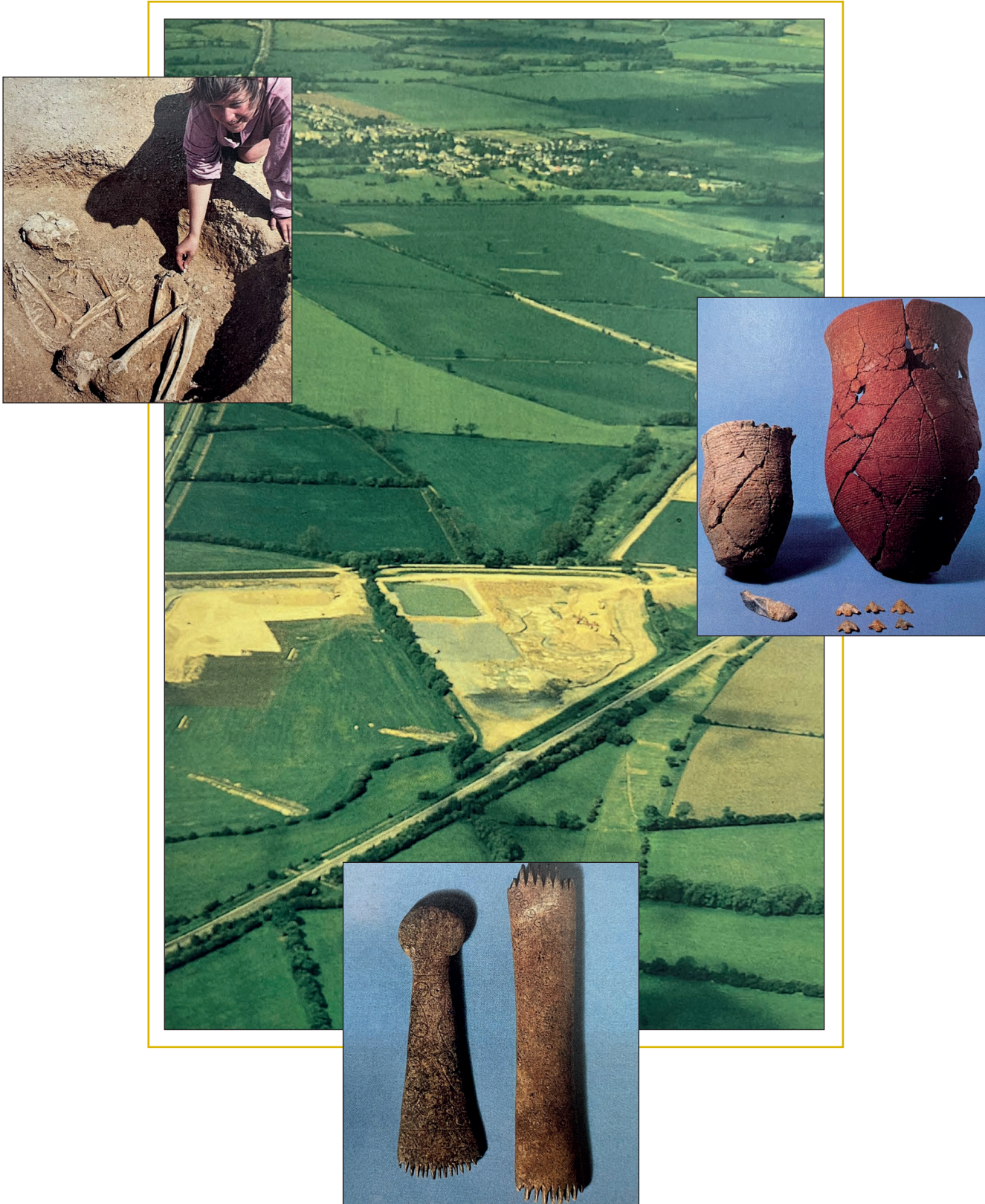


# YARNTON'S UNFOLDING PAST





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# YARRANTON'S UNFOLDING PAST



Archaeological sites in the Cassington gravel pit first came to light in autumn 1989, just before ARC Southern began digging. Since that time the Oxford Archaeological Unit has been uncovering the remains of over 5,000 years of human settlement and use of the landscape. This work has been undertaken with English Heritage funding, the co-operation of ARC Southern and the kind permission of Worton Farms Limited.

