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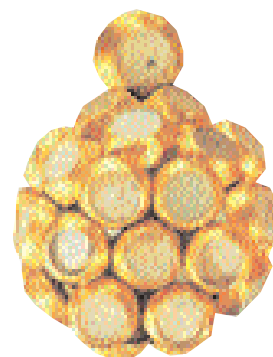
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The cover picture shows the interior of the Pantheon in Rome. The greatest of all surviving Roman temples, it was built by Hadrian c. AD 126.

The Pantheon must rank with the Parthenon and Saint Sophia as one of the landmarks in architectural history. It was dedicated to the seven planetary deities and was in effect an architectural simulacrum of the all-containing cosmos. Externally, it is a building of no great account, but internally the Pantheon is unsurpassed, and it was as an interior that the structure was conceived. One of the great achievements of Roman architecture, its survival is a miracle.

Visit this incredible building and see areas not open to the public with Dr Paul Wilkinson and the Kent Archaeological Field School annual club trip in May.

Picture credits: With thanks to all picture suppliers including; p.3 BBC Books; p.5, 6 Italian Tourist Board; p.9 Orian Films; p.10, 11, 13 Portable Antiquities Scheme; p.14, 15 Trustees of the British Museum; p.16 *Time Team*; p.23 English Heritage; p.24, 25 Tempus Books; p.30, 31 Bath Tourist Board; p.31 Newcastle upon Tyne Tourist Authority.

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FIRST WORDS

The Field School courses take place in an oast house dating back to about 1916. The building was gutted by fire about ten years ago and was bought by Paul and Louise Wilkinson, who rebuilt it over a six-year period, for some time whilst still working in London. The ground floor is now a large classroom with all of the modern teaching aids.

Behind the oast are some 30 acres of ponds, meadows and marsh, all of which were once part



A typical oast house (above) showing the hops from the surrounding fields being unloaded into the oast to be dried in the oast towers. Our oast was so badly damaged that it we had to demolish the building down to just above the doors and rebuild using the same bricks (right). Below can be seen the difficult task of fitting the cowl.



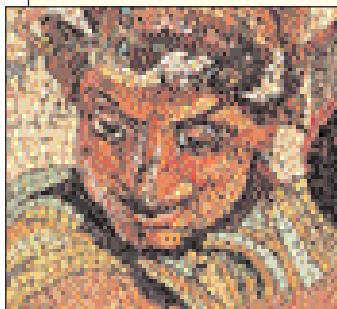
of the land belonging to Faversham Abbey. When the abbey was dissolved in the 16th century, by King Henry VIII, the school that was attached to the abbey was retained and Henry's daughter, Queen Elizabeth I, gave part of the lands to the school. These lands were called School Farm, and were in the ownership of the School Trust until the burnt-out oast was bought by the Wilkinsons. As can be imagined, there was very little paperwork to aid the transaction, and it took over two years to complete the purchase of the lands. The oast is now almost finished. The white cowls (see bottom), were installed late last year.

With the oast came a black and white cat who we called 'Daisy'. Daisy quickly transferred her abode from the barn to the oast where she lorded it over us and the students. Sadly, she had trouble with her lungs and died last year. She was so much missed that it was only recently that we adopted two wonderful cats, Rebecca and her son, Snowy, from the Celia Hammond Trust, on the advice of two KAFS members. Both cats have now settled into the outbuildings, but Rebecca is already showing signs of moving into the oast.

We hope to welcome you to the oast this year.
Dr Paul Wilkinson, Director KAFS.

FIRST WORDS

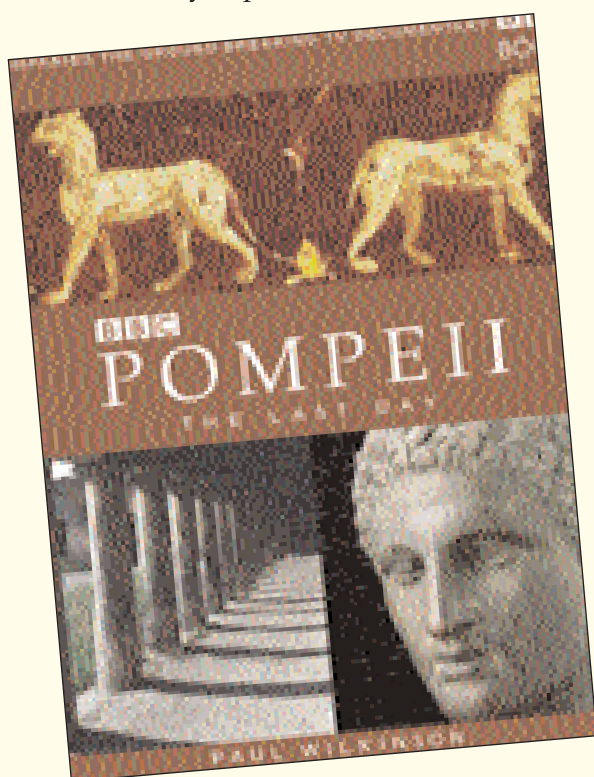
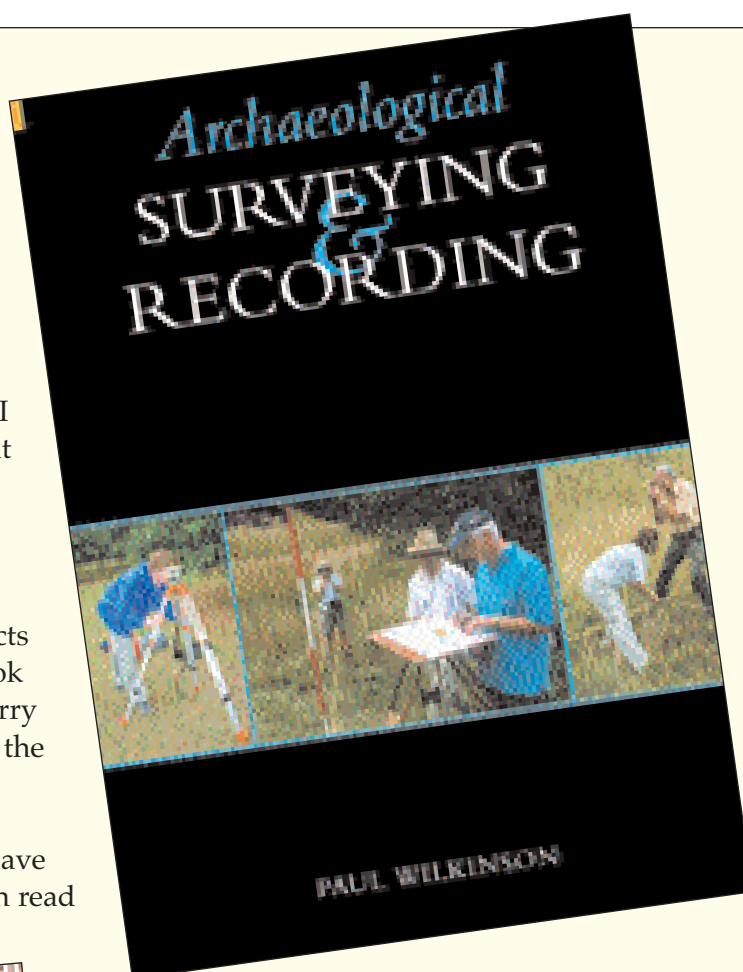
New Books by Paul Wilkinson



March began with the completion of my book about some of the vital practical archaeological techniques that I teach students at

the Kent Archaeological Field School each year, surveying and recording.

Archaeological Surveying & Recording is an accessible handbook for anyone wishing to understand these vital aspects of archaeology. It is a very practical book with clear instructions about how to carry out various techniques and how to use the appropriate equipment. Detailed illustrations have been especially commissioned by me for the book, as have the photographs. Each chapter has been read and checked by experts at



English Heritage and the Museum of London Archaeological Services (MoLAS).

Last October, the BBC broadcast a lavish docu-drama about Pompeii; it attracted over 10 million viewers. My accompanying book, *Pompeii: the last day*, was well received and it reached number three on the bestseller list.

In *Current World Archaeology*, Neil Faulkner says: 'What is the best book to read for a basic introduction to Pompeii? Paul Wilkinson has just produced *Pompeii: the last day* ... the pages which reconstruct the last hours and moments of the victims are especially memorable ... Wilkinson offers a sensible one-day tour of the site for the independent traveller, with summary notes on each of the key monuments to be visited'.

But why not visit Pompeii with Paul Wilkinson this year? See page 6 for details.

ROMAN HOLIDAYS

We wish to introduce you to our new venture, Roman Holidays. Many of you have already joined us on Kent Archaeological Field School trips abroad, and now we are offering you the choice of more tours each year.



The trips will follow the same format as before. Paul and Louise Wilkinson will select some of the best archaeological sites in each area and devise an itinerary that will be both informative and enjoyable. The tours are devised and led by Paul, a leading archaeologist and director of the Field School. Paul combines commercial archaeological work with educational work at the school. So he can answer the practical questions that many ask when visiting ruins, such as how would a structure have been built? How would a series of commercial buildings have functioned? What do those indents beside each wall mean? A practical archaeologist can unravel the secrets of the past by looking at the evidence etched in the ruins. Paul is the author of the BBC book: *Pompeii: the last day* (see page 3).

Our trips are also tremendous fun. We always make sure that everyone enjoys the social aspects of the holidays, from a rooftop lunch on the Capitoline Hill, to a Roman-style meal on the site at Glanum; from lunch in the gymnasium of the Forum baths in Pompeii to a Provencal meal beside the Pont du Gard. Many lunches are especially arranged exclusively for the group at archaeological sites. So caterers will serve you Italian delicacies as you look across the ruins of Herculaneum, or you may sit on Roman stones at the castle at Baiae eating an alfresco buffet, brought to site just for you.

As an archaeological school we are also able to arrange access to some special sites, not usually open to the public. In Rome we have been shown

into the locked rooms behind the main chamber of the Pantheon, and we have seen the aqueducts that supplied water to Pompeii, the starting point of Robert Harris's bestseller, *Pompeii*.

All our trips are made with Thomson, one of the largest travel firms in the country, which has ABTA and

ATOL protection. Working with Thomson means that we can offer you an exclusive trip created by an archaeologist, with the security of travel arrangements by an established organisation.

Details for tours are on the following pages and on our website: www.kafs.co.uk, or see our new site: www.romanholidays.co.uk. To book, simply fill in the form below and send it to us with a deposit of £225 per person per trip made out to Roman Holidays and insurance cheques made out to Thomson, £16 per person for those under 65 years old and £18 for over 65s.

ROMAN HOLIDAYS BOOKING FORM

Please return this completed booking form with the deposit and insurance cheques to: Roman Holidays, School Farm Oast, Graveney Road, Faversham, Kent ME13 8UP

I/we wish to book places on the trip(s) to
.....
on (dates).....

I/we enclose a non-refundable deposit of £225 per person per booking, made payable to Roman Holidays. Total enclosed

I/we would like a double/twin/ single room* (*single supplement applies). We would like a junior suite at Hotel Graal (Pompeii trip, supplement applies) YES/NO

I/we would like to take out Thomson insurance @ £16 per person under 65, £18 for over 65s and enclose a cheque made payable to Thomson for.....

Full names of all travelling as they appear on your passports

Address

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Postcode.....

