are conserved, and for promoting tourism and educational visits. If you have concerns about the conservation of historic battlefields in your area, write to the planning officer or conservation officer at the district or county council.

Registered Battlefields

Maldon (Essex) 991
Stamford Bridge (North Yorks) 1066
Hastings (East Sussex) 1066
Northallerton (North Yorks) 1138
Lewes (East Sussex) 1264
Evesham (Hereford and Worcs) 1265
Myton (North Yorks) 1319
Boroughbridge (North Yorks) 1322
Halidon Hill (Northumberland) 1333
Neville's Cross (Co Durham) 1346
Otterbrn (Northumberland) 1388
Homildon Hill (Northumberland) 1402
Shrewsbury (Shrops) 1403
Blore Heath (Staffs) 1459
Northampton (Northants) 1460
Towton (North Yorks) 1461
Barnet (Greater London/Herts) 1471
Tewkesbury (Gloucs) 1471
Bosworth (Leics) 1485
Stoke Field (Notts) 1487
Flodden (Northumberland) 1513
Solway Moss (Cumbria) 1542
Newburn Ford (Tyne and Wear) 1640
Edgehill (Warwickshire) 1642
Braddock Down (Cornwall) 1643
Hopton Heath (Staffs) 1643
Stratton (Devon) 1643
Chalgrove (Oxon) 1643
Adwalton Moor (West Yorks) 1643
Lansdown Hill (Avon) 1643
Roundway Down (Wilts) 1643
Newbury I (Berks) 1643
Winceby (Lines) 1643

Nantwich (Cheshire) 1644
Cheriton (Hants) 1644
Cropredy Bridge (Oxon) 1644
Marston Moor (North Yorks) 1644
Naseby (Northants) 1645
Langport (Somerset) 1645
Rowton Heath (S) (Cheshire) 1645
Stow-on-the-Wold (Gloucs) 1646
Worcester (Worcs) 1651 with Powick Bridge 1642
Sedgemoor (Somerset) 1685

Produced by English Heritage
23 Savile Row, London WIX IAB
Telephone 0171 9733000
June 1995

Appendix B

PLANNING POLICY GUIDANCE NO 15 DATED SEPTEMBER 1994 WHICH GIVES STATUTORY GUIDELINES FOR PLANNING ISSUES

Page 6

Historic battlefields

2.25 A similar non-statutory Register of Historic Battlefields is being prepared by English Heritage (see paragraph 6.39). This will not entail additional statutory controls, but, when consultation with landowners and others on the content of the Register is complete, it too will need to be taken into account by local planning authorities. The effects of any development on the limited number of registered sites will form a material consideration to be taken into account in determining planning applications.

Page 30-31

Historic battlefields

6.39 English Heritage's draft Register of Historic Battlefields, which will be comparable in status with the Parks and Gardens Register, is shortly to be the subject of public consultation. The proposed Register identifies a limited number of areas of historic significance where important battles are sufficiently documented to be located on the ground. They will not be graded. The Register will be periodically reviewed by English Heritage, to whom all enquiries about compilation and content should be addressed. (See also paragraph 2:25.)

Appendix C

BATTLEFIELDS:
The proposed Register of historic battlefields
(English Heritage 1994)

Conserving historic battlefields
The proposed English Heritage Register of historic battlefields identifies over forty areas of historic significance in England where important battles took place. This leaflet describes the role of the Register, how it was drawn up, and the advice we propose to issue with the published Register to owners, occupiers, planners, and other interested groups on ways to conserve and enhance the value of England's historic battlefields.
Separate documents are being issued to owners and interested bodies, and views on these, on the advice in this leaflet, and on the proposed Register entries listed at the end of this leaflet are invited by I December 1994. The role of the Register Like the Register of parks and gardens) also compiled by English Heritage, the Register of historic battlefields will be for information only. It will provide expert guidance for those involved in conserving the sites on both the extent of the areas of historical significance and the most important amenity features within and around these areas. However, the Register will not carry any statutory controls, nor any additional powers to regulate development or other work beyond the normal planning system.
Each proposed Register entry contains maps of the battlefield area showing the position of the armies and features which were part of the original battleground. These maps are intended to be the starting point for battlefield conservation by identifying the most visually sensitive areas and making clear the extent of current public access. At the same time they highlight particularly valuable features for understanding the battle, which should be conserved and, where appropriate, emphasised for visitors in displays or information boards.
The importance of battlefields If, as Winston Churchill wrote, battles are 'the punctuation marks of history', then battlefields are the fragmentary pages on which those punctuation marks were written in blood. Their importance is four-fold:

• Battlefields have been the setting for crucial turning-points in English history, for example the Norman Conquest which followed the Battle of Hastings in 1066, or the turmoil of the Civil Wars in the seventeenth century which changed the roles of monarchy and parliament.

• The reputations of great political and military leaders were frequently built on battlefield success.

• Tactics and skills of war still relevant to the defence of the country evolved on the medieval battlefield.

• Battlefields are the final resting places for thousands of unknown soldiers, nobles and commoners alike, ~ whose lives were sacrificed in the making of the history of England.

Where they survive, battlefields may contain important topographical and archaeological evidence which can increase our understanding of the momentous events of history which took place on their soil. They also have a use in education and recreation. Selection of entries for the Register
The National Army Museum has researched 69 possible battlefields for the Register. Each candidate was considered by a small panel of invited experts with diverse skills and perspectives. For each battlefield they considered whether the fighting constituted a battle rather than a lesser level of engagement, arid then whether

or not the extant evidence, physical or documentary, defined the geographical area within which the battle took place. In order to be considered for the Register, an engagement must have involved recognised military units. Incidents of civil unrest, while undoubtedly of historical importance, would be impossible to include consistently because frequently examples of these have no real boundaries and documentation is often poor. Sieges are better considered separately from battles because they are usually associated with physical remains which can be conserved through existing mechanisms such as scheduling or listing.

Having passed these hurdles, for an engagement to qualify as a battle three criteria have been used:

• the political significance of the engagement, was it, in fact, 'a little local difficulty' or can its impact be traced nationwide?

• its military historical significance, were the tactics of particular note, such as the turning of the tables at Blore Heath?

• the biographical significance; was it the crowning glory of a military career, or was a famous leader killed or captured? ' If an engagement is assessed as being not a battle but, for example, a skirmish instead, we do not propose to list it formally on the Register. The reliability of the detailed evidence for each battle was then considered. Where the evidence of documents, archaeology, topography, and landscape history was sufficient, the outer reasonable limit to the area within which the bulk of the fighting took place has been defined as the battlefield area. In those cases where the general location of the battle was known but where the evidence did not allow a boundary to be drawn, we propose to add the engagement to an appendix to the Register as the 'site of a battle. A small number of battles cannot even be located ~ generally, and these will not be included on the Register until further evidence emerges.

The list at the end of this leaflet indicates those sites currently proposed for inclusion on the Register, those identified as sites without definable boundaries, and those considered but not at present proposed for inclusion, either because they have been ranked as skirmishes or because there is insufficient information to justify entry at this stage.

Conserving battlefields

Battlefields rarely have identifiable remains. The land on which they took place was often farmland at the time of the battle and has continued to evolve since. English Heritage does not wish to prevent such natural changes, nor do we advise the 'restoration' of battlefields to a form consistent with the date of the battle. For the conservation of battlefields, as for the countryside in general, continued management is both desirable and necessary. Where detailed presentation to visitors is being considered English Heritage can provide only limited further information on the battlefield sites; we recommend that owners and developers bring in appropriate consultants to any such projects. Nevertheless, there are four themes which can guide the conservation of battlefields for current and future generations.

