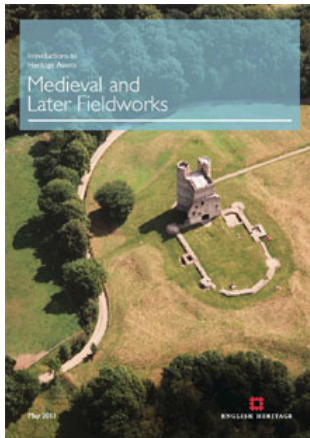




Historic England

# Medieval and Later Fieldworks



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Although this document refers to English Heritage, it is still the Commission's current advice and guidance and will in due course be re-branded as Historic England.

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Introductions to  
Heritage Assets

# Medieval and Later Fieldworks

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May 2011



ENGLISH HERITAGE





Fig. 1. The Queen's Scone, Newark on Trent, Nottinghamshire. Its main role was to control the bridge that carried the Fosse Way over the River Devon.

## INTRODUCTION

From the late 14th century gunpowder artillery and small arms began to dominate the battlefield, leading to profound changes in military tactics and, some would argue, to the demise of medieval feudal society. By the 16th century continental Europe had seen the development of a new system of fortification, the *trace italienne* (Italian line). This evolved to mount artillery and counter the effects of shot and shell. In England, although some permanent fortifications were built in this style, temporary fieldworks of this form generally date from the Civil War 1642-51, although a handful are known from the late Middle Ages, and the late 17th and 18th centuries. At the end of the 18th century, as Britain was endangered by Revolutionary, and later Napoleonic, France a number of temporary fieldworks were built to meet this threat. Also from this time a small number of fieldworks have been recognised associated with army training manoeuvres. By far the most numerous remains of fieldworks are those associated with 20th-century warfare. These include practice trenches, open air raid shelters, anti-tank and glider ditches, and more specialised installations.

Civil War earthworks are found widely distributed across England, although they are more common in the midlands and south, and extend into Wales and the Isles of Scilly. Eighteenth and 19th century, fieldworks tend to be coastal or positioned inland to offer defence in depth. Those of the 20th century are far more widespread and are commonly encountered on many public open spaces and former upland training areas.

In a number of instances contemporary accounts and maps survive of Civil War actions that describe or portray the position and forms of fieldworks. During the 18th century surviving defences were frequently commented on by travel writers, such as Daniel Defoe in *Tour through the whole island of Great Britain* (1724-7). By the end of the century antiquarian interest was growing and in the following century, the increase in local archaeological and historical societies, acted as a further stimulus to interest in the remains of the Civil War. During the 20th century fieldwork by the Royal Commission on the Historical Monuments identified and recorded many surviving examples. In recent decades excavations in towns, and other places fortified during the Civil War, have greatly increased our understanding of the temporary fortifications built at this time. Fieldworks and associated training works of the late 18th and early 19th centuries have only recently been recognised and they remain an under researched topic. 20th-century military fieldworks are increasingly becoming features of archaeological interest and are also described in contemporary military manuals.

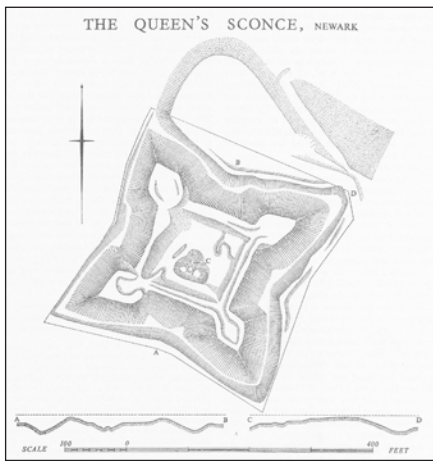


Fig. 2. The Queen's Scone, Newark on Trent, Nottinghamshire, an earthwork fort built by Royalist forces as a part of the town's defences. It is 76m square and its ramparts stand up to 9m tall.