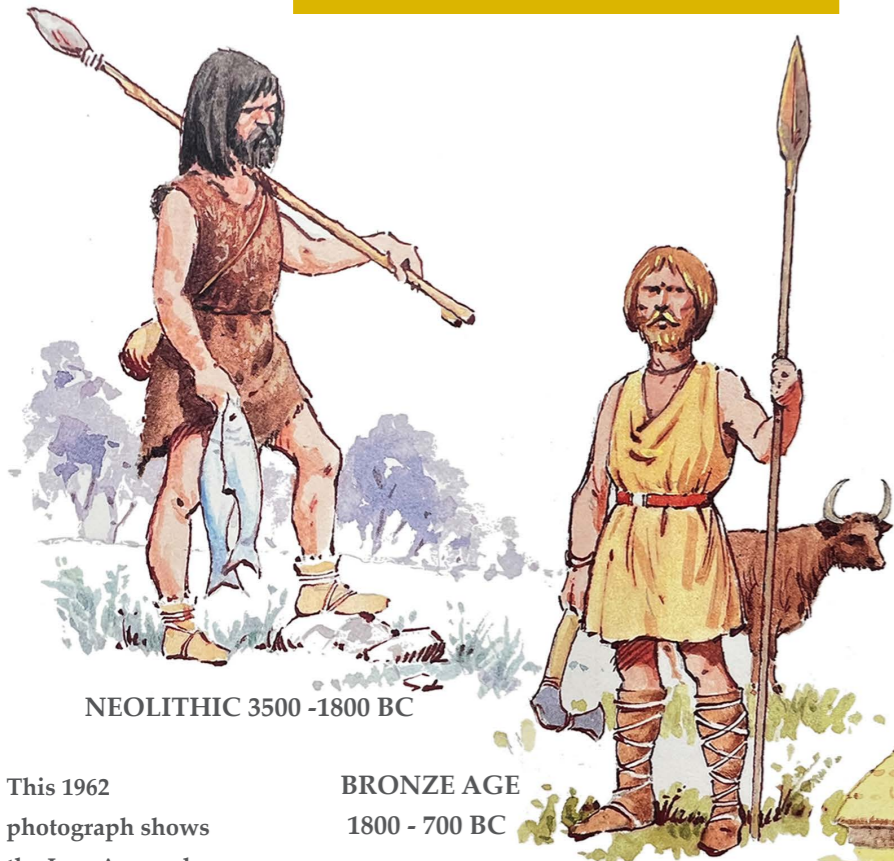
# The oldest village in England?

The floodplain slowly became more waterlogged and by 700 BC it had to be abandoned for habitation. A small village-like settlement was established on higher ground, which has been occupied from that time until today, moving gradually across the gravel terrace through time.

This record of past activity is unparalleled in the country and presents a wonderful opportunity to study rural life through the ages.

The topography has changed dramatically since the time of the earliest settlers. At that time the area would have been densely wooded (with oak, field maple, hazel and alder) but clearings would have been made in which animals could graze.

Small river channels flowed across the floodplain, creating islands which were favoured sites for occupation.