Authenticity

An essential part of the experience of visiting battlefields, whether for educational, recreational, or research purposes, is the knowledge that the landscape is essentially the one in which the battle took place. Superficial changes since the battle, such as the creation of enclosed fields, do not diminish the authenticity of the

battlefield. However, a largely synthetic landscape, for example following quarrying or the creation of a golf course, will have lost most of its historical significance. We recommend, therefore, that large-scale changes to battlefield topography should be avoided.

Visual amenity

The best-preserved battlefields are those where visitors' appreciation of history is least distracted by inappropriate elements in the landscape of the battlefield. These can include buildings sited in key views. Tree plantations or other barriers such as road embankments can be equally disruptive to the ability to appreciate the course of a battle. Conversely, carefully placed screening can enhance greatly the look of battlefields. Where new buildings are necessary, grouping them with existing structures can reduce their visual impact on the landscape.

Integrity

Archaeological methods, especially combined with historical research, can increase our understanding of battles by reconstructing the contemporary landscape and by studying the spread of battle-related objects such as musket balls. With inadequate information, there is a risk of reducing rather than increasing the understanding of the battles. For this reason, we recommend that only planned field research should be carried out. While small-scale ground disturbance such as pipeline laying is unlikely to diminish the value of battlefields, it should be remembered that other archaeological remains may exist in the same area.

Accessibility

Providing and maintaining public access to battlefields deserves to be encouraged, while respecting the interests of owners and occupiers. Even where there is little prospect of visitor access to battlefields at present, conserving their educational - and amenity value for future generations is consistent with principles of long-term development. Their long- term conservation will be helped by proper consideration of the effects of development through the planning system. The best prospect for battlefield conservation, however, is the early recognition of their value to local communities and to local tourism. There will be circumstances where the potential of battlefields can be realised in the near future, whether through owners' or occupiers' initiatives, through the policies of local authorities, through the work of local amenity groups, or through a combination of all of these.. Where such initiatives coincide wdth broader conservation and interpretation priorities, English Heritage may be able to give financial and technical assistance. In any case, we will retain an overview and will offer strategic advice.

Into the Future

Once published, the Register will be periodically reviewed by English Heritage in consultation with a panel of expert advisers. If you would like to comment on this proposed leaflet, or on particular proposals for entry to, or exclusion from, the Register, please write to English Heritage (Battlefields Register), 23 Savile Row, London WIX IAB, or telephone our special Battlefields Enquiry line: 071973 3226.

Local planning authorities, however, are the best agents for ensuring that battlefields are conserved, and for promoting tourism and educational visits. If you have concerns about the conservation of historic battlefields in your area, write to the planning officer or conservation officer at the district or county council.

Proposed Registered Battlefields

Maldon (Essex) 991
Stamford Bridge (North Yorks)1066
Hastings (East Sussex) 1066
Northallerton (North Yorks) 1138
Lewes (East Sussex) 1264
Evesham (Hereford and Worcs) 1265
Myton (North Yorks) 1319
Boroughbridge (North Yorks) 1322
Halidon Hill (Northumberland) 1333
Neville's Cross (Co Durham) 1346
Otterburn (Northumberland) 1388
Holmildon Hill (Northumberland) 1402
Blore Heath (Staffs):1459
Northampton (Northants) 1460
Towton (North Yorks) 1461
Barnet (Greater London/Herts) 1471
Tewkesbury (Gloucs) 1471
Bosworth (Leics) 1485
Stoke Field (Notts) l487
Flodden (Northumberland) 1513
Salway Moss (Cumbria) 1542
Newburn Ford (Tyne and Wear) 1640
Edge Hill (Warwickshire) 1642
Braddon Down (Cornwall) l642
Stratton (Cornwall) l643
Hopton Heath (Staffs) 1643
Adwalton Moor (West Yorks) 1643
Lansdown Hill (Avon) 1643
Roundway Down (Wilts) 1643
Newbury I (Berks) 1643
Winceby (Lincs) 1643
Cheriton'(Hants) 1644
Cropredy Bridge (Oxon) 1644
Marston Moor (North Yorks) 1644
Nantwich (Cheshire) 1644
Naseby (Northants) 1645
Langport (Somerset) 1645
Rowton Heath (S) (Cheshire) 1645
Stow-on-the-Wold (Gloucs) 1646
Worcester (Worcs) 1651
Sedgemoor (Somerset) 1685

