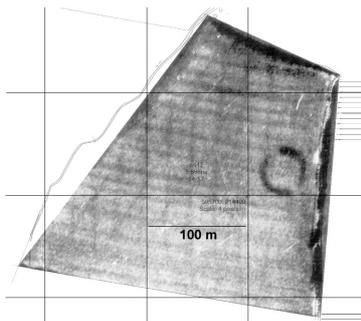


Archaeologists have revealed something of the early history of what is now Abbotts Hall Farm. Although little is visible on the ground there are several sites of archaeological interest.

**Great Wigborough Henge**



Aerial photo by Ida McMaster

The site of Great Wigborough Henge is a slightly raised area to the west of Abbotts Hall in the field called Mount Shies, revealed as a crop mark in an aerial photograph and is a Scheduled Ancient Monument. Henges are late Neolithic or Bronze Age structures comprising a ditch inside a raised bank and having one or two openings. Some have postholes suggesting that there was a wooden structure such as a round house inside the henge.

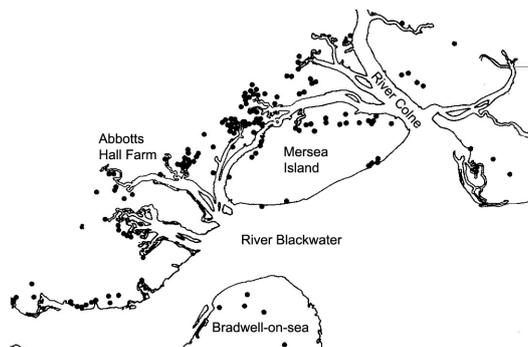
**Red Hills**

Coastal salt-making sites or salterns, from the Iron Age and Roman periods, survive as mounds of red earth, called red hills, where salt was crystallised by

evaporating water from brine in clay vessels over charcoal fires. At this time the coastal fringe of Essex must have been relatively well populated and it is likely that individual families operated the salterns. Salt was a valuable commodity for preserving food hence the origins of the word salary.

The absence of evidence of domestic occupation or alternative activities such as metalworking or the making of bricks, pottery or glass, supports this interpretation of the sites.

Over 300 red hills have been identified in Essex including several at Abbotts Hall Farm. Salt from the coast was probably used throughout Essex before being replaced by inland rock salt. Sea salt is still hand-produced on the Blackwater at Maldon and is favoured by top chefs.



Excavation of red hills generally reveals concentrations of debris such as fragments of pottery, hearths, clay-lined tanks and "briquetage".



**ESSEX**  
Wildlife Trust

The Joan Elliot  
Visitor Centre at  
Abbotts Hall Farm  
Great Wigborough  
Colchester, Essex  
CO5 7RZ  
Tel 01621 862960  
Fax 01621 862990  
E-mail  
admin@essexwt.org.uk  
Website  
www.essexwt.org.uk

Registered Charity  
No 210065

Supported by



ENVIRONMENT AGENCY

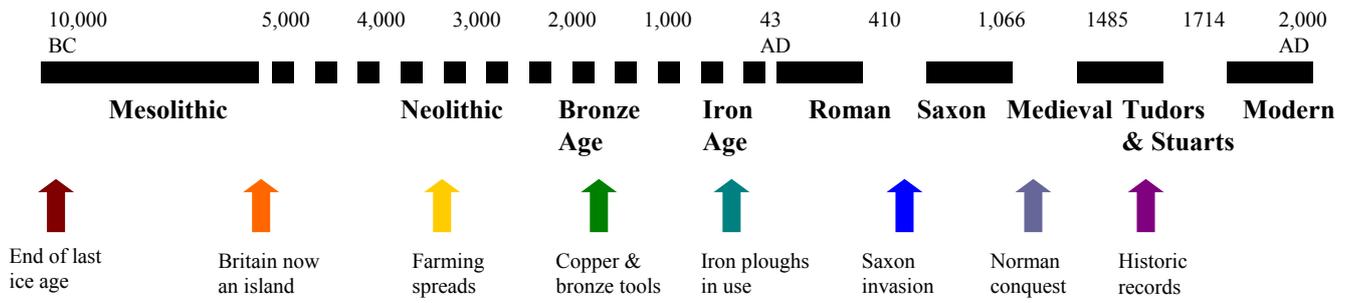


ENGLISH  
NATURE

Heritage Lottery Fund

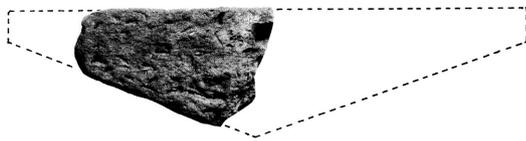


DEFRA support the  
environmental schemes  
on the farm



The term briquetage is used to describe crudely fired clay artefacts and material from hearths and often comprises fragments of the vessels used to hold brine and salt, pedestals, firebars, wedges, bars and props.