NEOLITHIC 3500 -1800 BC

BRONZE AGE  
1800 - 700 BC

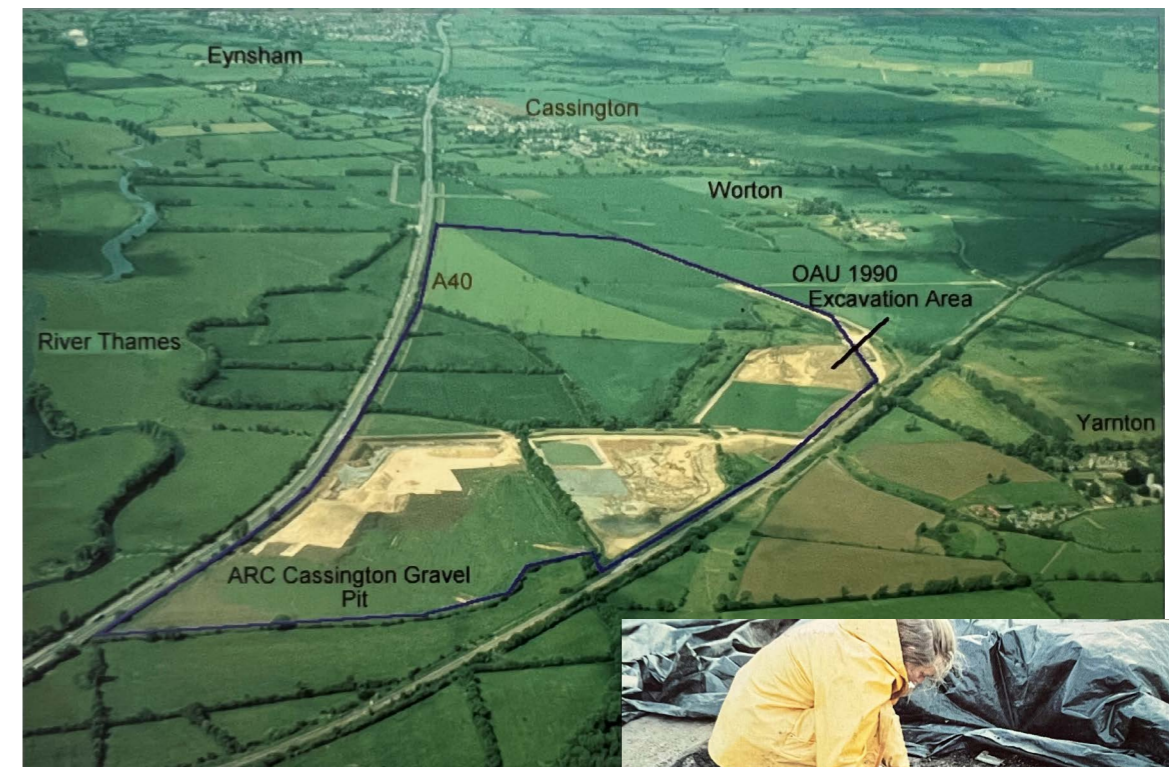
The earliest inhabitants were pastoralists and probably used the area only seasonally, but by 1500 BC people had become more settled, building small houses and grazing their animals on the broad floodplain of the Thames.

IRON AGE  
700 BC - AD 43



This 1962 photograph shows the Iron Age and Roman sites. It was the first indication of such sites in the area.

Cambridge University Collection



This aerial photograph was taken just a few years ago. Compare it with the computer created scenes on pages 5, 7 and 10.



Cleaning Bronze Age coppiced and worked wood from a stream channel.



ROMAN 43 - 410

It is hoped that the pollen will help to establish the date from which the famous hay meadows flourished on the meads north of the River Thames.

ANGLO-SAXON  
410 - 1066

There is evidence of one of the earliest-known ecological disasters in the country. Widespread tree clearance allowed much more water to flow into the river system, contributing to the rising water table by 1000BC. Roman farming was increasingly intensive and ploughed soils washed from the slopes, filling the stream courses and covering the lower ground. This began the levelling and flattening process which continued until about 400 years ago.

MEDIEVAL  
1066 - 1550

# The earliest farmers

Neolithic and Bronze Age  
(3500 - 700 BC)

The first people known to live at Yarnton were the earliest farmers of the British Isles. Around 5,500 years ago they cleared the forests which covered the area and grazed their animals, grew small amounts of wheat and gathered fruits and nuts.

The water table was much lower than it is today and they lived in small and flimsy wooden structures on low-lying areas next to stream channels which crossed the floodplain of the River Thames. They may have moved seasonally with their animals in search of good pasture. They did not have metal and used flint tools as knives, scrapers and arrowheads. Some of these tools have been very skilfully crafted.

They were the first people to make pottery vessels and many fragments have been recovered from the excavations. Although pots were quite crude and poorly fired, they were often carefully decorated.

Flint arrowheads and (right) flint knives and scrapers.



Early decorated pottery.



By the Bronze Age (around 1800 BC) people seem to have settled more permanently and built small circular houses out of wood and wattle. Each house was surrounded by a cluster of postholes (tethering posts and animal pens) and pits (for storage, rubbish disposal etc.). Cooking areas and wells have also been found.

It is known that they used bronze tools because wood preserved in the channel had been cut with bronze axes, but no trace of bronze has been found on the site.



The remains of a Bronze Age house and an artist's impression of how it might have looked.



These tools were probably very valuable; if you lost one you looked for it and if you broke it you melted it down to make a new object.

Ceremony and ritual played an important part in the life of the early inhabitants. Many of the finest objects of pottery and flint were carefully placed in pits as offerings. The charred remains of foodstuffs are found in these deposits, particularly hazelnut shells, but also cereals such as wheat and barley. These may be from feasts.

