

**BREAKING NEW GROUND
LANDSCAPE PARTNERSHIP**

GROUND DISTURBANCE PROJECT

HISTORIC ENVIRONMENT BEST PRACTICE GUIDANCE

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Introduction

In the early 20th century W.G. Clarke (1937) explained “Few districts in England are more attractive to the archaeologists than Breckland” and described many of the significant heathland features: prehistoric flint artefacts, Neolithic and post medieval flint mines (including Grime’s Graves), prehistoric burial mounds, Iron Age/medieval linear earthworks, Roman settlements, and warren and parish boundaries. To this list we can add medieval warren lodges, woodland, heath and field boundaries, sheep-fold enclosures and features associated with nineteenth and twentieth century military training.

Many of the Brecks’ important historic environment features survive particularly well on the remaining areas of heath. This is because most areas of heath have not experienced the intensive agricultural practices and associated level of disturbance that the adjacent arable land has since the 1940s. The lack of disturbance also means there is considerable potential for previously unrecorded archaeological remains to survive.

Heathland historic environment features contribute to our understanding of the Brecks history and archaeology. They offer opportunities for research and learning. Many can be visited by the public and therefore offer opportunities for exploration and enjoyment. Although most are of local significance, some are of national significance and have legal protection as Scheduled Monuments. A few are listed buildings. They are a non-renewable resource – once lost they cannot be replaced or recreated.

Physical ground disturbance works have the potential to cause significant damage to historic environment features and, in worst a case scenario, result in their loss. For this reason it is important to consider them during the early stages of designing ground disturbance projects. This section is designed to minimise the risk of ground disturbance works damaging historic environment features, to encourage best practice and help land managers follow Natural England’s published guidance. It is based on the positive engagement of natural and archaeological conservation organisations in the Brecks over the last thirty years, the strengthening of these collaborative relationships during the Breaking New Ground disturbance project (Robertson and Hawkes 2017), Natural England’s published guidance (Hawley *et al* 2008) and guidance prepared for foresters working in Thetford Forest (Robertson and Riley 2017).

Project development

Land managers planning ground disturbance projects should consider the historic environment at the very start of project development. Doing so will not only ensure historic environment features can be protected, but help with budget planning and ensure there are no nasty surprises or unexpected delays later in the project.

The following steps should be followed in order:

1. Download and consult the Breaking New Ground *Historic Environment Opportunities Map* for the heath in question. This provides initial historic environment advice for over 400 different areas and directs land managers to their next step. It is available to download as GIS files from <http://www.heritage.norfolk.gov.uk/teaching-resources-1>, as is the user guide (Robertson with Hawkes 2017).
2. Follow the advice in the *Historic Environment Opportunities Map* 'Historic Environment Opportunities Statement' for the area/areas you are considering disturbing. These could be:
 - i. *No historic environment consultation required.* If this is the recommendation the land manager should feel confident that they can undertake ground disturbance without negatively affecting the historic environment.
 - ii. *Commission a rapid identification survey and consult local authority historic environment/archaeological service.* The land manager should commission an archaeological contractor or a Breaking New Ground trained volunteer to carry out a rapid identification survey which will identify all visible earthworks. The local authority historic environment/archaeological service¹ can provide a brief for the survey that can be passed to an archaeological contractor or put the land manager in touch with a volunteer. The results of the survey and full details of proposed physical ground disturbance should be provided to the local authority historic environment/archaeological service, who will then provide advice on next steps.
 - iii. *Consultation with local authority historic environment/archaeological service required.* Full details of proposed ground disturbance work should be provided to the local authority historic environment/archaeological service, who will then provide advice on next steps.
 - iv. *No ground disturbance permitted.* These are known to contain archaeological earthworks and/or buried archaeological remains. In some cases these are legally protected as designated Scheduled Monuments. Ground disturbance works should be planned elsewhere to avoid harming archaeological remains.
3. For areas with *Historic Environment Opportunities Map* 'Historic Environment Opportunities Statements' ii and iii it is important and best practice to follow the advice provided by the local authority historic environment/archaeological service. Examples of the sort of advice that may be given are provided below.

Burial mounds

From around 6000 to 3500 years ago important people were buried in mounds. The first burial mounds tended to be rectangular, but after around 4500 years ago oval and circular examples were built. The last were built in the first half of the first millennium AD. Most were constructed from material dug from a surrounding ditch, but many ditches have been

¹ and ² Contact details for local authority historic environment/archaeological service are provided in the *Historic Environment Opportunities Map* user guide.

filled in by their mounds eroding. Some mounds were made of turf and some have banks outside the ditch. Some mounds can be over 30m in diameter and stand over 2m tall, while others are much smaller and can be only 0.3m high. Every mound has its own story to tell. In some cases, excavations of mounds have uncovered the remains of one person. Others are known to have contained the remains of numerous people.

- Burial mounds and their surrounding ditches and banks must not be damaged.
- Do not carry out physical ground disturbance within 20-30m of burial mounds.
- Do not drive on or across burial mounds – keep vehicles at least 10m away and go around them.

Boundary banks and ditches

Banks and ditches have been used to mark boundaries for thousands of years. Some are relics of land ownership or administration, such as Iron Age tribal, Anglo-Saxon Hundred and later parish boundaries. Others define former land uses, including woodland, heath and warren perimeters or internal divisions. Warrens were large areas dedicated to rabbit farming from the medieval period to the early 20th century. Banks and ditches can form networks stretching for many miles, but not all sections will survive in the same condition. Banks vary in size, anything from 2 to 30m wide and 10cm to 1.5m high. Although some banks will have ditches alongside, others will not. They can be associated with burial mounds or marker stones.

- Banks and ditches must not be damaged.
- Do not carry out physical ground disturbance within 25m of Iron Age or Anglo-Saxon earthworks (such as the Fossditch).
- Do not carry out physical ground disturbance within 5m of all other banks or ditches.
- Vehicles must use existing gaps to cross banks and ditches. Other than when crossing they must stay at least 5m from the outer edge of the feature.

Quarries and pits

People have dug quarries and pits for flint, sand, gravel, chalk, clay and iron ore for thousands of years. As well as being used in building, flint was used to make tools, both in the prehistoric period and in the post medieval period (gun flints, for example, in the latter period). Sand and gravel would have been quarried to construct roads and buildings. Chalk was heated to produce lime for use in mortar and for fertilising fields. To reduce the distance chalk had to be carried, many fields had a 'marl pit'. Bricks were produced from clay and brick kilns were often located near the pits. Some quarries are over 30m across and 3m deep with steep sides and access tracks. The smallest pits are less than 5m across and shallow – these may occur in clusters.

- Quarries and pits should not be damaged.
- Do not carry out physical ground disturbance within 5m of all quarries and pits.
- Do not drive on or across quarries or pits – keep vehicles at least 5m away and go around them.

Military features

During the First and Second World Wars many areas that are now heath were used by the military. Some housed camps and airfields while others were used for training and civil defence. Features surviving from military camps and airfields can include gun emplacements, concrete roadways, concrete slabs, buildings, drains and piles of building material. Training features include banks from rifle ranges, training trenches and pits. Trenches can take a number of forms, including straight, curving and zig-zag. Some may have collapsed and not look deep enough for people to shelter in.

- Military features should not be damaged.
- Do not carry out physical ground disturbance within 5m of all military features.
- Do not drive on or across military – keep vehicles at least 5m away and go around them.

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