In 2001 an archaeological evaluation was undertaken at Abbots Hall Farm of the land to be flooded as part of the coastal realignment and two red hills were investigated, one of which was previously unknown. Finds included half a firebar, several fragments of vessel walls and six clay-lined settling tanks.



Colchester Archaeological Trust

trenches were dug at these sites but no subsoil features were found and the reasons for the pottery remain unknown. The material might have been deposited here from an adjacent site during construction of the sea wall.

Aerial photographs have revealed a mound (possibly a red hill), an enclosure and a linear feature of uncertain date in a field due south of the Hall and next to Salcott channel. In the same area monitoring during the digging of the creeks and breaches revealed the remains of another red hill possibly dating from the Middle Iron Age. An area approximately 10m in diameter of densely packed oyster shells and some winkle shells was also found, together with many fragments of medieval pottery (late 13<sup>th</sup>-14<sup>th</sup> century).

### Ships Lock



Essex County Council

### Saxon wooden structure

During the excavation of the new freshwater lake in September 2001 two rows of oak posts were uncovered that had been preserved by thick clay deposits. The posts were east-west oriented, approximately 3m apart, stretching across part of a former tidal creek. Nearly 100 posts were finally exposed.

Radiocarbon dating of a wood sample indicated a late Saxon origin, probably within 50 years of AD 920. It was not possible to identify the exact nature of the structure but it may have



Colchester Archaeological Trust

been a fish trap, jetty or a small bridge across the creek. Most of the posts were left in place and covered with a protective layer of clay to help preserve them when the lake was filled.

### Other finds

Apart from the briquetage, significant concentrations of Roman pottery (sherds) have been found at two sites. At one of these there was also a cluster of Medieval pottery. Trial

Ships Lock appears on the 1st edition Ordnance Survey map of 1881 but no additional information about the site has been uncovered. It might have been a dry dock for boat repairs, a Dane encampment, or most likely a place where sheep were penned before being transported to market by boat.

“Ships Lock” may be a corruption of “Sheeps Lock”. It is possible that the site was originally a salt-working site that survived as a mound and was then converted into a sheep pen. We know that animals and hay were taken off by boat from this point right up to the 1950s before the roads were improved.

### Modern Finds

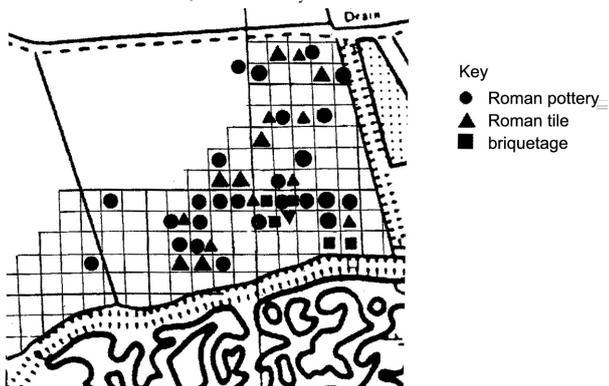
During all the archaeological investigations at Abbots Hall pieces of post-medieval and modern pottery and peg tile were found, which is typical of Essex farmland. This is generally interpreted as “manure scatter” material, brought out with farmyard manure and spread onto the fields by accident, rather than arising from below ground archaeological sites.

## Unlocking history

Several different archaeological techniques have been used at Abbots Hall Farm in order to identify and record any finds, features or deposits disturbed by the groundworks.