Remains of charred bread were found in one pit which contained many flints, including a beautifully-made flint knife. Barley grains can be seen within the blackened lump; the earliest-known example of burnt granary toast!



The aerial photograph has been re-drawn on computer to show how the same area probably looked 3,500 years ago.



Excavating the 4,000-year-old Beaker burial.

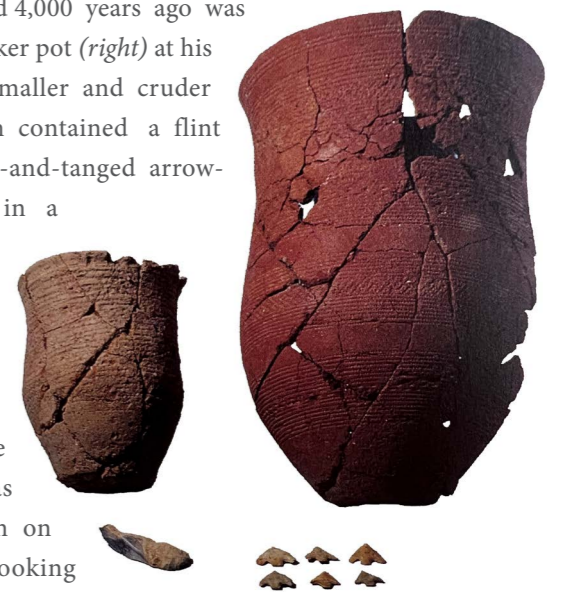
One area of the site seems to have been laid out as a processional way, and decorated pottery and flints such as arrowheads and knives were discovered, scattered over the ground surface.

Ancestors were revered and considerable effort was invested in the burial of the dead. At around 3500 BC a ditch was dug forming a large enclosure 60 metres by 30, where bodies

were probably exposed before burial. This area became a focus for burials in later periods down to around 1000 BC.

A man who died 4,000 years ago was buried with a fine Beaker pot (right) at his feet; it contained a smaller and cruder vessel which in turn contained a flint scraper. Six barbed-and-tanged arrowheads were found in a group beneath his hip, as though they had lain within a leather pouch.

Round barrows or tumuli (left) were also constructed as burial mounds often on higher ground overlooking the floodplain.



# Moving to higher ground

Iron Age (700 BC - AD 43)

An artist's impression of an Iron Age pot, based on fragments found at the site.



Around 2,700 years ago the floodplain became too wet for permanent habitation and small villages were established on the higher gravel terrace, both at Yarnton and Worton. These settlements are the true ancestors of the modern villages.

The Iron Age inhabitants built circular wooden houses with high conical roofs, as in the reconstruction below. Cereal cultivation became more important and deep pits were excavated in which to store grain. Modern experiments have shown that if these pits are sealed they function well for storage.

Animals were reared for meat, dairy produce and fleeces and weaving was an important craft activity. Beautifully decorated



This dog was probably the subject of a ritual offering or sacrifice.

The Iron Age people of Yarnton would have lived in houses like the one in this reconstruction at Butser Iron Age Farm, Hampshire.



weaving tools (*below left*) were used to comb out fibres before spinning. Animal bones (*below right*) were used to make a wide variety of objects, as well as weaving implements. Horse-riding bits (such as the cheek piece in the illustration), knife handles and leather-working tools have been recovered.



Evidence of small-scale metal working is found for the first time and tools would increasingly have been made out of iron, such as the complete adze head above.