Proposed Battle Sites
Carham (Northumberland) 1018

Shrewsbury (Shrops) 1403
St Albans I (Herts)1455
Wakefield (West Yorks) 1460
Mortimer's Cross (Hereford and Worcs) 1461
St Albans II (Herts)1461
Hexham (Northumberland) *l464
Empingham (Leics) 1470
Newark (Notts) 1643
Newbury II (Berks) 1644
Sherburn (North Yorks) 1645 •
Torrington (Devon) 1646
Preston (Lanes) 1648
Preston (Lanes) 1715

Proposed Unregistered Candidates

Ashingdon (Essex) 1016
Lincoln (1141): Location unknown
Burton Bridge (1321): Skirmish-only small proportion of armies engaged
Byland Abbey (1322): Location unknown
North Walsham (1381): Civil action
Radcot Bridge (1387): Stand-off, no real fighting
Bramham Moor (1408): Skirmish
Hedgeley Moor (1464): Location unknown folklore site unreliable
Edgecote (1469): Location unknown, several locations possible
Powick Bridge (1642): Skirmish
Chalgrove (1643): Skirmish
Ripple (1643): Skirmish
Montgomery (1644): Almost all in Wales
Clifton Moor (1745): Skirmish

Produced by English Heritage
23 Savile Row,
London WIX IAB
071973 3000
September 1994

Appendix D

ENGLISH HERITAGE NEWS RELEASE, 7 APRIL 2004

From: "Mike Heyworth" <mikeheyworth@BRITARCH.AC.UK>
To: <BRITARCH@JISCMAIL.AC.UK>
Sent: Friday, April 09, 2004 8:20 PM
Subject: English Heritage Pioneers a New Approach to Heritage Protection

The way we protect England's heritage by listing buildings, scheduling ancient monuments and registering historic parks, gardens and **battlefields** is about to change. Proposals for a new system of heritage protection have been drawn up by the Department for Culture, Media and Sport, and will be put to the test by English Heritage on 15 pilot sites across the country, announced today (Wednesday 7 April).

Centre Point, the landmark London office block and venue for today's launch, is itself to be a pilot. Others include the buildings of the Piccadilly Line of the London Underground, the University of East Anglia, Kenilworth Castle, York's Roman Walls, historic bridges in Cornwall, a couple of Ministry of Defence sites, Hampshire's ancient water meadows and three great historic estates, Holkham in Norfolk, the Weld Estate in Dorset and the Godolphin Estate in Cornwall.

While maintaining the present levels of statutory protection, the aim of the new system is to change the culture of protecting the historic environment from its generally passive, reactive and often adversarial form towards an approach that is positive, collaborative and strategic. The choice of the projects has been designed to focus on the most innovative aspects of the new system:

- the creation of a single unified list, called the "List of Historic Sites and Buildings of England", that gives equal statutory recognition to different components of the historic environment formerly accorded varying status as listed (buildings), registered (parks and gardens and **battlefields**), and scheduled (archaeological sites);

- a single designation regime that allows separate archaeological, architectural and landscape elements all found on one site to be treated as one entity. This will overcome the confusing overlap or artificial demarcation which currently occurs where some structures are both listed and scheduled or a historic site contains individually listed buildings but the land between them is ignored; and

- the establishment of statutory management agreements that allow for strategic management over the medium to long term.

Simon Thurley, Chief Executive of English Heritage, said: "The pilots herald a new era in which there will be less distinction between the regulator and the regulated. They are designed to demonstrate that the management of the historic environment must be a partnership between all those with an interest in its future. The new system is based on a shared understanding not just of what makes the grand estate, the office block or the archaeological site important enough to be listed but of how it needs to be managed. This is an aspect entirely lacking in the present system.