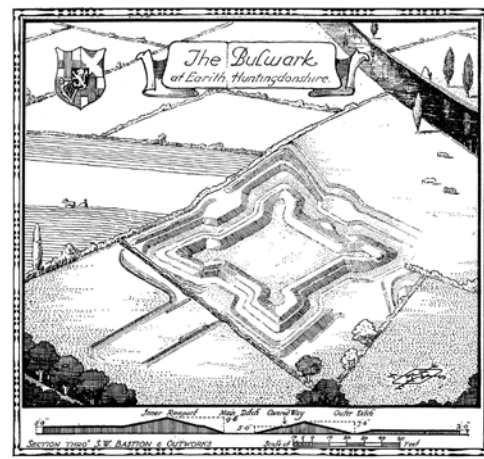


Fig. 3. Earith Bulwark, Cambridgeshire, reconstruction drawing of the earthwork fort constructed by the Parliamentarian Eastern Association to control the Great Ouse and Old Bedford rivers.

## DESCRIPTION

The main characteristics of the *trace italienne* were low wide walls or ramparts to absorb shot and projecting from them four-sided angled bastions to protect the walls and for positioning artillery. In plan, this gave rise to the classic star-shape fortification. Further refinements might include outer ditches and detached casemates or batteries, known as ravelins. Where upstanding earthworks survive they represent denuded remains of works that have been subject to slighting, or demolition, and the effects of natural erosion. Contemporary illustrations and archaeological excavations show that most also had a timber component. The inner bank of a fortification might be protected by gabions (earth filled basket work), inside artillery was often placed on timber platforms, and the ditches protected by *Chevaux de frise*, or a lines of spiked poles.

Few Civil War fieldworks in Britain match the elaboration of continental examples; notable exceptions include those around Newark-on-Trent, Nottingham (Figures 1 and 2), and examples from Huntingdonshire (Figure 3). Most fieldworks thrown up around towns, castles and country mansions were raised in haste by the local population, and probably only in exceptional circumstances were men with up-to-date military knowledge available to guide the work (Figure 4). Isolated fieldworks are also found dominating key roads and river crossings. Other simple fieldworks may also be found: at Cornbury Park, Oxfordshire, a rectangular earthwork, comprising a rampart and ditch, and open back was interpreted as a temporary battery.

The few fieldworks that post-date the Civil War were generally part of national defence schemes and most were designed by professional soldiers. Many of these also follow the principles of the *trace italienne*. These works were generally prepared to counter external threats and are usually coastal, or inland to delay the approach of an invasion force.

## CHRONOLOGY

On the Continent fortified camps were a common feature of late medieval warfare, and while apparently far rarer in England the Duke of York dug in his army at Crayford (Kent) in 1452 and Ludford bridge (Shropshire) in 1459. However, the battle of Northampton (1460) where the royal Lancastrian force occupied a banked and ditched 'fortified camp' with artillery was the only known occasion when an English fortification came under (successful) attack.

By the 16th century, gunpowder artillery and small arms came to dominate the battlefield, to support the widespread adoption of this new military technology a new form of fortification based on star shaped bastions and other earthen defences the *trace italienne* had evolved. In Britain, the form was adopted for permanent fortifications from the 16th century and the applications of its principles continued until the late 19th century.

On the Isles of Scilly, Harry's Wall's represents a rare a 16th-century Italian inspired star-shaped fieldwork, although it was never completed. Temporary fieldworks built on this system are generally restricted to a very narrow date range during the Civil War (1642-1651) when they were constructed to defend key towns, and other strategic locations, or built to support siege operations. Knowledge about this form of fortification travelled with mercenaries and was also transmitted by published treatises, and ones of Dutch origin were especially influential.

Although Britain was at war throughout the late 17th and 18th centuries, the country generally relied on the Royal Navy and permanent fixed fortifications to defend its shores. At the end of the century with increased threats from Revolutionary and later Napoleonic, France temporary fieldworks reappeared. On the east coast small anti-invasion gun batteries were constructed, often preceding the later Martello towers. Around Chelmsford, Essex (Figures 4 and 5), an extensive earthwork defensive line of forts and a bastioned trace was prepared, and at Shorncliffe, Sandgate, Kent, an earthwork redoubt was built.



Fig. 4. Chelmsford, Essex, diagram showing the extensive early 19th-century defences built to block any advance on London by French armies.



Fig. 5. Galleywood fort, Essex, part of the early 19th-century defences constructed around Chelmsford.

During the 18th century British military training was notoriously poor and although contemporary military manuals discuss fieldworks, few examples of training works have been recognised. Rarely, in Crowthorne Wood, Berkshire, training fieldworks probably dating to 1792 have survived and been surveyed (Figure 6). As military training improved during the late 19th century, and especially during the world wars of the 20th century, remains of practice fieldworks become more numerous.

