

Managing archaeological sites in arable areas.

Where do archaeological survive on arable land?

Archaeological sites may survive as upstanding monuments or earthwork sites excluded from cultivation or as buried sites sealed by ploughsoil. An **archaeological audit** should identify where sites have been found, though it may not identify the precise boundaries of all sites. There may also be new sites that have not yet been added to the record.

Why are these sites that may not even be visible important?

Arable cultivation is concentrated on lower ground and on the best soils; areas often favoured for settlement by people in the past. Many of Scotland's most significant archaeological sites lie either in or adjacent to arable ground and are vulnerable to damage during farming operations. Because these areas have been intensively occupied they may contain more significant remains than marginal areas that were occupied for a briefer period.



Substantial archaeological deposits, such as this filled-in ditch from a Roman fort at Newstead near Melrose, can survive even in areas of intensive arable cultivation.



Many important sites are found in arable areas. This one at Dryburn Bridge East Lothian, first revealed as a cropmark, is shown here being excavated in advance of destruction by quarrying.

Why are archaeological sites in arable land at risk of damage?

Upstanding monuments, whether buildings, standing stones or cairns can be damaged by machinery or stock. Ploughing too close can loosen these structures making them vulnerable to collapse. Earthwork and turf sites can be eroded by stock, machinery, overgrazing or conversion of grassland to arable, either from permanent pasture or as part of a system of arable rotation.

Archaeological deposits surviving below the current topsoil are vulnerable to deep ploughing, drainage, destoning and subsoiling. Tracks, fencing and dumping can all cause damage to archaeological sites.

What must I do to protect them?

Find out where they are, making sure you are aware of the location and extent of sites by searching [PASTMAP](#). You should have been informed by Historic Scotland if you manage nationally important [Scheduled Monuments](#). Identify if current farming operations may be damaging sites and adopt appropriate management to protect them. Further details are stored under separate Archaeology Scotland Identification and Advice notes.

Much of Scotland's archaeological heritage lies in rural areas. This sheet is one of a series giving advice on some of the ways these important remains can be protected during normal rural land management.

GOOD PRACTICE

- Leave a margin of at least 5 metres (and more if appropriate) unploughed next to a standing monument, earthwork or a cropmark site. This buffer should extend from the external edge of the monument.
- Consider converting areas around upstanding monuments & earthworks and vulnerable cropmark sites and their surroundings in arable fields to permanent pasture. You may get payments under the SRDP if this is linked to the creation of new or extended habitats such as sowing a species-rich grassland cover .
Selecting areas that include Scheduled Monuments will score extra points if entering an [Agri-Environment Climate Scheme](#).
- Reduce the impacts of ploughing by adopting minimum cultivation methods.
- Do not select fields with buried archaeological sites for deep-rooted crops.
- Do not rear outdoor pigs on areas of known archaeological interest.
- Make sure that no deep ploughing, destoning, subsoiling, metal-detecting or drainage occurs over known buried archaeological sites.
- If using contractors make sure they avoid damaging archaeological areas.
- Historic Scotland must be contacted for any works affecting a Scheduled Monument.
- Consult your local archaeology service if you want information on buried sites or are not sure of the extent of an archaeological site.

Further information - see [Archaeology Scotland Identification](#) & [Arable Management Guides](#)
[Archaeology Scotland Case Study 1 Kinbeachie Farm, Black Isle](#)
[Archaeology Scotland Advice Note 15 Cropmarks](#)
[English Heritage Caring for Archaeological Sites on Arable Land](#)
[Historic Scotland SRDP Management of Scheduled Monuments](#)



The black marks in the subsoil are all that remains of a house mostly destroyed by ploughing. The surviving remains have been dated to around 5,500 years ago at the time of the introduction of farming to Scotland.



De-stoning can mix and destroy archaeological deposits in the soil to a depth of 300mm or more. Subsoilers going to a depth of 450mm will destroy archaeological deposits to an even greater depth.