"The 15 pilots comprise a whole range of different types of site, of varying degrees of complexity and with contrasting private or public ownership and management. Our partnership with local authorities will be a vital dimension to English Heritage's work, as it is with other key partners such as the Historic Houses Association, the National Trust, the Country Landowners' Association and the Ministry of Defence."

Andrew McIntosh, Heritage Minister, said: "When we asked people about our ideas for change we were delighted by unprecedented levels of support. More than four in every five respondents favoured a single unified list of all heritage assets, and almost 100% supported plans to make the listing process more open. Next month I will publish these results in full and will outline how the Government will work to make improvement a reality.

"Today is an important step in this process. The pilot schemes put forward by English Heritage will allow us to test further and develop our ideas by working in real places, with real people. We hold the historic environment in trust for generations to come. It is vital that we fully explore proposals for change and get them right. I am convinced that this programme will offer that important opportunity, and I commend English Heritage on the impressive breadth and range of their projects."

DCMS papers on the ecclesiastical exemption and marine archaeology are now out to consultation for a three month period. Both papers propose the same principles of integrated designation and strategic management. A further group of pilots, including marine and ecclesiastical examples, will be announced by English Heritage in the Autumn.

The results of these consultation papers, together with the results of the Historic Environment Records consultation paper, will be fed into the Government White Paper that will precede new primary legislation which the DCMS will seek to achieve at the earliest opportunity, probably in 2007.

Appendix E

THE HANSARD REPORT OF THE EXCHANGES IN THE HOUSE OF LORDS

17th September 2003

Battlefields: Protection
2.51 p.m.

Lord Faulkner of Worcester asked Her Majesty's Government:

Whether they will introduce statutory protection for historic British battlefield sites so that those using metal detectors are required to obtain licences under Section 42 of the Ancient Monuments and Archaeological Areas Act 1979 for the use of such instruments on these sites.

The Parliamentary Under-Secretary of State, Department for Culture, Media and Sport (Lord McIntosh of Haringey): My Lords, at present, the Government have no powers to protect historic battlefields. We have commissioned a review designed to bring together listing, scheduling of ancient monuments and other regimes, such as the register of historic battlefields, into a unified system. The protection status for those historic sites will form part of the review. Public consultation on the proposals runs until 31st October, and we shall then publish our responses in a White Paper.

Lord Faulkner of Worcester: My Lords, I thank my noble friend for that encouraging and very positive reply. I am pleased that the consultation period is nearly over. I accept that metal detecting is generally a harmless and pleasurable activity that can sometimes be of great assistance to historians. However, does the Minister appreciate that the archaeological evidence of a battlefield generally consists of the artefacts lost during the conflict, and that if they are picked up in an uncontrolled way, such as happened, for example, at the metal detectors' rally on Marston Moor battlefield last weekend, the archaeological integrity of those battlefields will be lost for ever? Can I impress on the Minister the importance of ensuring that battlefield sites are listed in the same way as other archaeological sites, and are not just treated as parts of historic landscape?

Lord McIntosh of Haringey: My Lords, I agree entirely that metal detecting, unless done in accordance with proper standards and a proper code of practice, can be very damaging. We knew about the rally at Marston Moor. Liaison officers from the Portable Antiquities Scheme attended and assembled a mile and a half from the centre of the battlefield. I do not know whether that shows ignorance or good judgment. In the end, we recorded all the important objects found. Only nine objects related to the battle itself.

Lord Redesdale: My Lords, does the Minister not agree that, although liaison officers from the Portable Antiquities Scheme were at the Marston Moor rally, they are not often invited to metal detectorists' rallies, which is a problem? Perhaps they could strengthen their hand if they looked further at battle sites. Furthermore, does the Minister not agree that, as the Battlefields Trust pointed out vociferously, the danger to battlefield sites and the historic environment is not through metal detectorists in their own right, but through uncontrolled development?