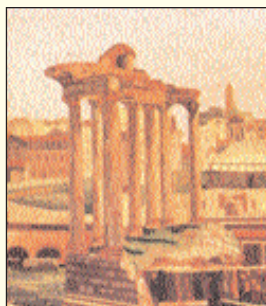
Tel. No.

Date of Birth

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IMPERIAL ROME

MAY 8TH TO 14TH



Rome, the Eternal City, was the centre of one of the greatest empires in history and ruins of its past may be found in many of its streets and gardens. Join Dr Paul Wilkinson on the Kent Archaeological Field

School club trip that brings the glory of Imperial Rome to life.

Saturday: BA flight Heathrow to Rome. In the afternoon, we go to the Pantheon, the lively Piazza Navona, the site of the Stadium of Domitian, and return via the Trevi Fountain.

Sunday: A tour of the Colosseum, venue for some of the most spectacular games in the Roman world. Then, in a specially arranged visit to the Golden House, we will see some of the magnificent rooms built for Nero's opulent banquets. In the afternoon, we will tour the Roman Forums and the Via Sacra, finishing at Trajan's Column.

Monday: A day trip to the Roman port of Ostia (right), entry point for the riches of the Empire that would be taken up the Tiber to Rome. Our tour will include the theatre, the baths and the Forum.

Tuesday: A coach tour past the Vatican and Castel Sant' Angelo will end near Tiber Island. We will walk over the last working ancient Roman bridge in the capital, the Pons Fabricius. Next we will look at the excavations at the Theatre of Marcellus, before we ascend Michelangelo's steps to the Capitoline Hill to visit the museum. The tour will end here after lunch in the rooftop restaurant.

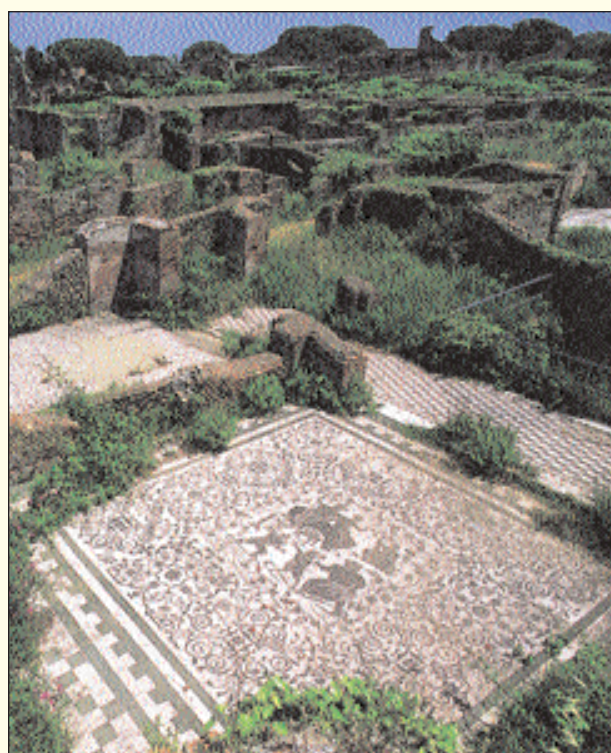
Wednesday: Our day begins at the Arch of Constantine, one of the best preserved triumphal arches in Rome. Then we will visit the wonderful palaces and temples of the Palatine Hill and look at the site of the Circus Maximus. After lunch, we will take the coach out of Rome along the Appian Way, built in 312 BC, to the vast Baths of Caracalla. Finally, we visit the the maze-like catacombs built as

multi-storey graves by the early Christians.

Thursday: A day trip to Hadrian's Villa at Tivoli will reveal the largest and most expensive villa ever built in ancient Rome. Hadrian designed it himself, having been inspired by some of the sites he had seen in his journeys through Greece and Egypt.

Friday: A tour to the Baths of Diocletian and the wonderful treasures of the National Roman Museum, before returning home.

Cost: Twin/double room £1,341 per person; Single room £1,581 per person.



Details and what the price includes:

- * Six nights bed, breakfast and three-course evening meal in the 4-star Imperiale Hotel
- * Lunch Sunday to Friday (drinks not included for any meals)
- * Return BA flights from London to Rome
- * Coach trips as specified in the itinerary
- * Entrance to sites and museums in the itinerary
- * Fully guided and escorted tours by Roman Holidays

All the above are provided by Thomson, which is a member of ABTA and ATOL.

POMPEII AND THE BAY OF NAPLES

MAY 15TH TO 22ND;

SEPTEMBER 18TH TO 25TH



Our trips to some of the most famous historic sites in the world are set amongst magical natural scenery. It will soon become clear why this area was a

favourite place for ancient Romans to enjoy summer by the sea. From our base in Ravello, set high above the Amalfi coast, we will tour the archaeological remains of the ancient Greeks and Romans with the author of *Pompeii: the last day*, Paul Wilkinson. The provisional itinerary is:
Saturday: Direct BA flight Gatwick to Naples.
Sunday: A morning at the Naples Archaeological Museum to see treasures from Herculaneum and Pompeii. After lunch we go to Mount Vesuvius and then to the villas in Stabiae, where Pliny the Elder died in the eruption of AD 79.

Monday: A day in Pompeii to see the city that was buried in the volcanic eruption of Vesuvius. We will tour the forums, baths, shops and much more that has been frozen in time.

Tuesday: A visit to Herculaneum conjures up ancient Roman life in an evocative townscape. In the afternoon, we go to Oplontis, a villa with beautiful frescoes and gardens, and the museum at Boscoreale, the site of a Roman farm.

Wednesday: Following in Aeneas' footsteps to Cumae, we visit the Temple of Apollo and the Cave of the Cumaean Sibyl. In the 8th century BC,

Cumae was one of the first Greek colonies in Italy. Nearby in Baiae, a Roman seaside resort now submerged, we see salvaged artefacts in the castle of Baiae. Finally, we visit the amphitheatre at Pozzuoli, which has a wonderful system of underground cells.

Thursday: A day on the isle of Capri, to see Villa Jovis, Tiberius' base from AD 27. There will be time to explore Capri before returning via Amalfi.

Friday: Founded by Greeks in the 7th century BC, Paestum has one of the most intact groups of Greek temples outside Greece. We will tour the Greek parts of the city and the later Roman remains, before visiting the site museum.

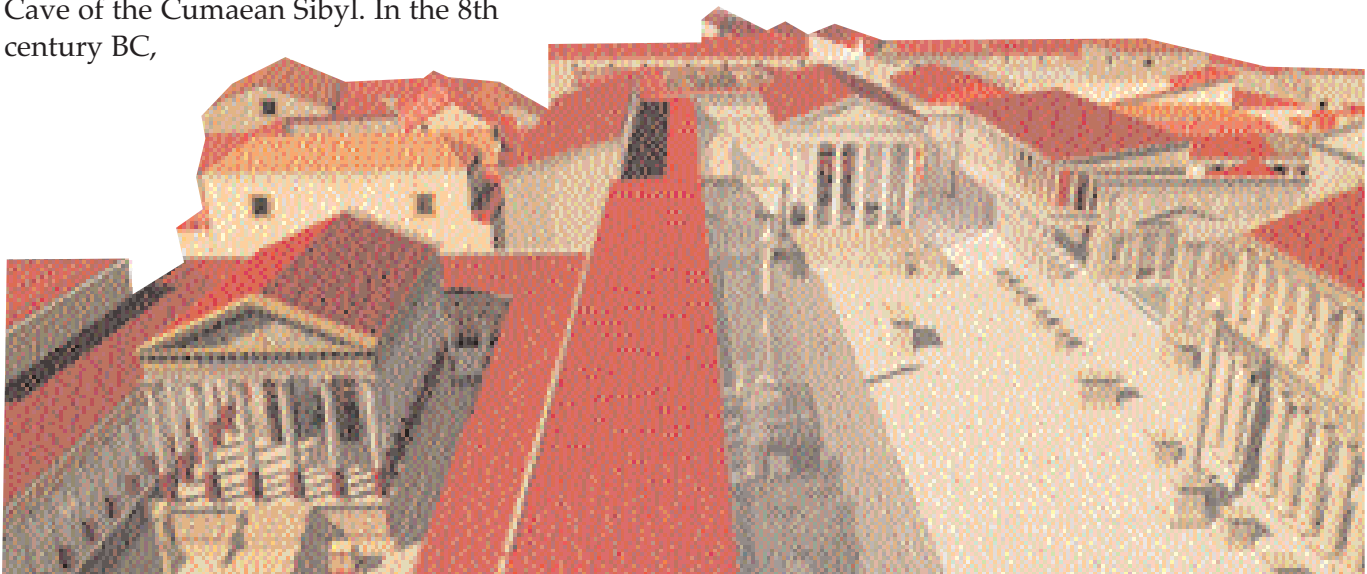
Saturday: A free day, before the return flight.

Cost: Twin/double room £1,395 per person; Single room £1,710 per person; Junior suite £1,535 per person.

Details and what the price includes:

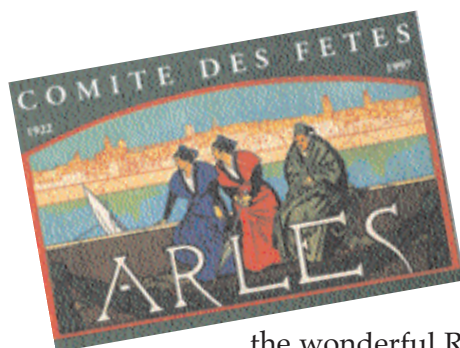
- * 7 nights in a twin/double room (or single supplement), breakfast and dinner (drinks not included) in Hotel Graal. Lunch Sunday to Friday
- * Entrance to sites and museums in the itinerary
- * Coach travel from airport to hotel, return and to all destinations listed and boat trip to Capri
- * Return flights from London to Naples
- * Fully guided and escorted tours by Roman Holidays

All the above are provided by Thomson, which is a member of ATOL and ABTA.



ROMAN PROVENCE

JUNE 19TH TO 26TH



Provence was a vital part of the Roman Empire; indeed Arles was regarded as the Rome of the north, and we will visit many of

the wonderful Roman remains in the region. It is easy to see the attractions of the area — they must have been as appealing to the ancient Romans as they are to us. Indeed the area has long attracted painters such as Van Gogh. We will be based in Arles, but our extensive tour will take us to many sites across Provence. The provisional itinerary is:

Saturday: BA flight direct Gatwick to Marseille.

Sunday: A visit to the excellent archaeological museum in Arles will reveal the history of the area. This will be followed by a tour of the Roman remains in the city including the amphitheatre, arena, cryptoporticus and the baths of Constantine.

Monday: The Pont du Gard is one of the most spectacular sites in Provence. After learning how the three-tiered aqueduct supplied water to Nimes, we will lunch beside the site. Next we visit a vineyard, built on Gallo-Roman remains, to see a reconstructed Roman wine press and taste wine made in the ancient Roman way. Travelling past Roman Beaucaire, our last stop is at Tarascon, where you may visit the castle (fees payable locally).

Tuesday: A day in stately Nimes, where the amphitheatre is one of the best preserved in the world, and the Maison Carrée is an almost perfect Roman temple. The Jardin de la Fontaine is a garden built over Roman baths, where we will see the Temple of Diana, and Augustus' 112-foot Tour Magne. Back in Arles, we will visit the Alyscamps, the Roman cemetery painted by Van Gogh.