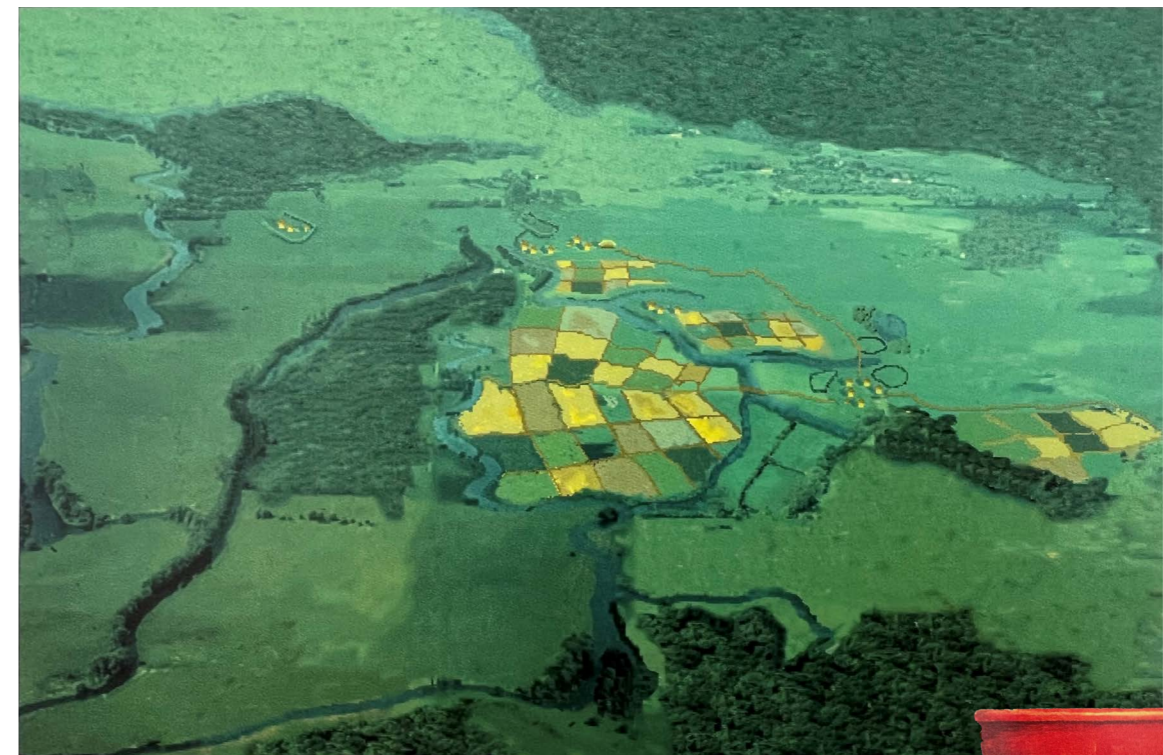
Ritual offerings continued to be made, commonly of animals.

# A new way of life

The Roman period (AD 43 - 410)

Throughout the Roman period the villages retained their rural character but the effects of a new way of life slowly became apparent in the sorts of pots they used and the more varied diet they adopted, as well as the increase in jewellery and other traded items on the site.

Vessels began to be made on a potter's wheel and some pots were made in small kilns in Yarnton itself.



Widespread tree clearance has taken place over the centuries and the Romans have established a pattern of ploughed fields.

Farming practices became more intensive and geared to cereal production.

Roman ploughed fields have been located even down on the floodplain and modern fields are scattered with Roman finds which came out of their settlements among manure used as fertiliser.



A pot like this would have been made on a potter's wheel.

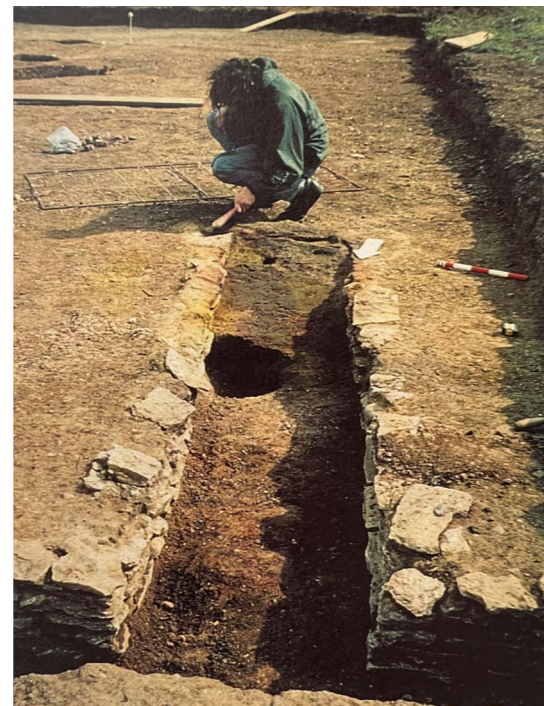


Excavating a Roman pottery kiln... and what it might have looked like at the time.



**The Roman period  
(AD 43 - 410)**

This corn drying oven (*right*) may have been used to malt wheat for beer.



Part of the Roman cemetery has been excavated. In the early Roman period cremation was most common and the beautiful brooch shown below was found mixed with ashes in an urn.