Lord McIntosh of Haringey: My Lords, I agree with all that the noble Lord says. It is why we have a review that includes historic battlefield sites as part of the general subject of listing and scheduling. At present, it is entirely unsatisfactory that we can do nothing about battlefields, metal detectorists or anybody else, if they operate with the permission of the landowner and avoid scheduled sites. I hope that the noble Lord's parliamentary group will see fit to make appropriate representations to our consultation. It would be very welcome.

Baroness Trumpington: My Lords, does the late Lord Perth's Treasure Bill, which eventually became a government Bill, have no bearing? What is found today may be just a question of yesteryear, but it could be the treasure of future generations.

Lord McIntosh of Haringey: My Lords, it does have a bearing. It is very helpful that we have the Treasure Act 1996. The definitions of what the Act covers are very difficult to understand. Coins-that is to say, two or more-must be from the same find and at least 300 years old. However, if the coins are less than 10 per cent gold or silver, there must be at least 10 of them. It is even more complicated for objects other than coins. We value the Treasure Act. In so far as it is helpful in our review, it will be taken into account.

Lord Luke: My Lords, we welcome the Government's initiative in bringing together these matters, and the forthcoming publication of a White Paper. On the other hand, does the Minister not accept that valuable work has been done by metal detector clubs, particularly in helping to delineate the boundaries of some sites, especially, in many cases, battlefields where documentation is extremely sparse? Does he not think that a sensible compromise could, and should, be reached that would benefit archaeology and provide scope for metal detecting enthusiasts to enjoy their activity?

Lord McIntosh of Haringey: My Lords, I hope that the noble Lord, Lord Luke, will agree that I was careful not to condemn all metal detecting. Clearly, metal detecting carried out properly under an acceptable code of standards can contribute to knowledge-it can find things that nobody else can find. It is important that we have a proper definition of scheduled or listed sites, which should be the same for all purposes. It is important that, when we have done that, metal detectorists should work in an acceptable and agreed way. That is not to condemn all metal detecting.

Lord Campbell of Croy: My Lords, besides the battlefields in this country, do the Government possess the necessary authority in France and Belgium to protect effectively sites of battles from both World Wars in which British troops have been involved?

Lord McIntosh of Haringey: My Lords, I do not know the answer, so I shall have to write to the noble Lord. From recent debates on driving roads in Belgium across battlefield sites, my impression is that we have no powers-in fact, I am sure that that must be the case. Where there are battlefields in which British troops were involved, we would express our views to those concerned.

Appendix F

GUIDELINES REGARDING THE DISTURBANCE OF HUMAN REMAINS

Table 1 Published guidelines on human remains (for more information see references below)

Author/Organisation	Title	Year	Covers
Department for Culture, Media and Sport	*Consultation Document on Care of Historic Remains*	Ongoing	Whether current laws relating to holding of human remains are sufficient, repatriation issues
English Heritage and The Church of England	*Guidance for best practice for treatment of human remains excavated from Christian burial grounds in England*	2005	Any Christian burial from 7th to 19th century in England. Recommendations on treatment of human remains from pre-excavation stages up to deposition
British Association for Biological Anthropology and Osteoarchaeology and Institute of Field Archaeologists	*Guidelines to the standards for recording human remains*	2004	Standardisation of cataloguing human remains, age, sex, metric and pathological recording, as well as where and how to dispose of skeletal collections
Historic Scotland	*The treatment of human remains in archaeology*	2003	A policy statement on the legal and ethical position of treating human remains within Scottish Law
Cox (Institute of Field Archaeologists)	*Crypt archaeology: an approach*	2002	On logistics and health and safety of crypt excavations
English Heritage	*Human bones from archaeological sites: guidelines for producing assessment documents and analytical reports*	2002	Largely written for osteologists and post-excavation managers. Covers human bone assessments and assessment reports, as well as curation and storage
Glasgow University Archaeological Research Division	*Human remains in Irish archaeology: legal, scientific and ethical implications*	2000	The law, planning and development and ethics of excavating human remains in Ireland
Pugh-Smith and Samuels	*Archaeology in law*	1996	Legal aspects of archaeology, including the disturbance of human remains
Parker Pearson	*Ethics and the dead in British archaeology*	1995	The ethics of treatment of human remains in Britain
McKinley and Roberts (Institute of Field Archaeologists)	*Excavation and post-excavation treatment of cremated and inhumed human remains*	1993	The excavation, recording, lifting, sampling of inhumed and cremated remains, health and safety issues, cleaning, marking, packing dating, chemical and molecular analysis of human bone, as well as the sort of information a specialist can gain, statistics
Mays/ English Heritage	*Recommendations for processing human bone from archaeological sites*	1991	Largely processing of human remains following excavation (out of print)
World Archaeology Congress	*The Vermillion Accord – human remains: motion approved at the first inter-congress on the disposal of the dead*	1989	General recommendations on the ethics of dealing with human remains