Wednesday: A visit to the Greek and Gallo-Roman city and temple site at Glanum begins with the arch and mausoleum outside the town, before a tour of this beautiful site. We will have an ancient Roman-style lunch on site, before going to chic St Remy-de-Provence, to see the treasures

from Glanum in the museum. Finally, we tour the impressive Roman watermills at Barbegal.

Thursday: An early start to Orange to see the vast four-storey Theatre Antique, the museum and the Arc de Triomphe commemorating Augustus' victories at Actium. In the afternoon you will be free to enjoy the historic city of Avignon.

Friday: Another early start to visit Vaison-la-Romaine, set in a river valley in the Haut Vaucluse. We will have a guided tour of the extensive Roman remains in this lovely town — villas, streets, shops, theatre, baths and public toilets, the Roman bridge — and the site museum.

Saturday: A free morning, before the return flight.



Cost: Twin/double room £1,217 per person;
Single room £1,462 per person

Details and what the price includes:

- * British Airways scheduled flights direct from Gatwick to Marseille return

- * 7 nights b&b in twin/double room (or single supplement) at Hotel D'Arlatan in Arles

- * Dinner in a local restaurant for each night, lunches for four days (drinks not included)

- * Coach travel from airport to hotel return, and trips, as specified in itinerary

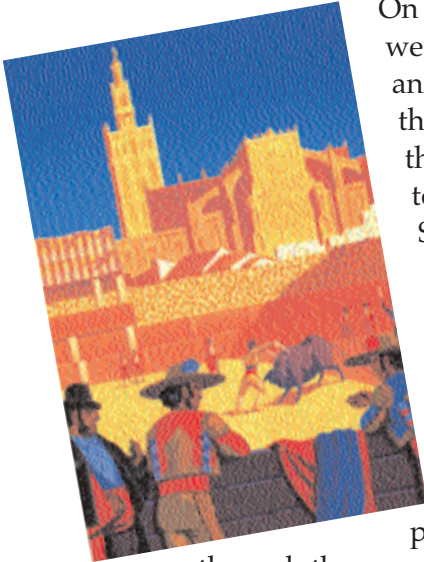
- * Entrance fees for sites, museums and wine tasting, as specified in itinerary

- * Fully guided and escorted tours by Roman Holidays

All the above are provided by Thomson, which is a member of ATOL and ABTA.

ROMAN AND MEDIEVAL SPAIN

OCTOBER 9TH TO 16TH



On this two-centre trip we will stay in Seville and Cordoba and tour the amazing ruins in the countryside and towns of southern Spain. We will unravel the rich cultural heritage of the region as we visit Italica, the first Roman settlement on the Iberian peninsula, and travel

through the area that became Baetica in 19 BC. The province grew wealthy by producing oil, wine, metals and wheat for the Roman world. After the Romans other waves of traders and invaders came to Spain and left their imprint, especially the Moors, whose mosques and palaces we will explore.

Provisional itinerary

Saturday: Iberia flight Heathrow to Seville

Sunday: A visit to the Roman ruins of Baeolo Claudia, founded at the end of the 2nd century BC, the remains of the basilica, curia archives, capitol, temples and more, give an impression of urban life. After lunch in Tarfia, we will tour Seville and visit the archaeological museum.

Monday: Leaving Seville to spend two nights in Cordoba, we will visit the Roman baths at La Luisiana, a villa, the Roman city of Obulcula and the Colonia Augusta Firma Astigi. Next we tour a Roman area of olive oil production, Almodovar del Rio and the Andalusian Floresta castle.

Tuesday: A day in Cordoba, the capital of the Roman province of Baetica and the birthplace of Seneca. We will see the Via Augusta and the Roman bridge. Then we visit the Medina Azahara, a partly restored palace city built on three terraces in the Caliphate period. After lunch, near the mosque, we will visit the El Ruedo Roman villa.

Wednesday: We return to Seville, via Osuna, conquered by Julius Caesar who re-named it Urso. After touring the Roman walls and necropolis, we visit the Torre del Agua Archaeological Museum

and Marchena, a Roman agricultural town.

Thursday: A visit to Italica, founded in 205 BC by Scipio and birthplace of the emperors Trajan and Hadrian. We will see the amphitheatre, theatre and town. In the afternoon we visit Carmona, a Carthaginian, then a Roman settlement. As well as the walls and necropolis, the palace is of Roman origin, though mostly rebuilt by the Moors.

Friday: The day begins at the sherry-producing town of Jerez de la Frontera. We will visit the Alcazar, the mosque, the baths and the museum. In the afternoon we go to Cadiz, founded by the Phoenicians and transformed by the Romans into Gades, where we will see the Roman theatre.

Saturday: A free morning, before the flight home.



Cost: Twin/double room £1,230.00 per person;

Single room £1,405 per person

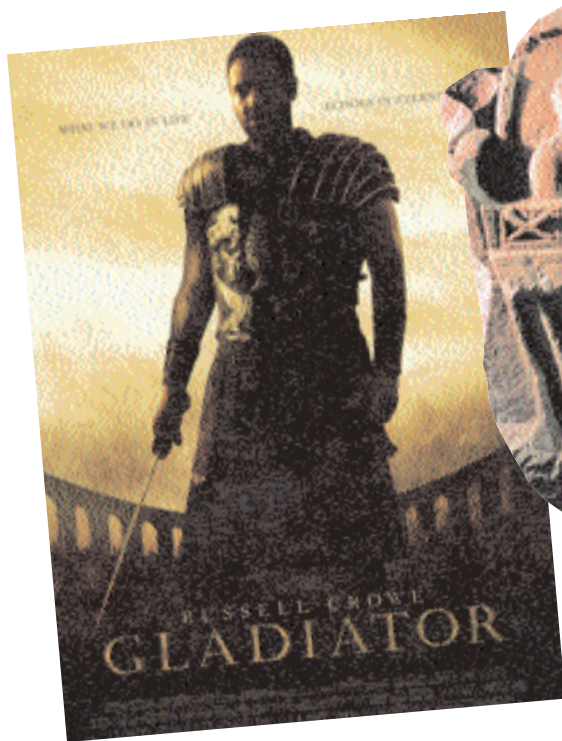
Details and what the price includes:

- * Return flights London/Seville
- * 7 nights bed and breakfast at two hotels in twin/double room (or supplement)
- * Dinner each night (drinks not included)
- * Lunch Sunday to Friday (drinks not included)
- * Entrance to sites and museums in the itinerary
- * Coach travel as specified in the itinerary
- * Fully guided and escorted tours by Roman Holidays

All the above are provided by Thomson, which is a member of ATOL and ABTA.

ROMAN GERMANY — THE EDGE OF EMPIRE DECEMBER 4TH TO 9TH

Roman Germanica formed the hard-won frontier of the Empire, and this two-centre trip will take us to the heart of the area. Who can forget the opening scene of the film *Gladiator*, set in the Teutoburg forest? Our tour begins in Cologne, and we will visit Aachen and the archaeological park at Xanten. Then we travel to Trier, one of the most important cities in the Roman Empire. Our trip will coincide with the Christmas markets, so you will have time to get into the festive spirit, while appreciating the winters that must have put a chill in the hearts of Roman soldiers.



The provisional itinerary is:

Saturday: Flight from London to Cologne. City tour including the Roman north gate and tower, the city hall, the Praetorium and the Romisch-Germanisches Museum.

Sunday: A morning in Aachen, where the warm springs beneath the town attracted Roman settlers. After lunch in the cellar of the town hall, we will visit the museum at Frankenberg Castle.

Monday: A day at the archaeological park in Xanten, the only Roman town north of the Alps which has not been built over since the collapse of the Roman Empire. Its ground plan has remained intact under fields, and in 1977 a reconstruction of

the town began on a scale of 1:1 over the foundations. We will have a Roman-style lunch at Xanten's reconstructed Roman inn.

Tuesday: En route to Trier, we will visit the Roman villa at Silberberg, and then Saalburg Roman fort, where a reconstructed Roman fort houses a museum. We will walk through a forest to the Feldbergkastell, the highest fort along the Limes (700 metres). In the evening we will arrive, in Trier. Situated on the banks of the Moselle, Trier was a Roman city and is a Unesco World Heritage

site. Trier was so important that it was known as Roma Secunda, the second Rome. **Wednesday:** A day in Trier will start at the Basilica, Constantine's throne room; it is the largest surviving single-room structure from Roman times, and the bridge in Trier dates from AD 144-52. We will visit the three public baths in Trier, the Forum baths, the Barbara baths and the Imperial baths, the latter baths being the largest

outside Rome. Finally, we will walk beyond the medieval city wall to see the wonderful Roman amphitheatre.

Thursday: A trip to the Porta Nigra; this impressive Roman gate dates to about AD 180. After lunch we go to Cologne to fly home.

Cost: Twin/double room £905 per person; single room £1,005 per person

Details and what the price includes:

*Return flights London/Cologne

*5 nights bed and breakfast at two hotels in twin/double room (or supplement)

*All dinners and lunches either in hotel or restaurants in towns (drinks not included)

*Entrance to sites and museums in the itinerary

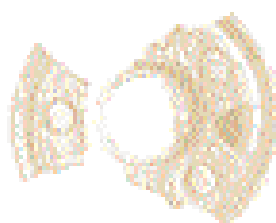
*Coach travel as specified in the itinerary

*Fully guided and escorted tours by Roman Holidays.

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NEWS



Portable Antiquities Scheme

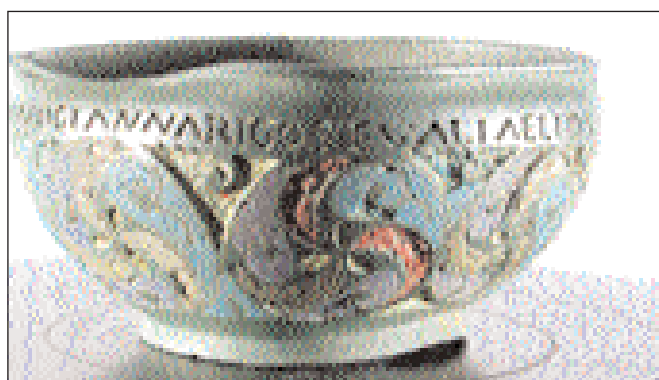
Michael Lewis, Deputy Head of Portable Antiquities of the Portable Antiquities Scheme, writes about the success and future of the Scheme.

The Arts Minister, Estelle Morris, recently said that the Portable Antiquities Scheme is 'a real success story'! So, what is the Portable Antiquities Scheme and why is it such a big success?

Every year many thousands of archaeological objects are discovered, mostly by metal-detector users, but also by people whilst out walking, gardening, or going about their daily work. When recorded, these 'finds' offer an important source for understanding our past.

Today, the Portable Antiquities Scheme offers the only proactive and

recorded with the Scheme is an elaborately decorated bronze patera, found by Kevin Blackburn and Julian Lee whilst metal-detecting in Staffordshire moorlands. Although the finders



The Staffordshire Moorlands patera.

had no legal obligation to report the discovery, they took it to their local Finds Liaison Officer so it could be properly recorded.