Later Roman burials were interred and sometimes placed in a very strange manner.

This woman (*left*), buried with her head by her feet, is not unique, but the custom behind her burial is not known. Her dog was buried over her knees.



**A dramatic  
change in  
lifestyle**

**The Anglo Saxons  
(AD 410 - 1066)**

The collapse of the Roman empire and the arrival of Anglo-Saxon settlers heralded a dramatic change in lifestyle. It is uncertain, at the moment, whether the occupants of early Saxon Yarnton and Worton were native Britons or Saxons. They lived in more rudimentary houses, in much less organised settlements where few material possessions are found.

By contrast, rich objects are often found in their burials, though the evidence of this is limited at Yarnton and Worton as both their cemeteries have been destroyed by Victorian gravel workings.



An early Saxon house, showing sunken floor and (*below*) how it might have looked at the time.



Saxon settlements dating to between 650 - 900 are rarely found and the mid-Saxon village at Yarnton is unique in Oxfordshire. Large timber halls, around 17 metres by 6, were constructed within enclosed areas. They may have resembled simpler farmhouses or have been grand and elaborately carved structures; sadly all the timber has rotted away.

At this time the sorts of crops grown changed to include more barley and oats as well as peas and beans. Flax was being grown for cloth; the fibres were softened (retted) in ponds on the floodplain.

There is some suggestion from the animal bones that horse rearing may have been an important occupation at this time, as it became in the 18th century when Yarnton horse-sellers regularly attended the Oxford market.

An excavated Saxon timber hall (*left*) and (*below*) how Yarnton may have looked at the time.



An early Saxon glass bead.



Saxon dress ornaments - a decorated pin and fittings from a belt.

# Revels and riots

The medieval period  
(1066 - 1550)



The village has expanded and there are ploughed fields to the north and pasture land to the south and east. Note the ponds where the stream channels used to run.

By the medieval period, the village of Yarnton, or Eardington as it was then known, had moved to the area around the church and the old manor house. The village is recorded in the 1086 Domesday Book with its 26 tenants, 10 hides of ploughland, pasture, meadow and fish ponds. The number of tenants had grown to 48 by 1279.

Early records and field observations show that the ploughed fields lay north (The Ruttons) and north west of the village, with pasture on the floorplain south and east.

The medieval custom of hay allotment survived the centuries, as shown by this 1917 photograph. In fact, it continued until 1978.

Centre for Oxfordshire Studies



Hay meadows lined the banks of the Thames and these fields would have been a mass of flowers in May and June before the annual mowing.

Each meadow was divided into 13 lengths known as lots, and these were allocated to the meadmen by means of drawing wooden balls from a bag. The rosewood balls still survive, inscribed with the names of the 13th century meadmen.



The church and old manor house were at the centre of Yarnton, then known as Eardington.  
Oxford Air Training School

Mowing was concluded by a fair, which sometimes got out of hand, and the 'revels and riots' were finally stopped by the vicar early in the last century.

The meads were open for common grazing after the parish feast of St Bartholomew on 24 August. Meadow allotment continued until 1978; by examining the pollen from a silted-up stream course north of Oxey Mead, archaeologists hope to work out when hay meadows were first used in the area.

# How archaeologists work

Archaeological sites in this area were first discovered by studying photographs taken from the air. In dry summers areas of more moist ground - for example where people have dug ditches and pits in the past - will bear thicker and taller crops which will ripen more slowly and this can be detected from above.

The archaeologists then walked over the ploughed fields, collecting objects which had been disturbed and brought to the surface.

Sampling silts to look for pollen, insects, snails and plant remains.



Studying the site records to analyse the findings.

by modern cultivation. Careful plitting of these finds can locate early settlements.

Surveys using geophysical instruments, which measure the differences in magnetic properties of soils buried beneath the ground or the resistance to electric current passed through them, can also help to detect areas which were inhabited in the past.



Carefully cleaning an excavated skeleton.

On some soils these techniques are not successful and trenches are often dug to locate areas of early activity creating fields covered by a grid of long thin machine-dug sections.

When important sites are found, the modern ploughsoil is usually removed by machine. Then starts the long, slow process of excavating all the remains by hand, which is done in reverse order to that in which they were deposited, as in a game of Chinese sticks.