### Field walking

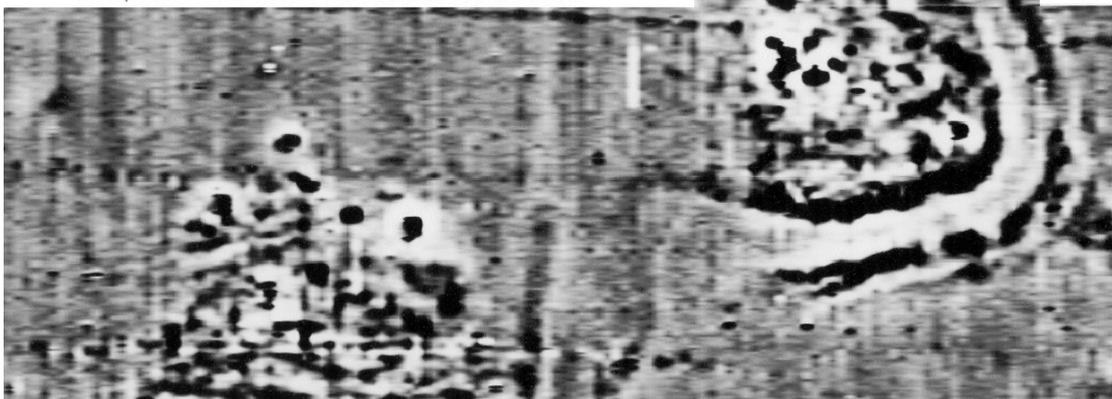
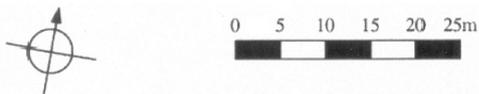
The aim of the field walking survey was to collect and plot surface finds to establish whether there were any significant clusters that might highlight the position of previously unknown archaeological sites. The standard method for field walking in Essex is to collect finds in 2m-wide corridors over a 20m grid. The grid base points are located by the GPS satellite location system and then boxes marked out using tape and canes. A numbering system is used to locate kilometre squares, then hectare boxes, and finally 20m boxes.



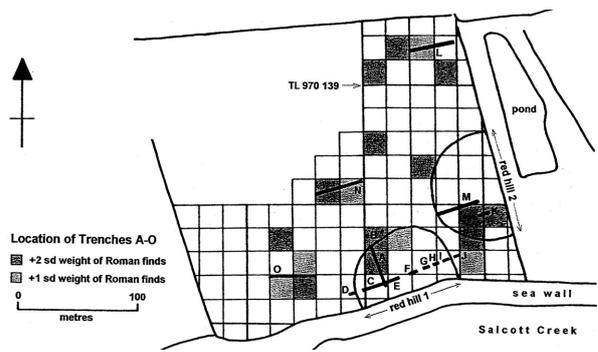
Two field-walking evaluations were carried out at Abbots Hall Farm to cover the areas to be flooded for the fresh water lake (5 hectares in October 2000) and the saltmarsh recreation (24 hectares in October 2001). Finds are classified by period, such as Prehistoric, Roman, Medieval, Post Medieval and Modern, and class of material, such as flints, tiles, pottery, and briquetage. Different types of finds are plotted on maps showing the individual boxes. Significant clusters of material can then be identified and investigated further.

### Trial trenching

If field walking identifies significant clusters of archaeological material, the next stage of investigation is trial trenching. 5 trial trenches were dug on the site of the lake and 18 on the coastal land. These are typically 1.5m wide, up to 1m deep and up to 30m long, and are cut by machine in a series of horizontal layers.



D & A Black



Colchester Archaeological Trust

Trenching produces much more precise results than field walking but can only be used in a small area. The trenches helped to identify the extent of the red hills and revealed several interesting features, most notably the six clay-lined settling tanks.

### Archaeological watching brief

During the excavations for the lake, creeks and sea wall breaches archaeologists visited the site periodically to check spoil heaps for artefacts, record and remove finds, and record soil layers and features. Finds were washed, marked and bagged according to their context. All finds are lodged with Colchester Museum.

### Geophysical survey

Geophysical surveys allow archaeological investigation without digging. The method most commonly used is to identify variations in the earth's magnetic field using a magnetometer. The strength of the Earth's field is some 50,000 nanoteslas (nT) and changes as small as 2 or 3nT can be detected. These can be caused by silted up holes or ditches, foundations of walls, fired clay, or ferrous metal. The readings are processed by computer to produce images showing variations as shades of grey.

A magnetometry survey has been carried out at Abbots Hall by two local amateur archaeologists. It revealed the extent of two red hills and the presence of an unexpected feature at one of them, possibly a raised protective bank between the working area and the shore.

The image shows the normal magnetic field as grey, higher readings as black and lower as white. The fired clay scattered throughout the red hills is magnetically very active. One red hill continues under the modern sea wall (beyond the bottom edge of the image) but the one on the right can be seen in its entirety and is about 25m in diameter.