The 'pan' is decorated with Celtic-style motifs, inlaid with coloured enamel. The most exciting feature of the vessel is its engraved inscription, which lists four forts located at the western end of Hadrian's Wall: Bowness (MAIS), Drumburgh (COGGABATA), Stanwix (UXELODUNUM) and Castlesteads (CAMMOGLANNA). Until the discovery of this vessel only two other examples were known with inscriptions naming forts on Hadrian's Wall, and this is the first to include Drumburgh. The 'pan' also incorporates the name of an individual, AELIUS DRACO, and a further place-name, RIGOREVALI, which may refer to the place in which Aelius Draco had the 'pan' made. Aelius Draco (who possibly originated from the Greek-speaking part of the eastern Roman Empire) was perhaps a veteran of a garrison of Hadrian's Wall and on retirement had this vessel made to recall his time in the army. The object was acquired by the British Museum and is currently on display in the museum's 'Buried Treasure' exhibition.

Evidence for unofficial Roman mints in Norfolk
Most of the finds recorded through the Scheme are perhaps less spectacular, but nevertheless offer important clues about where and how people lived in the past. Many hitherto unknown archaeological sites have come to light thanks to



An Anglo-Saxon brooch from Eastry in Kent, which has been used as the logo design for the Portable Antiquities Scheme.

comprehensive mechanism for systematically recording such finds for public benefit. These data are made available to Sites and Monuments Records and are published on the Scheme's website: www.finds.org.uk.

Advancing knowledge

The Portable Antiquities Scheme has made a major contribution to our knowledge and understanding of the past. The Scheme was established in 1997; since then its Finds Liaison Officers have identified over 150,000 archaeological objects, many of which would have otherwise not been recorded.

The Staffordshire Moorlands patera

One of the most spectacular finds recently

NEWS

finds discovered by the public and recorded by the Scheme's Finds Liaison Officers. These include two sites of unofficial Roman mints.

Coin blanks, and the fragments of bronze rods used to make them, dating from the 3rd century AD were recovered by Shaun O'Reilly, Mervyn Bone and David Johnson whilst metal-detecting at Colkirk and Rocklands in Norfolk. The finds, subsequently recorded by Adrian Marsden (Norfolk Finds Liaison Officer), provide important evidence for the production of local imitations of contemporary Roman coins — these copies were known as 'barbarous radiates'. It is now becoming apparent that there were a large number of these unofficial mints scattered across Roman Britain in the 3rd and 4th centuries AD. Therefore these discoveries not only contribute to our understanding of the local historic environment, but also to our knowledge of the economy of the whole Roman province of Britain.

Raising awareness

The Finds Liaison Officers, together with the Scheme's Education Officer, have an important outreach role, working with a variety of people — including finders, school children, museum professionals, and staff and students at universities and colleges — to raise awareness of the educational value of finds for understanding our past. Information about the Scheme and educational resources are published on the Scheme's website.

Working with schools

Last March, as part of a Finds Day at Tenterden Library, Kent, Andrew Richardson (Kent Finds Liaison Officer) gave a talk to pupils from the local primary school, in conjunction with Debbie Greaves of Tenterden Museum. After hearing a general introduction about the work of the Finds Liaison Officer, the children were divided into groups of two or three and each given an archaeological find, a simple Finds Recording Form and a pencil and ruler, and asked to try to identify and describe their find. The finds used were of a wide range of materials and dates, ranging from fossils and Mesolithic flint implements to Roman and Medieval finds.

The event was considered a great success, and all of the children were clearly enthused by the opportunity to handle numerous 'real' archaeological finds.

Working with finders

Katie Hinds and Adrian Marsden (Norfolk Finds Liaison Officers) visit five metal-detecting clubs on a monthly basis. Each month they judge the 'Find of the Month' competition and at two of the clubs regularly give a general talk about the finds on the table. They also organise speakers to go to the clubs to talk about local archaeological projects and finds.

The Finds Liaison Officers encourage finders to bag up their objects according to which field they were found in, and to mark each bag clearly with name, parish and grid reference or enclose a map. They also encourage finders to look for flint and pottery whilst they are detecting. In the past certain classes of object have not been reported because finders were unaware of what they were. By recording such objects finders have themselves



Nick Herepath recording metal-detector finds.

been made aware of the importance of these objects and can make an even greater contribution to our understanding of the past.

Working with the general public

In 2002 Nick Herepath (North West Finds Liaison Officer) curated a successful exhibition of metal-detector finds from Cheshire at the Salt Museum, Northwich, and at Nantwich Museum to coincide

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with Cheshire Archaeology Day. The exhibition looked at how objects were discovered, who finds them and how to record them. The displays also featured the work of the Portable Antiquities Scheme and details of objects recorded. There were a number of activities which explored what survives in the archaeological record, but the highlight of the exhibition was the objects themselves. Some of these were from the museum collections, but many were loaned by local metal-detectorists and had never before been put on public display.

Increasing opportunities

The Portable Antiquities Scheme is the largest community archaeological project this country has ever seen. The Finds Liaison Officers work hard to increase opportunities for active public involvement in archaeology. A good example is the White Ladies Aston Parish Survey. An exhibition in Worcester provided a focus for the parish survey, with events taking place in the parish itself. A metal-detectorist's collection of finds discovered locally and displayed in the exhibition evolved into a project to study the archaeology of the parish more generally. School activities, a talk to the residents of the parish in the local village hall, finds identification sessions, workshops and a programme of re-enactors all complemented the exhibition.

Overall, this project was seen as very successful in giving a range of people the opportunity to work together. The residents of the parish, and of surrounding parishes, were particularly active in advertising the varied events and arranging for a talk to be given to the White Ladies Aston Discussion Group. The whole project had positive community participation, but the wider message of the exhibition was that anyone can research the archaeology of his or her parish without necessarily having to dig a hole. The exhibition highlighted the Sites and Monuments Records, archives, museums, Portable Antiquities Scheme, and libraries as sources of information.

Kent Archaeological Metal-detecting Support Unit

An important aim of the Portable Antiquities Scheme has been to increase the role and use of

metal-detectorists in archaeological projects. In Kent there has been a strong tradition to build on in this respect, as some archaeological groups and units have regularly worked with local metal-detectorists. In order to foster further co-operation, and to give more people an opportunity to work on archaeological sites, Andrew Richardson (Kent Finds Liaison Officer) and the National Council of Metal-detecting (Southern Region) have recently worked together to establish the Kent Archaeological Metal-detecting Support Unit (KAMSU). KAMSU has a set of operational procedures and draws on volunteers from all the Kent metal-detecting clubs to assist with archaeological projects. In the last year a number of teams have been provided to assist on excavations, including a metal-detecting survey for the BBC Television series *Two Men in a Trench*, and development control projects carried out by units such as Archaeology South East and Wessex Archaeology.

The main role of the Finds Liaison Officers is to record archaeological objects found by the public, which are then published on the Scheme's website. Last year over 60 per cent of the finds recorded were found by metal-detectorists, but a significant minority were found by people not actively seeking archaeological material. Almost 92 per cent of the finds recorded have been recovered from cultivated land, where they are susceptible to plough damage and natural corrosion processes. It is the belief of the Scheme that everyone has a responsibility for our heritage and should ensure any objects discovered are properly recorded so that this information can be used to enhance our knowledge and understanding of the past.

Metal-detecting survey on Countryside Stewardship land

Ciorstaidh Hayward Trevarthen (Somerset & Dorset Finds Liaison Officer) worked closely with members of the Yeovil and District Bottle and Metal-detecting Club in the planning of a rally at Dillington, Somerset. Because a proportion of the land is under the Countryside Stewardship Scheme, the arrangements had to be checked with the Department for the Environment, Foods and

NEWS



Mark Lodwick investigating a Late Bronze Age hoard with the finder, Alan Jenkins.

It is essential all finds are correctly recorded, and here

Mark is bagging up the finds before writing on the bag the exact location of the find and any other information necessary for researchers.

Rural Affairs (DEFRA) and the County Archaeologist. This required a great deal of time, pre-planning and organisation to advise and pull the relevant parties together. The Finds Liaison Officer organised meetings with the County Archaeologist and Sites and Monuments Record and then liaised with DEFRA on behalf of the Yeovil Club to gain permission to detect on the land. Advice was then given on what areas to avoid, so as not to damage underlying archaeology, and on the correct recording of finds. The involvement of the Finds Liaison Officer paved the way to a satisfactory conclusion for all. Not only did this result in a successful rally, at which the finds were recorded in more detail than is usual at these events, but the rally also produced a cluster of five pilgrims' ampullae, rare objects in Somerset. One was donated to the

Somerset County Museum, others were drawn and photographed by the Finds Liaison Officer. They may indicate that there was a road through the area along which pilgrims passed and possibly broke their journey.

Looking to the future

Since the autumn of 1997, when the six pilot Portable Antiquities Schemes to record archaeological objects were established, we have gained a much better picture of the resources needed to sustain a nationwide Scheme of Finds Liaison Officers when the current period of funding ends in March 2006. The Scheme now comprises 46 posts, a central and support unit of nine posts (four Finds Advisers, an Education Officer, an ICT Officer, an Administrator, a Co-ordinator and a Deputy Head), and 37 locally-based Finds Liaison Officer posts. At a cost of about £1.5 million a year the Scheme will provide a proactive and comprehensive finds recording service for members of the public across the whole of England and Wales — which is excellent value for money.

The decision whether or not to fund the Scheme in the long-term will be made by the Government later this year. Politicians from all the major parties have welcomed the success of the Scheme to date and hope long-term funding will be forthcoming in due course. The establishment in July 2001 of the All-Party Parliamentary Archaeology Group by Lord Redesdale, with Lord Renfrew as chairman, has been a very positive step forward. The group is now one of the largest all-party groups in Parliament, with 146 members. Its first report was published in January 2003, after a very thorough process of public consultation and five committee sessions in Parliament, at which evidence was taken from all the key players, on *The Current State of Archaeology in the United Kingdom*. One of its key recommendations is that the Government should give long-term support to the network of Finds Liaison Officers established across the whole of England and Wales under the Portable Antiquities Scheme. Estelle Morris has agreed that the Scheme is a success, so let's hope her department can ensure the Scheme's long-term survival!

NEWS

Roman Coin Find Rewrites History

The British Museum has announced the significance of a recent find in an article reproduced below.

The discovery of a coin (below and right) of a hitherto unrecognised rebel Roman 'emperor' — Domitianus — has excited experts at the British Museum and looks set to rewrite history. The coin, part of a hoard, was discovered by Brian Malin whilst using a metal-detector on farmland ten miles from Oxford in April 2003.

Richard Abdy (Curator of Roman Coins, British Museum) said: 'So little is known of Domitianus that some scholars have seriously doubted his existence. The new discovery makes it certain both that this



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shadowy claimant to the Imperial throne existed, and that he mounted a serious challenge for the position of emperor in the troubled period of the early AD 270s, known as the Gallic Empire’.

The antiquity of this coin of Domitianus is beyond doubt as it came from a hoard consisting of over 5,000 common Roman coins fused together in a 3rd century AD pot, which had to be separated by British Museum conservators.



The map (above) shows the extent of the Gallic Empire in about AD 271. Initially Spain had joined the secessionist state, but it was won back by Imperial forces loyal to the legitimate Roman emperor. The coin hoard (right) was no doubt buried for safekeeping by its owner, who never returned.



