

Protecting archaeological sites from drainage

Why does modern drainage matter on archaeological sites?

Cuts for drains can cause serious damage to archaeological deposits as they may penetrate well below the ploughsoil. The mixing of the archaeological material with topsoil and subsoils means that much of the archaeological information will be lost. The greater the density and width of drainage trenches the worse the damage will be. However even intrusions like mole drains will cause damage.

Drains may also alter the structure of archaeological sites by altering the water table. While desirable for agricultural purposes this can cause major damage to waterlogged deposits preserved in ditches and ponds.

Can drains themselves be of archaeological interest?

Before the introduction of stone and tile drains as part of the agricultural improvements of the 18th & 19th centuries, the only drains were open ditches. However occasionally well-built stone culverts may be found as parts of lades for mills or as part of major monastic or Roman sites. These are significant features worthy of record and preservation.



The tile drain on the left has been cut into the archaeological feature on the right, disturbing the older remains.



Modern tile drains shown as parallel lines have been cut into the larger rounded rectangle that marks the site of a Roman Fort. The drains will have destroyed perhaps 10% of the surviving remains as well as affecting any organic deposits that might have survived at the base of the fort ditch.

If I need to replace or repair my drains, how can I prevent further damage to archaeological deposits?

As described overleaf, best practice involves first identifying where drains are likely to have been previously cut through archaeological sites. Inserting or replacing drainage should only be done where there is no alternative option to preventing further damage. Cuts should only be inserted on the line of previous drain trenches and not cut afresh. Where there is a risk of draining significant organic archaeological deposits or Scheduled Monuments you are advised to seek professional advice.

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

- Identify where sites of archaeological interest may be affected by either existing or planned new drainage.
- Where existing drainage runs over or through a Scheduled Monument you must get consent from [Historic Scotland](#) before carrying out any repairs or replacement work.
- Where drainage threatens a major archaeological site or deposit, consider removing this area from cultivation. You should be able to get compensation for this as part of agri-environment funding.

Where it is suspected that this may include an area of organic deposits that require to be kept wet, consider blocking the drains in the protected area. You may be able to get support if this is also linked to managing nature conservation outcomes, such as restoring wetlands.

- You will need to take advice from your local archaeological adviser on sites that are not identified as SMs.

Further information - see

[Archaeology, Arable landscapes and Drainage in the Fenland of Eastern England \[2002\]](#)



This substantial stone drain was built as a lade to power a 19th century mill. Such features should be preserved wherever feasible.



Drains may help remove water from waterlogged soils but can damage buried deposits and structures..

Archaeology Scotland | Suite 1a | Stuart House | Station Road | Musselburgh | Edinburgh | EH21 7PB
0300 0129878 |

info@archaeologyscotland.org.uk | www.archaeologyscotland.org.uk
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