Appendix G

IFA CONFERENCE 2004 - BATTLEFIELD ARCHAEOLOGY SESSION, ORGANISED BY DR. P. FREEMAN

Session Abstract

Judged on the basis of its profile in the media – notably television output as well as conferences which have been organised or are planned – 'Battlefield Archaeology' has arrived as a subject of legitimate attention. While in the past it has been asserted that there was no archaeology of battlefields, only of warfare, the subjects current 'popularity' lies with the fortuitous combination of a number of factors: it appeals to that part of the society with an interest in military history as well as the development of a more general archaeological audience with a more astute appreciation of the range of archaeological research techniques now available. Combining these two themes, there is the way that the subject, almost paradoxically, 'humanises' an experience the majority of the audience will never have to experience. The subject has also benefited from some attractive packaging in terms of its television format. This is not to ignore the fact that a number of individuals have for years longer than they may care to admit been arguing that threat to the condition of many of Britain's battlefields has grown considerably over the years. In turn many of the issues which confront the study of battlefields irrespective of their date or location are exactly those that confront general landscape archaeology studies. These include how to manage and present what are often large tracts of land. How might they be preserved and protected? Then there is the question who might legitimately explore such sites and what they might remove? In addition to these questions there is the issue of how to present the subject in a fashion which not only makes for a good story but pays due respect to the material discussed. And this is before we begin to think about the relationship of the archaeological data to the historical version of the sites being explored as well the sort of story that might be reconstructed for the evidence. Finally, because of the nature of the sites to be explored there is the question, how precisely can fieldwork be undertaken at such sites.

In this admittedly wide-ranging session, a number of speakers have offered papers which explore at least a few of the issues facing the subject of battlefield studies. We start with how the subject is presented to the public in the form of television output, with the experiences of one who speaks from in front of the camera and contrasting with somebody who has to put that material into a format acceptable to those who have commissioned the output. One of the consequences of increased media output about battlefields is a concomitant rise in interest about them. Much of this interest is to be welcomed but it has had its negative effects. The next set of papers outline some of these problems, explain the magnitude of them and will seek to offer resolution to at least some of the issues that arise about preservation and management of the resource. The third and final part of the session will explore some case examples of how the study of violent human engagement might be approached with an emphasis on some of the ways colleagues have addressed the pitfalls that come with such work through study of such actions overseas.

Example of Paper Abstract

Tim Sutherland
Treasured or treasure: Who is protecting British battlefields?

In 1995, Foard highlighted the contemporary attitude towards battlefield archaeology in Britain when he stated that:

"The absence of any proposals for action from English Heritage in connection with the Battlefields Register reflects the almost complete failure of the archaeological profession to take the study of battlefields seriously …It is essential that a proper methodology of battlefield archaeology is developed and that effective conservation of the evidence is instituted before it is too late" (*Naseby: The decisive battle* (1995).