Abdy continues, ‘There are only two fleeting references to Domitianus in historical sources as a high-ranking army officer punished for treason by the Emperor Aurelian (ruled AD 270-75). But neither identifies him as a rebel emperor (called ‘tyrants’ by the official Roman sources). Only the archaeological evidence of this coin shows that he was indeed emperor and provides us with a face to go with history’s forgotten ruler.’

There is one other known coin depicting Domitianus in existence, which was found in the Loire area of France in 1900. Since it was unique and unprecedented the coin was dismissed as a modern hoax. It then disappeared into the collections of a small museum in western France and has only recently been traced. The Oxfordshire coin matches the French example and together the coins provide the final indisputable proof of the existence of Domitianus.

It is possible that there are other coins of Domitianus in existence which have been previously misidentified by the people who found them. The British Museum would encourage people who have ‘Gallic Empire’ coins in their collections to take a look at them again or show them to an expert, such as their local Finds Liaison Officer (see pages 10-13).

The Gallic Empire

The ‘Gallic Empire’ is the name given to the secessionist state that was created in the aftermath of the Roman Empire’s greatest humiliation. In AD 260 the Emperor Valerian was captured alive by the Persians. He was used as a living footstool by the Persian king and upon his death was stuffed and displayed in a Zoroastrian temple. This was the cue for Gaul (the area comprising modern France and the Rhineland) to revolt in order to look after its own security, taking Britain and initially the Iberian peninsula with it. An officer called Postumus became the first breakaway Gallic ‘emperor’ with his capital in Trier — this is the probable location for the minting of the Domitianus coin. AD 269 was a particularly turbulent year for the Gallic Empire with three successors to Postumus staking rival claims. Finally power settled on Victorinus (ruled AD 269-71). Victorinus was reportedly prone to raping the wives of his courtiers. It is possible that Domitianus was one of these wronged husbands and assassinated Victorinus, briefly seizing power and taking control of the mint. Domitianus must then have been overthrown (an incident left historically unrecorded) by Tetricus, the governor of Aquitaine who became emperor from AD 271 to 274. Tetricus was subsequently confronted by the Roman Emperor Aurelian, who punished Domitianus for treason.

FIELD SCHOOL NEWS

Time Team at Syndale

The report which follows can be found on Time Team's website: www.channel4.com/timeteam.

Excavations conducted by the Kent Archaeological Field School at Syndale, in Kent, have produced some interesting Roman finds. The most exciting was the discovery of what is thought to be an 'ankle-breaker ditch', a special military design that incorporates a trap at the bottom to perform the task it was named after.

A day or two's march from where the Romans landed in 43 AD, and on the north Kent route they would have taken on their way to the Thames, could this be the site of the first Roman fort in Britain, dating back to the Claudian invasion? As usual, the Team had three days to find out. Ridges, terraces and banks

As the geophysics team battled to extract

information from the confused and tough-to-interpret landscape, all eyes turned to landscape expert Stewart Ainsworth. The ridges, terraces and banks surrounding the site would have been complicated enough anyway, even without the landscaping that had been carried out over the past few hundred years.

Using his skill to read the land, though, Stewart unravelled the 'lumps and bumps' and suggested that what looked like a defensive perimeter on the western side of the hill was actually based on Iron Age agricultural terracing which had been adapted during later use of the site. It was time for some trenches to make sense of it all.

Claudian pottery

Excavation uncovered Roman ditches on the western and eastern sides of the site. These features contained Roman pottery from the 1st to 3rd centuries AD. One fragment was even dated by pottery expert Malcolm Lyne to the Claudian

era. The profile of the ditches was 'V' shaped, however, and didn't feature the expected military ankle-breaker at the bottom.

Ditches and pits

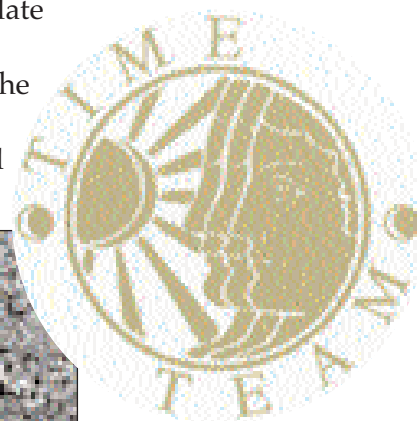
Further excavation in the east of the site discovered another Roman enclosure ditch, this time dated to the late Roman period.

Investigations at the centre of the site, meanwhile, found no evidence for



Members of the Field School cleaning up one of the Roman

cobbled surfaces situated in 'High Street' Durolevum.



substantial features, apart from what appeared to be a large rubbish pit or well. Nowhere had any evidence been found for military activity. What did the Field School find?

The archaeologists here had actually discovered more substantial ditches, which led us to believe we may have found a more permanent fort. However, for that type of enclosure we would expect large ditches, ramparts and evidence for timber gates on each side and buildings inside the walls.

So what have the *Time Team* excavations discovered?

In fact, what we've found here has been lots of little pieces of ditch which don't appear to relate to each other. We've also had none of the range of finds we would expect if this was a military establishment. Yes, we've had some Claudian coins and pottery but nowhere near enough.

What have KAFS found since *Time Team* visited Unfortunately, *Time Team* only had three days! The Field School spent another month excavating and its report on the Roman finds will be ready at the end of the year, for an update see opposite.

FIELD SCHOOL NEWS



KAFS at Syndale

Over one thousand Roman coins have now been found at Syndale, recently identified as the lost Roman town of Durolevum by the KAFS. All of these coins are being dated by Dr Richard Abdy of the British Museum. His report on the coins will be ready by the end of the year and will be part of the larger report on the small Roman town of Durolevum. We hope that continuing work by KAFS after *Time Team's* programme will unravel some of the questions posed by this intriguing site.

The number of artefacts recovered during KAFS excavations has been staggering and includes large amounts of iron military equipment, horse harnesses and agricultural equipment. Quantities of Roman pottery recovered from the site runs into tens of thousands of sherds, dating from the late Iron Age up to the early 5th century. An interesting feature of the site is the large numbers of amphora sherds of a type called Dressel 20. These amphoras, the jerry cans of antiquity, carried anything from olive oil to a type of fish sauce called garum. The Roman estate stamps on the amphora sherds from Syndale show that they originated from southern Spain, and it seems control of this lucrative trade in the early years of conquest was firmly in the hands of the Roman army. So many amphora were found at Syndale that there must have been port facilities attached to the Roman town. Durolevum was built astride the great Roman road, now called Watling Street, which connected the port of entry

to Britain, Richborough, with the lowest crossing point of the Thames at London. Any supplies from London needed for the Roman town of Canterbury would have been landed at Durolevum and taken by road to the city.

Although the Dressel 20 amphoras date from the early years of the Roman conquest, other amphora sherds are of eastern Mediterranean origin and date from the mid-5th century. But we are told by our history books that Roman life and

trade had stopped years earlier. This is why archaeology is important — material artefacts can be dated, and alter our preconceptions of history. Our work at Syndale has revealed when Watling Street was actually built. Also, because we have sectioned it and planned in the pottery and coins found in the various layers, we can tell how many times the road was rebuilt and when. The last layer dates to the early 5th century, but the last people to use it were Romans. We found in the houses and shops that fronted on to Watling Street signs of destruction and chaos. Shoes and other items were scattered across the surface of Watling Street. This was not a town that had been abandoned by its occupants but rather a town that had died violently and had never been reoccupied. The great road too was abandoned, and the



Rubbish pit or ritual shaft? Opinions are divided: archaeologists from Time Team suggested it could be a ritual shaft but when excavated by KAFS members the only artefacts found were domestic rubbish from the nearby Roman town. But why dig such a perfectly round and deep pit?

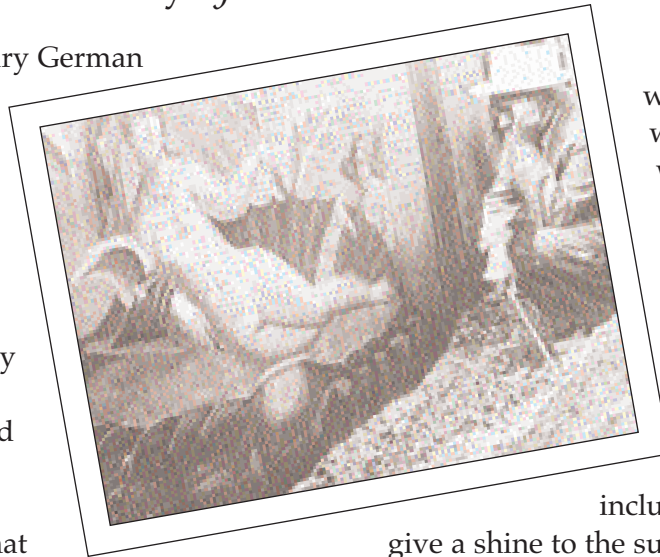
new settlers of the district, presumably Germanic tribes, had no need of Roman roads, villas or even towns. Civilisation in south-east Britain paused for decades, and little history was written until St Augustine landed in Kent with 60 Roman monks to start rebuilding the country. Land was allocated to the church and of course had to be recorded, and so history restarted. But what fills the gap? It is of course archaeology. Year by year other pieces of the missing history are put into place by archaeologists working on sites like Syndale.

HOUSE DECORATION AT POMPEII

The people of Pompeii were surrounded by magnificent decorated rooms which have survived to this day. This is an extract about wall paintings and a famous mosaic, taken from Pompeii: the last day by Dr Paul Wilkinson

Goethe, the 19th-century German traveller and writer, said that the deaths of the cities of Pompeii and Herculaneum were significant, not for the brevity of life but for the perpetuity of art. Art played an important part in the daily lives of the inhabitants of Pompeii. Although they lived in a provincial country area, the people of Pompeii were surrounded by decoration that had meaning for them. The architecture complemented the frescoes, mosaics, stucco reliefs and sculptures in such a way that it can give us an understanding of how the Romans lived. We can see the cruelty of the gladiatorial contests, see human desires and fantasies at the brothels and try to understand the secret rites of initiation into the cult of Dionysus at the Villa of the Mysteries. But the most exciting experience is seeing the frescoes, mosaics, stucco reliefs and sculptures in the rooms or buildings where the people of Pompeii and Herculaneum had wished to see and enjoy them.

To help understand the chronological development of Pompeian wall painting, the scholar August Mau, writing in 1882, established that there were four styles of wall painting. His definition of these four styles is still in use today. The name of one painter has survived from the many that must have painted at Pompeii. Pliny the Younger wrote that Studius, who lived at the time of Augustus, introduced 'the delightful style of decorating walls with representations of villas, harbours, landscape gardens, sacred groves, woods, hills, fish ponds, straits, streams and shores, any scene in short that took his fancy' (Pliny, *Natural History*, Vol. IX, books 33-35).



To create these wonderful paintings the wall had to be prepared with up to three coats of fine plaster. The background of the picture was painted first, and left to dry. The figures and decoration were then added. The paint mixture probably included glue and wax to

give a shine to the surface that was also polished. The subject matter was seldom original; there were no copyright laws in ancient Rome and most Roman paintings (and some sculptures) were derived from Greek originals. The more famous the original Greek artist had been, the more he seems to have been copied, and occasionally, emulated.