The image also shows evidence of the painstaking process used to produce it as measurements were made every quarter meter along parallel lines a meter apart over the whole 7000 square meter area.

Colchester Archaeological Trust

## Metal Detection

Metal detectors can be used to find metal objects, at depths of up to 12 inches for large pieces. The majority of finds are Victorian arising from the spreading of "night soil" shipped out from London for use as fertiliser on the grazing land.

A local enthusiast has undertaken metal detection surveys of the lower fields at Abbots Hall Farm. These have located many metal objects that are commonly found on farmland including harness decorations, straps, spurs, rambler bells (used on sheep), tokens, lead weights and large numbers of coins, buttons and nails. Some of the weights may be Roman but no Roman coins have been found to date.

The most valuable find has been a silver ring brooch about 20 mm in diameter, which has been dated as 1270 to 1330 AD and classed as treasure trove. The constriction on the right shows the position of the missing pin.



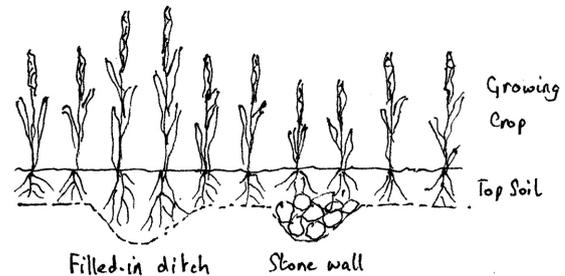
## Dowsing

More mysterious than magnetometry or metal detection, dowsing is also used by enthusiasts to search for buried archaeological features. The dowser holds a metal rod, bent though a right angle, in each hand and walks over a site looking for places where the rods swing in different directions. Dowsers believe that they are able to distinguish between different types of buried features, such as ditches, banks, and the foundations of buildings, as well as watercourses.

An amateur dowser believes that he has located the site of an older circular structure near to the site of Wigborough Henge but, to date, there is no corroborating evidence to convince the sceptical.

## Aerial Photography

Aerial photography is invaluable for identifying archaeological remains that are not visible at ground level. Since the 1970s county archaeologists have identified many soil and crop marks and remains of oyster pits, boats and decoy ponds in the mudflats and marshes during their annual aerial survey programme.



Soil marks formed by differently coloured soil, as in the red hills, may show up when fields are ploughed. Cropmarks, such as Wigborough Henge, are light and dark marks visible in growing and ripening crops. These may be caused by buried stone walls or roads, or by pits, ditches or gulleys that affect the moisture level and hence the growth of grass and cereal crops. Marks show particularly well during dry summers but it must always be remembered that they can also be produced by geological factors, the weather, agricultural machinery and tethered goats!

## Excavations of cropmarks

County Archaeologists hope to excavate a section of the cropmark of Wigborough Henge while the land is lying fallow. Such an investigation takes a team of 2 or 3 people about 2 weeks. Topsoil is removed by machine to expose the subsoil and the exposed surface is then cleaned by hand using hoe and trowel, revealing the cropmark ditch as a darker material. A small segment would then be excavated by hand, possibly to a depth of 1m. Following recording of the excavated section it is backfilled and the topsoil replaced by machine.

In the way of archaeology, this might reveal a unique henge, some interesting old rubbish or nothing at all!

---

### Further Information

Tony Robinson and Mick Aston, 2002, *Archaeology is Rubbish*, Channel 4 Books

David Strachan, 1998, *Essex from the air - Archaeology and history from aerial photographs*

Colchester Archaeological Group, 1990, *The Red Hills of Essex*

Anthony Clark, 1996, *Seeing Beneath the Soil*, B T Batsford

Essex County Council, 1999, *The Essex Landscape - In search of its history*

Essex County Council, 1996, *The Archaeology of Essex*, Proceedings of the Writtle Conference

Essex County Council, 1995, *Archaeology of the Essex Coast*, Vol.1: The Hullbridge Survey, East Anglian Archaeology Report 71

Colchester Archaeological Trust:

Report 161, 2001, *A fieldwalking and trial-trenching evaluation at Abbots Hall Farm*

Report 211, 2001, *Archaeological watching briefs on a new lake and counterwall trench at Abbots Hall Farm*

Report 213, 2002, *An Archaeological watching brief on new creeks and the breaching of the sea wall at Abbots Hall Farm*