In 1997, following the completion of the excavation of a mass grave from the Battle of Towton (AD1461), together with colleagues from the University of Bradford, the author instigated the Towton Battlefield Archaeological Research Project with the aim of systematically locating and recording physical evidence of a medieval battle. The results of this research have exceeded all expectations.

For the first time in Britain, an extensive survey was carried out over a medieval battlefield which succeeded in targeting over 1300 C15th artefacts. These included over 200 arrowheads which have been analysed by the Royal Armouries and have shed new light on medieval weapon technology. Furthermore, evidence of further mass graves have been identified on the battlefields using geophysical survey and trial trenching.

The initial phase of this multi-disciplinary archaeological survey is now near its completion and the results add extensive information not only about the battle but also about the application of archaeological techniques for the identification of battlefields in general. But should the results of this survey be published without the lack on implemented legal protection of this archaeological resource?

The dangers of publishing such information were highlighted in 2003 with the publication of Newman and Robert's monograph on the C17th battlefield at Marston Moor. Within a few months of the book's launch, a metal detecting rally had been organised on a newly recognised area of the battlefield. In spite of months of warnings of this impending destruction of the evidence of the battle to the relevant authorities, including English Heritage and the Portable Antiquities Scheme, and despite attempts to protect this vulnerable site by the Battlefield Trust, over 300 metal detectorists were given free access to this nationally important archaeological site.

Despite the presence of two members of the Portable Antiquities Scheme to record any artefactual remains located during the event finds were only recorded by field, therefore loosing valuable information on distribution patterns. Furthermore, it became apparent after the rally that the officially recorded number of battle-related objects was potentially 300 times lower than that reported by visitors to the rally.

Subsequently, an attempt was made to raise the profile of the issue in the House of Lords by questioning whether it is possible to schedule battlefields in a similar manner to archaeological sites.

Following the recent glorification of televised treasure hunting as an alternative to good archaeological practice, is it responsible to publish the results of battlefield-related surveys so that others can then use them to finance 'harmless' and very popular 'charity events'?

Appendix H

FURTHER INFORMATION

Further information regarding the archaeology of conflict can be obtained from the following selected sources:

CONFLICT ARCHAEOLOGY INTERNATIONAL RESEARCH NETWORK (CAIRN)
A group of individuals and organisations who research the archaeology of conflict from an historical or modern forensic context.
http://perso.wanadoo.fr/worldcairn/index.htm

THE BATTLEFIELDS TRUST
Battlefields Trust, a body set up to preserve battlefields as educational and heritage resources, received grants to employ a Battlefield Project Officer for a two year period to create a national battlefield database and internet site. Battlefield Trust 2002
http://demo.battlefieldstrust.com/resource-centre/
Why preserve Battlefields?

AMERICAN BATTLEFIELD PROTECTION PROGRAMME
National Park Service On-Line Publications http://www2.cr.nps.gov/abpp/batpubs.htm#top
'How can Battlefields be Better Protected?' http://www2.cr.nps.gov/ABPP/cwsac/cws6.html
Guidance for Developing a Battlefield Preservation Plan
http://wwww2.cr.nps.gov/abpp/RevisedPlanGuidance.PDF (American: Requires PDF viewer) - This technical working paper emphasizes the importance of good planning to successful battlefield preservation efforts and recommends a number of planning elements to include in battlefield plans.

THE LITTLE BIGHORN BATTLEFIELD
http://www.custerbattle.com/sub-pages/archaeo_sub/fieldwork.htm)

THE BATTLE OF WISBY (Swedish)
http://www.historiska.se/exhibitions/korsbetningen/index.html)

FLAVIUS VEGETIUS RENATUS
"MILITARY MATTERS" A military manual used by the Roman army. Translator: Lieutenant John Clarke
http://www.sonshi.com/vegetius3-12.html

THE TOWTON BATTLEFIELD ARCHAEOLOGICAL SURVEY PROJECT
http://mysite.freeserve.com/TowtonBattlefield

TOWTON BATTLEFIELD SOCIETY
http://www.towton.org.uk/