First- and second-style Painting

The first style (according to August Mau) of painting dates from the late 3rd century to the early 1st century BC. It imitates variegated marble, porphyry or alabaster relief marble walls. Occasionally called the 'incrustation style', from *crusta*, a slab of marble, it was executed in stucco relief and then painted and polished to resemble colourful marble walling. The best examples can be found in the Basilica, the House of the Faun, and the Temple of Jupiter at Pompeii. Painting in this style sometimes displayed small architectural features which became more widespread and painting evolved into the second style. Also known as the 'architectural style', it dated from the end of the 2nd century to the beginning of the 1st century BC. The wall paintings were much more theatrical, with the image frequently divided into three areas, top, middle and bottom. The

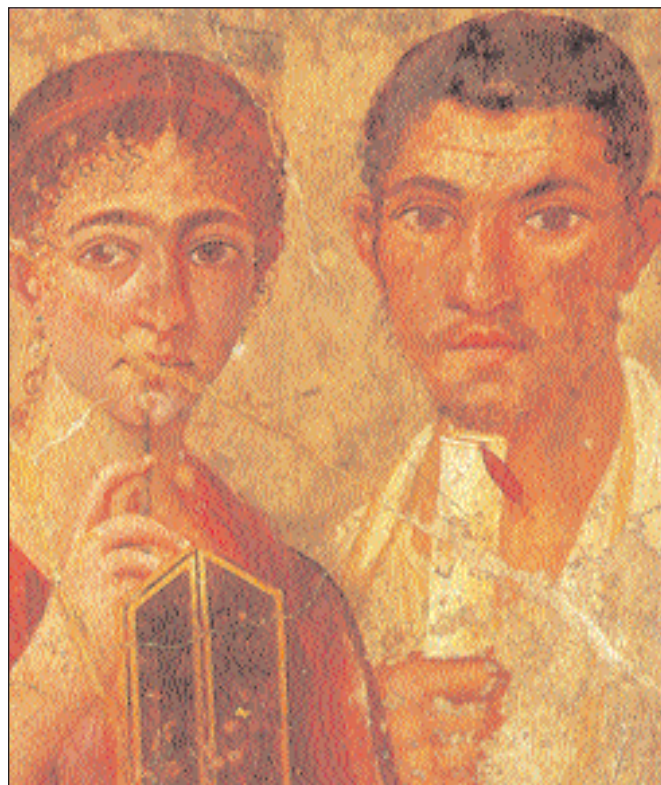
middle area was divided vertically with columns. Vitruvius wrote that theatrical 'scaena' influenced Roman interiors: 'Tragic scenes are delineated with columns, pediments, statues' (Vitruvius *The Ten Books of Architecture*, V8).

The use of such architectural motifs made the walls seem three dimensional. Windows were painted on the walls they seemed to open on to vistas that were made to appear to be in the distance by the use of misty contours and diminishing colours. The best example is probably the wonderful series of paintings from a room at the Villa of Publius Fannius Sinistor, a country villa located just to the north of Pompeii near Boscoreale. The pictures are divided off from one another by thin columns, which give the room the appearance of a pergola looking out on to the vistas of other columned halls, streets and houses. The Boscoreale paintings introduce another



element of the second style, which is the vista of rural arcadia shown through an illusionary opening painted into the architectural framework. Subject matter ranged from flocks and herds shepherded by rustics in a timeless landscape to formal parks with pavilions and shrines. Clients sometimes wished their own garden to be painted, either as it was, or, more usually, how it should be. Paintings of flowers, extended gardens, shrubs and birds on the surrounding walls gave

the illusion of extending the garden and making it look larger. The idea was not new. Greek painters had been warming to the theme from at least the 2nd century BC. The first landscape painter whose name is known — Demetrius, the son of Seleucus — had been painting in Rome from 164 BC, and was called a *topographos*, or landscape painter. Some of the best examples are in the atrium of the



The frieze of cherubs (left) decorates the triclinium wall in the House of the Vettii.

The portrait of Terentius Neo and his wife (above) is from the tablinum in his house.

House of Fabius Amandio where a group of three birds sits on the rim of a marble birdbath, and, a little further afield, the beautiful Villa of Poppaea at Oplontis.

Another new pictorial element introduced in the second style is the representation of monumental figures within architectural frameworks called *megalography* by historians. The best example is the stunning series of paintings found in the *triclinium* (dining room) of the Villa of the Mysteries, just outside the Herculaneum Gate at Pompeii. The villa, a huge 90-room mansion, contains the most famous of all Pompeian paintings. The decoration consists of 29 life-size figures seemingly involved in rites associated with Bacchus. They show the preparations for a wedding, the scourging of a woman, the playing of a lyre, women dancing and so on. The figures

seem totally preoccupied and almost in a spiritual trance, completely oblivious to the outside world. It has been said that the people in the paintings seem entirely absorbed in their own existence, engrossed in their pursuits and abiding in a world apart from ours. It seems that the bride-to-be has to undergo terrible torments of a physical and sexual nature to win salvation with the cult of Bacchus. The date of the painting has yet to be resolved; it could be from the time of Caesar or from the early part of Augustus' reign.

Third-style painting

It is likely that the third style of painting, also known as 'ornamental', developed under Augustus and continued under Claudius (20 BC to AD 40-60). The style is simpler and more organised than that of the second style. The walls are more solid, with fewer dramatic architectural motifs. The central panel was usually painted quite dark, occasionally black, and the painting in the centre of the panel had become much smaller and was usually mounted on ornate and intricate painted candelabras. The borders of the panels were delicate frames of foliage arabesques, candelabras, masks and ribbons. One of the best examples is in the *tablinum* of the House of Marcus Lucretius Fronto, where the top part of the wall was painted in a delicate architectural fantasy, similar to the backdrop (*scaenae frons*) of a theatre. Below the central panels, the dado painting showed a marvellous garden, complete with garden walls in white marble and embellished with an urn fountain and white marble benches awaiting prospective visitors.

Fourth-style painting

The fourth style of painting covers a whole host of different styles and types of paintings and is

occasionally called the 'fantastic' or 'illusionist' style. There are numerous examples in Pompeii and Herculaneum because the fourth style of painting was being used at the time of the earthquake of AD 62. The extensive restoration and re-painting that happened, following the serious damage inflicted to the houses by the earthquake, meant that there was much work done in the fourth style. It has been estimated that up to 17 painters were at work in Pompeii following the earthquake.



Pair of feminine theatrical masks decorating the walls of the House

of the Golden Bracelet situated in the southern district of Pompeii.

The fourth style is a pot-pouri of elements from the second and third styles with the inclusion of stucco reliefs into the paintings, as seen in the Stabian and Forum Baths at Pompeii. The architectural structures in the paintings appear unreal and the decoration fussy. Some of the better examples of this style of painting can be found in the House of the Tragic Poet, the House of

Loreius Tiburtinus and the House of the Vettii, which has a wonderful painting on the east wall of the dining room (*triclinium*), depicting the punishment of Ixion, a story of infidelity, betrayal and punishment.

The dates given for the four styles of painting can only be approximate. Clients' tastes must have changed slowly and painters were probably reluctant to discard a style of painting at which they were adept. There has been much discussion about whether the wall paintings of Pompeii are true 'frescoes', i.e. painted rapidly on to newly laid damp plaster. A large room, recently excavated at the house of the Chaste Lovers was found to be in the process of being painted at the time of the eruption. The technique being used, in this case, was definitely fresco, but it is difficult to tell in other cases.

Pompeii: the last day is published by BBC Books, price £16.99.

Floor Mosaics: The Alexander Mosaic

Some remarkable examples of the old Greek carpet technique have been found, where the mosaic is in the form of a picture rather than an overall decorative pattern. One of the best examples is the famous mosaic floor depicting Alexander the Great in battle, found in 1831, at the House of the Faun. The year after the discovery of the mosaic Goethe wrote: 'The present and the future will not succeed in commenting correctly on this artistic marvel, and we must always return, after having studied and explained it, to simple, pure

whole block; its ground area is some 3,000 square metres making it the largest house in Pompeii. The mosaic was found in the *exedra*, a room with a view out into the peristyle garden and used for entertaining guests. The battle scene and the four floral corner motifs were executed with extremely small tesserae



The face of Alexander the Great is shown above. It is part of the great battle scene found at the House of the Faun in Pompeii. The

detail right shows Darius, King of Persia, Alexander's opponent, as he turns his chariot to face the enemy, knowing he is defeated.

wonder.' The battle portrayed is not that of Issus in 333 BC, but the rout of the Persians at Gaugamela in 331. It is thought the mosaic is based on a Greek painting by Philoxenus of Eretria for King Cassander (305-297 BC), but recently the suggestion has been mooted that the painting may be the work of Apelles, an outstanding painter from antiquity.

The House of the Faun is one of the most magnificent residences in Pompeii, covering a



— on average, each one is three millimetres square — and there are over 4 million individual cubes in the mosaic. The colouring is the natural colour found in the type of limestone used. Close examination of the mosaic has revealed that at some time in antiquity it had been cut into two parts and transported to Pompeii, possibly from an area recently conquered by the Romans. It is all too apparent that the *exedra* where the mosaic was located is far too small to contain it. Guests standing at the doorway, would not have been able to see the whole battle scene, and if they stepped back to get a better view they would have found that the Corinthian columns were in the way.

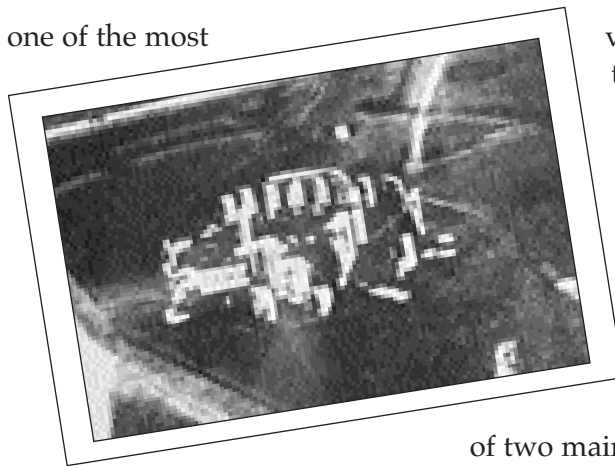
AERIAL SURVEY

'If you are studying the development of the landscape in an area, almost any air photograph is likely to contain a useful piece of information' (Interpreting the Landscape from the Air, Mick Aston, 2002).

Aerial photography is one of the most important remote sensing tools available to archaeologists. The development of aerial photography goes hand-in-hand with the development of the aeroplane and camera. A 1906 photograph taken on a plate camera in a balloon floating above Stonehenge is one of our earliest aerial photographs, (right), whilst in 2003 satellite imagery of the Iraq deserts revealed to American archaeologists hundreds of miles of buried roads from the earliest empires of that region. A pioneer in aerial photography was O.G.S. Crawford. Funded by the marmalade millionaire Alexander Keiller, Crawford photographed from the air archaeological sites in central southern England, and the results were published in their classic book *Wessex from the Air*.

During the Second World War there were huge advances in technology, and aerial reconnaissance produced first-class photographs. Archaeologists were involved in aerial photograph interpretation, and after the war an aerial photographic unit was founded by Keith St Joseph, which in 1949 became the Cambridge University Committee for Air Photography (now the Unit for Landscape Modelling). Its contribution has been invaluable, with hundreds of sites located, and an aerial photograph taken, say, 30 years ago will show features that may now have been removed.