Trowels are often used, but delicate objects must be cleaned with toothpicks and brushes. Ditches can be carefully dug with mattocks and shovels.

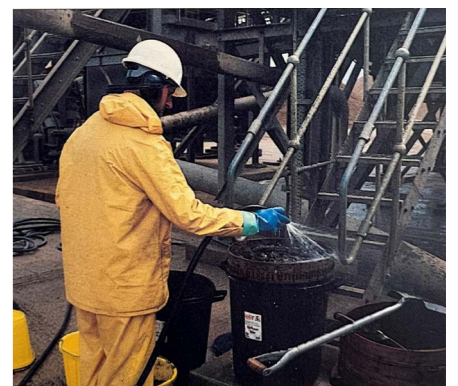
Many soil samples are taken to sieve for small objects and bones (right) and to mix with water allowing carbonised seeds and other light items to float.

All the objects found are carefully cleaned and marked and are examined by specialists.

They make an important contribution to understanding not only what people used on sites but how they ate, how wealthy they were and how far they traded with the outside world. The plans and site records are also studied and finally everything is brought together in an excavation report.



The slow process of excavation.



# Gravel extraction and the countryside

Protecting our heritage has its price - the cost to the gravel industry between 1991 and 1993 amounted to more than £10 million. But it clearly demonstrates a willingness to balance society's needs for the future with a commitment to safeguard the past.

Quarrying is an age old industry. Sand, gravel and crushed rock form the foundation - and a great deal more - of our society. The industry's job is to get these vital raw materials out of the ground in the most sensitive way possible and ensure that what is left behind is of benefit to the community.

The archaeological treasure unearthed at Cassington is one of a series of remarkable discoveries made in ARC gravel pits which highlight the important part that the gravel industry has to play in both initiating and supporting archaeological research.

In 1994 the shin bone of 500,000-year-old Boxgrove man was discovered at Eartham pit in West Sussex. Earlier that year a 250,000-year-old mammoth tusk was found at Stanton Harcourt in Oxfordshire, enabling scientists

to identify a hitherto unknown warm interglacial period.

And in 1983 the largest rural Roman villa complex in Western Europe was uncovered at ARC's Stanwick pit near Northampton.

ARC's gravel extraction has also led to the discovery of a host of smaller, but nonetheless significant, archaeological treasures.



Careful restoration is a requirement of any new planning approval and there are many potential options for restoration that enable useful amenities to be created, such as nature reserves, agricultural or building land, recreational areas or waste disposal sites.

Old quarries and gravel pits are particularly valuable as wildlife habitats and many of today's Sites of Special Scientific Interest are former quarries.

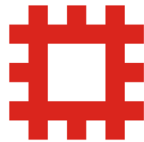






ARC Southern is the largest of four regional companies which form the aggregates division of ARC Limited, a subsidiary of Hanson PLC. The company runs stone quarries, sand and gravel pits, depots and wharves and a network of coated roadstone and concrete and mortar plants. There is also a specialist road surfacing contracting division.

**ARC Southern, Regional Office, Stoneleigh House, Frome, Somerset BA11 2HB**



English Heritage, which is funding the excavations at Yarnton, is the national body responsible for the nation's heritage. It funds excavations and research into prehistoric and historic monuments, buildings and landscapes and provides advice on the protection and management of this cultural resource. It looks after over 407 historic properties throughout England which are open to the public.

**English Heritage, 23 Savile Row, London W1X 1AB**



The Oxford Archaeological Unit is an educational charity which was set up in 1973. It is an independent organisation and has grown to become one of the largest archaeological practices in the country. The unit undertakes a wide range of archaeological and historical work, including evaluation and excavation for research and in advance of development, desk-based appraisal and documentary research and building surveys. It also provides a variety of educational services.

**Oxford Archaeological Unit, Janus House, Osney Mead, Oxford, OX2 0ES**



Worton Farms Ltd owns the Yarnton gravel extraction area and operates next to it as traditional farmers and runs a green waste composting, worm farm and general waste recycling business. It has revived and enhanced the traditional method of composting organic matter for use in the soil as a vital source of nutrients and humus for farmers and gardeners. The company has developed, in collaboration with local authorities, a range of recycled garden composts. Due to the increasing cost of landfill and the concerns over this method of disposal, commercial composting or garden by-products has become the desirable alternative - beneficial for both the garden and the environment.

**Worton Farms Ltd, Cassington Oxford, OX8 1EB**