## DEVELOPMENT OF THE ASSET TYPE AS REVEALED BY INVESTIGATION

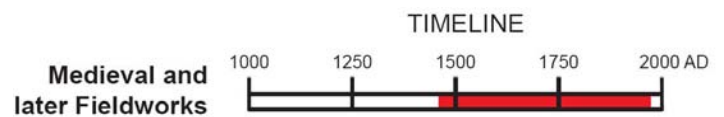
Where fieldworks survive in the countryside, analytical earthwork survey is particularly effective for understanding their form. Traces of less formally laid out fieldworks might also be expected around any defended town, house or castle, which was besieged. Survey has confirmed Civil War earthworks follow the general principles of contemporary practice, although often modified to fit with local topography and modest in scale reflecting the size of many Civil War units. Evidence of plough levelled fieldworks are occasionally seen on air photographs, or may be revealed by geophysics. No above-ground medieval fieldworks are known; air photography and geophysics would seem to offer the best hope of defining any where their general whereabouts are known, as at Northampton. Traces of Civil War (1642-51) fieldworks, in particular ditches, have been found during urban excavations. In most instances they are fragmentary, truncated by later activity, and contain few stratified objects. They, nevertheless, are able to confirm the position of defences known from historic maps and reveal fieldworks that were unknown from documentary sources. Given their relatively short occupancy, archaeological excavations of many Civil War features have yielded relatively small numbers of objects. Where finds are made artefact and faunal assemblages can add to our knowledge of local siege economies. Securely stratified Civil War contexts are also important markers for dating local pottery types, claypipes, and other artefacts. Excavation may also reveal details of contemporary military field engineering practices. In rare

instances elements of fortification, such as angled bastions, have been incorporated into 17th-century garden designs.

## ASSOCIATIONS

Civil War Fieldworks were often built to strengthen existing urban or castle defences (Figure 7). They were also constructed around other existing features, such as mansions and churches, while others were built to control key bridges and roads.

Later fieldworks of the 18th and early 19th centuries tended to be part of national defences schemes directed at the threat from foreign invasion. Most are therefore located on the coast, or as with the Chelmsford line provide an element of defence in depth. Training fieldworks are typically found on areas of former open ground used for army manoeuvres, many of which continued in use into the 20th century, and where later activity may have reused and altered earlier features.



## FURTHER READING

There is no publication that deals exclusively with medieval and later military fieldworks. Books on artillery fortifications by Andrew Saunders, *Fortress Britain* (1989) and *Fortress Builder: Bernard de Gomme Charles II's Military Engineer* (2004), and Bernard Lowry *Fortifications from the Tudors to the Cold War* (2006) provide some information on these works as well as a wider historical background. Peter Harrington has written a number of more specialised books on the English Civil War (1642-51) including the *English Civil War Fortifications 1642-51* (2003) and *English Civil War Archaeology* (2004).



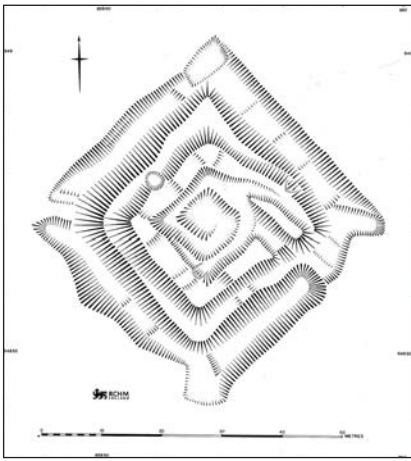


Fig. 6. Crowthorne Woods, Berkshire, late 18th-century training fieldworks, earthwork redoubt probably constructed during the 1792 manoeuvres.



Fig. 7. Donnington Castle, Berkshire, in 1643 a star-shaped fort was constructed around the 14th-century castle. From 1644, these fortifications successfully withstood a parliamentary siege for 20 months.

The now rare Royal Commission on Historical Monuments' (RCHM) 1964 book *Newark on Trent - The Civil War Siegeworks*, remains a classic study. Similarly, the RCHM *Inventory of the Historical Monuments in Huntingdonshire* (1926) contains a number of surveys of well-preserved Civil War fieldworks. David Crossley's *Post-Medieval Archaeology in Britain* (1990) provides a summary of archaeological work on fieldworks.

## CREDITS

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Cover: Donnington Castle, Berkshire (as Figure 7).

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