In 1967 The Royal Commission on the Historical Monuments of England (RCHME) organised a national aerial reconnaissance programme which entailed the collection of existing photographs, the acquisition of the RAF's collection of photographs, and the commissioning of aerial photography by independent flyers. The success of this policy can be seen in the 400,000 oblique and 2.4 million



vertical aerial photographs at the National Monuments Record (NMR), Swindon.

Aerial photographs are merely raw data. The photograph needs to be examined so that the terrain can be interpreted and archaeological traces from features located.

Aerial photographs are of two main types: oblique and vertical.

Oblique aerial photographs, taken at an angle to reveal contours and shadows, are best for discovering sites; vertical photographs are more useful for mapping. However, it is possible, using appropriate computer software programmes and at least four known points on the ground, to map an area quite accurately from an oblique photograph. Vertical photographs can be overlapped to give a three-dimensional effect through stereoscopic viewing lenses. The height of buildings and structures can then be measured.

Oblique photographs taken at low altitude are the most important means of discovering sites from the air because they provide perspective and a clearer view than vertical photographs and are generally taken specifically for the purpose, whereas verticals are taken for general purposes.

There are three main archaeological features to be identified from aerial photography; they are shadow sites, crop mark and soil mark sites.

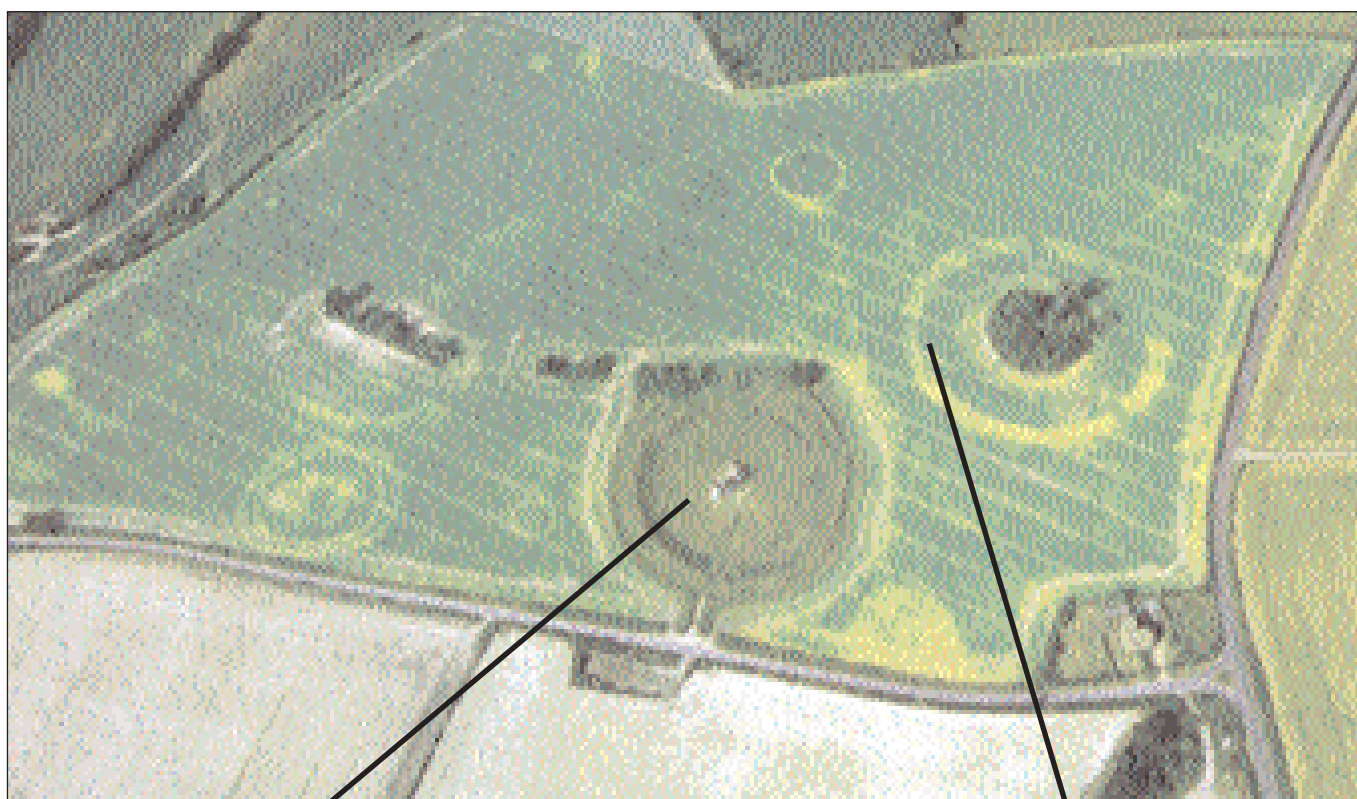
Shadow sites are usually the most visible archaeological features to be seen in the landscape. Any site with lumps and bumps like banks or ditches has the potential to show shadows. In the raking light of low sun, early or late in the day, the site can spring to life in fascinating detail. Shadows will only be cast more or less at right angles to the sun's rays. If a bank or ditch runs parallel to the source of light it will be difficult to see. It is essential to take aerial photographs at different times of the day and the

year to capture all of the site features to be seen. Shadow sites can also be seen and surveyed on the ground, but crop and soil marks can generally only be seen from the air.

Crop-mark sites are some of the best indicators of buried features on a site. The variation in height of the crop, colour and vigour of growth can help find features beneath the surface. Where the soil is damp, as in a buried ditch or pit, the vegetation will be taller, greener and more dense. This is a positive crop mark. But over a buried building the soil above the walls will be thinner, drier, and the vegetation will be sparser. This is a

wheat, barley, oats — it is worthwhile to keep an eye on the field, and as the crop turns from green to yellow to photograph it from the air. This will be the optimum time to discover crop marks.

Soil marks are usually at their best in ploughed fields. Every feature on an archaeological site is likely to be made out of different soils. Colour and texture of the soil is the key indicator. Ditches may be filled with a dark silty soil and ploughed-out barrows may show as a dark circle enclosing streaked re-deposited natural soil. Differences in moisture can reveal hidden ditches or even the walls of a buried building. After rain, the buried



The central feature in the aerial photograph is called Church Henge after the Norman church located inside

it. The surrounding earthworks have been protected from damage by the plough and still survive almost intact.

However, the other Neolithic and Bronze Age sites have been destroyed by ploughing. But the remains show up well

in this field of peas which were starved of water during the summer drought of 1995 (English Heritage).

negative crop mark. The greener, dense vegetation appears darker from the air and almost black on existing black and white aerial photographs.

Visibility of crop marks will change throughout the growing season, and indeed on a day-to-day basis. Different crops will react differently to soil conditions, and grass has to be really parched before any buried features become apparent. The most useful plants for crop marks are wheat, barley, peas, sugar beet and maize. If a site is subject to crop rotation, take aerial photographs over a number of years. For the corn crops —

building's walls will retain moisture longer than the surrounding soil and leave a damp mark. Conversely, after frost, the cold walls of a buried building will retain the frost over the buried walls longer than will the surrounding soil. These soil mark patterns may be extremely clear or very blurred because of long-term ploughing of the site. Either way, soil marks are a good indicator of the survival of the buried features as seen from the air.

Abridged from Archaeological Surveying and Recording, by Paul Wilkinson.

BOOK REVIEWS

We can offer readers a selection of some of the best recently published archaeology books reviewed below. KAFS members may enjoy a 10% discount on any of the books ordered.

Piltdown Man: The Secret Life of Charles Dawson & The World's Greatest Archaeological Hoax, by Miles Russell (£14.99)

In December 1912, an exciting discovery was made public; the skull of the earliest human had been found in Piltdown, Sussex.

It was apparently the first piece of evidence for the 'missing link' in the development of humans from the apes, as propounded by Charles Darwin in his thesis *On the Descent of Man*, originally published some 40 years earlier. The first headline, announcing the find to an astonished world, was printed by the *Manchester Guardian*, 'The Earliest Man?: Remarkable Discovery in Sussex. A Skull Millions of Years Old'. However, Piltdown man, as this early human came to be known, made the headlines again years later, when the skull was declared a forgery. In

November 1953, the *London Star* wrote that it was 'The Biggest Scientific Hoax of the Century'.

This book is an investigation into the hoax and the chief culprit, Charles Dawson. But it is more than just a thrilling whodunnit; it is a fascinating examination of a series of discoveries made by Dawson, culminating in Piltdown man. Dawson was a respected solicitor and a notable figure in Sussex; he was an amateur archaeologist, geologist and an antiquarian. But as Russell says, 'He was all these things and more. He was also a first-rate forger, fraudster, fabricator, hoaxer, manipulator, trickster and liar... He was indeed a veritable Jekyll and Hyde'. In his well-researched

book, Russell examines the 'discoveries' made by Dawson, and shows that many were false.

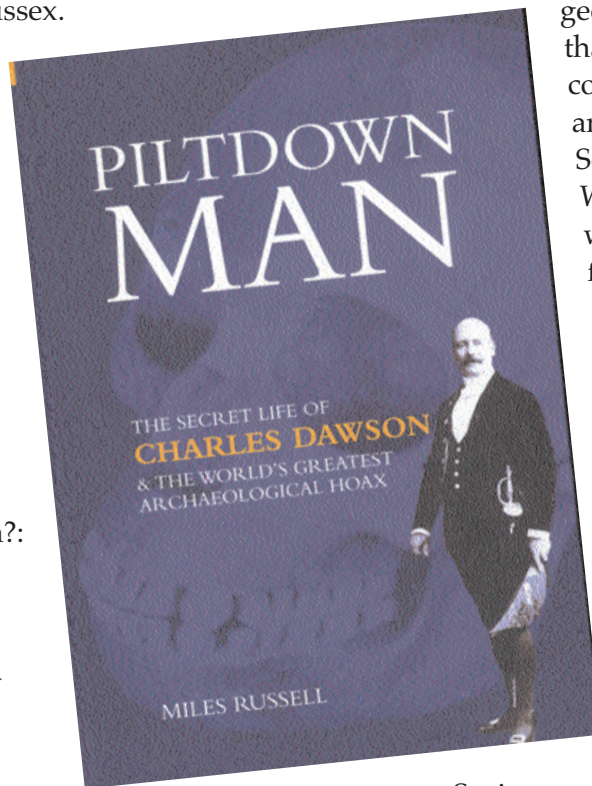
Dawson came from a middle-class family and went to work for a firm of solicitors at the age of 16. Over the next few years he pursued his

amateur interest in fossils and geology in general, to the extent that he became an 'honourary collector' of the British Museum and a fellow of the Geological Society at the age of just 21.

Within two years, however, he was to perpetrate his first fraud, filing down an animal tooth to suggest the discovery of a new species. From 1891 onwards Dawson was involved in a series of finds that gained him the title of fellow of the Society of Antiquaries by 1895. Russell examines these finds in his book and proves that most of them were hoaxes.

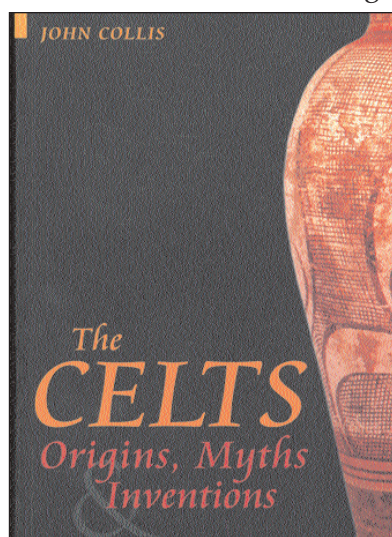
It then appears that Dawson sought a fellowship at the Royal

Society and decided that the best way to achieve this would be to discover the 'missing link'. From 1909 to 1912 Dawson made a series of finds in and near Piltdown that culminated in a skull that seemed part human and part ape and was acknowledged as the missing link. It was not until discoveries of more early human remains were made over the next few decades and dating techniques improved that Piltdown man was exposed as a hoax. For over 40 years, Dawson had tricked almost everyone, from family and friends to the academic world. This master-forger is unmasked in the book and all his secrets laid bare. Russell's lively and informative writing style combines clear analysis of the facts and all the elements of an intriguing story.



The Celts: Origins, Myths & Inventions, by John Collis (£19.99)

This is an extremely complex book that, in describing the Celts explains that the name defines less an identifiable group than a concept



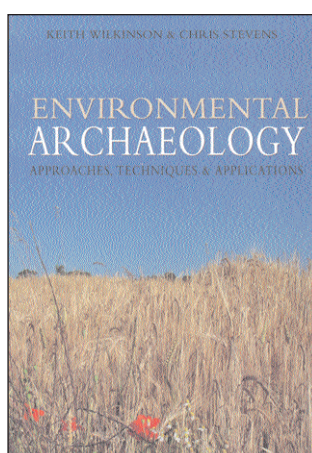
that has changed over the years. Although the author is a Professor of Archaeology, Collis says: 'anyone dealing with the Celts has to range over a number of different disciplines: classical texts and historical

criticism; linguistics; archaeology; art history; genetics; anthropology'. These topics form the chapters of the book, and Collis also looks at how definitions of the Celts have altered over the years and in different parts of Europe.

After an exhaustive study of the Celts and all that they have meant, Collis looks at current controversies surrounding them. He succinctly concludes with a series of points that summarise his radical reinterpretation of the Celts.

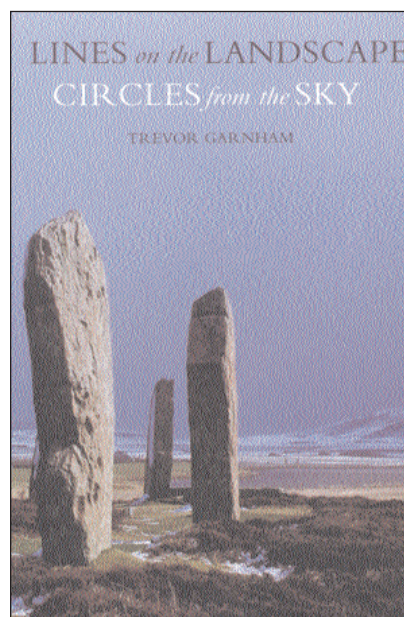
Environmental Archaeology, by Keith Wilkinson & Chris Stevens (£25)

The authors explain that 'environmental archaeology concerns the study of vegetation (flora) and animals (fauna), which lived in association with the people of the past, and the way in which humans interacted with these other living organisms...(it) is also about reconstructing the physicality of the landscapes in which people lived, hunted and farmed'. The authors cover techniques such as pollen analysis and insect studies and also show how the discipline can answer questions about past peoples. An excellent book for non-specialists.



Lines on the Landscape, Circles from the Sky, by Trevor Garnham (£17.99)

Another complex book, but unlike *The Celts*, this is a study limited in time, the Neolithic period, and place, the Orkney Islands. However, Garnham takes the reader on a journey through anthropology, mythology, comparative religion and folklore to explain the archaeology of the islands. As a lecturer in architecture, he expertly



describes the structures on the islands, from the best-preserved Neolithic houses in Europe, to burial tombs, such as the cairns of Rousay; from the Stones of Stenness to the Ring of Brodgar and the burial mound of Maes Howe. Good photographs

and reconstructions, such as one of a house at Skara Brae, bring the stones to life. Garnham goes beyond this to try to show the meaning that these structures had to the people who constructed them; he explains their view of the world and the cosmos. A fascinating study for anyone interested in the Neolithic concept of the world, as well as the architecture of the Neolithic era.

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THE KENT ARCHAEOLOGICAL FIELD SCHOOL COURSES

The listing of archaeological courses for 2004.

The fee is £35 a day unless otherwise stated, and if you become a member there is a 10% discount on full prices, except field trips. To join, fill in the form on the last page of the magazine, and to book a course fill in the form on page 31. For further details of courses, access our web site at www.kafs.co.uk.



March 20th & 21st, Field Walking and Map Analysis

Field work at its most basic involves walking across the landscape recording features seen on the ground. On this weekend course we are concerned with

recognising and recording artefacts found within the plough soil. These include flint tools, building material, pottery, glass and metal artefacts. One of the uses of field walking is to build up a database for large-scale regional archaeological surveys. We will consider the importance of regressive map analysis as part of this procedure. The course will cover: Strategies and Procedures, Standard and Non-standard Linewalking, Grid Walking, Pottery Distribution, Identifying pottery and building ceramics.

April 3rd & 4th, Field Trip to Stonehenge and Avebury

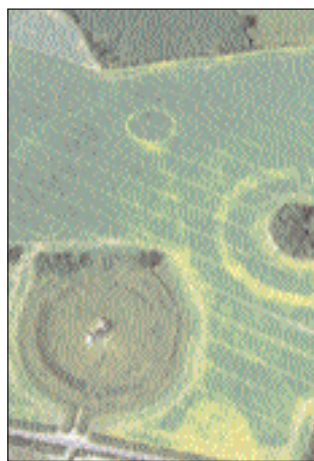
Fully booked.

Easter, April 9th to April 18th, Excavation of a Medieval Palace at Teynham

Our fifth season of field work and excavation at Teynham will concentrate on excavating the medieval manor house kitchens of the Archbishop of Canterbury's summer palace and the newly discovered medieval and Roman buildings close to the church farm. Beginners should book for the first five days, with the option to continue for further days (same daily fee applies). Experienced participants may book

the days they wish. Topics taught each day are: Friday: History of the Site & Why Dig?; Saturday: Excavation Techniques; Sunday: Site Survey; Monday: Archaeological Recording; Tuesday: Small Finds Photography and Recording. The non-member's fee is £35 per day, KAFS member's special fee is £30 per day.

April 24th & 25th, The Past from the Air



Prehistoric farms, Roman roads and villas, lost medieval settlements are all hidden in the landscape but can clearly be seen from the air. Specialists from English Heritage will show students various types of aerial photographs and explain the skills

needed to interpret them. There will be a practical exercise using aerial photographs to find and record a site in Kent.

May 1st, 2nd and 3rd, Discovering Archaeological Sites

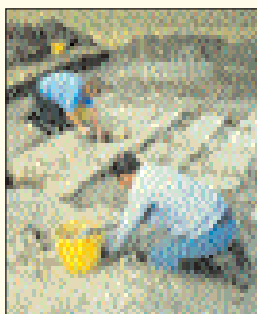
We shall look at the ways in which archaeological sites are discovered and excavated, and study the techniques used to pinpoint sites. During the three days of the bank holiday we will locate, survey and excavate, with test trenching, a previously unknown prehistoric site near Bridge to the east of Canterbury, in the very best traditions of Time Team.

SUMMER EXCAVATIONS 2004

TEYNHAM MEDIEVAL PALACE APRIL 9TH TO 18TH

ROMAN VILLA AT HOGBROOK JULY 17TH TO AUGUST 1ST

ROMAN TOWN OF DUROLEVUM AUGUST 23RD TO SEPTEMBER 5TH



Join us on our exciting excavations this year. The Easter excavation at Teynham will concentrate on the domestic areas of the Archbishop of Canterbury's summer palace. Some of the

pottery found in previous years is shown below. We will also investigate a possible Roman building found close to the church.

In July we will investigate an unknown Roman villa at Hogbrook close to Deerton Street. Initial investigations indicate there is a substantial bath house and extensive living quarters. During our field walking weekend this March, we found and mapped hundreds of pieces of Roman roofing tiles, Kentish

ragstone walling and cubes of coloured marble mosaic flooring.

In late summer, we will be continuing our excavation at the Roman town of Durolevum. Our programme of archaeological work will include sectioning military ditches, and investigating more of the large rubbish pits that we are finding behind the shop buildings which front on to Watling Street. We also plan to section Watling Street itself to confirm how and when the famous Roman road was built. Durolevum was found by members of the Field School by field walking and geophysical survey, and our keyhole investigations over the last four years have revealed the extent of the town. They have also raised the question of whether the town grew up outside a Roman military fort, as the Roman name does suggest.



KAFS COURSES

May 8th to May 14th, KAFS Field Trip to Imperial Rome



The KAFS club trip abroad for 2004. See page 5 for details.

May 15th to May 22nd, Field Trip to Pompeii and the Bay of Naples

See page 6 for details.

May 29th, 30th & 31st, Investigating an Archaeological Site

A practical three-day bank holiday course on a newly discovered Roman villa near Faversham. We will survey the extent of the villa and sample, through excavation, the quality of survival of the structure. There will be experts on site to date Roman pottery and coins as they are revealed by excavation.

June 5th & 6th, Bones and Burials

Osteo-archaeology is the study of human remains. The course will be led by Trevor Anderson, consultant to Canterbury Archaeological Trust, who has appeared on *Meet the Ancestors*. The course will cover the on-site recording of human remains and how they can reveal information about the person's age, sex and state of health. Excavated skeletons will be available for study and analysis in practical sessions.

June 19th to June 26th, Field Trip to Roman Provence

See page 7 for details.

July 3rd & 4th, Landscape Archaeology

A course designed for all those who want to know more about the English landscape. Six main categories of information will be studied: Field archaeology, aerial photography, maps, local history and place names. Dr Paul Wilkinson will guide us through the countryside to show how to apply archaeological theory to interpret and understand the landscape.

July 10th & 11th, Prehistoric Flints



A practical weekend course on the identification of prehistoric flint and stone with Terry Hardaker and Hugo Lamdin-Whymark of the Oxford Archaeological Unit. They will explain the technology used to produce prehistoric tools from all periods. A practical exercise on field walking and flint knapping with John Lord will take place on Sunday.

KAFS COURSES



July 17th to August 1st, Excavation of a Roman Villa

This year we will spend two weeks excavating and recording a high-status Roman building at Hog Brook near Faversham. The villa was previously unknown and has never been explored by archaeologists. Initial work suggests a substantial bath-house which may be attached to a large villa. Beginners are welcome on the Monday to Friday courses, with the option to continue for further days (same daily fee applies). Experienced participants may book the days they wish. Topics taught each day are: Monday: History of the Site & Why dig? Tuesday: Excavation Techniques; Wednesday: Site Survey; Thursday: Archaeological Recording; Friday: Small Finds Recording. The non-member's fee is £35 per day, KAFS member's special fee is £30 per day.

August 7th & 8th, Geophysical Surveying for Archaeologists

Archaeological geophysical survey plays a vital role in field work. It provides a framework for detailed recording and helps us to analyse a site. Methods from basic optical site levels to laser technology, resistivity and Ground Penetrating Radar will be taught. Practical exercises will take place at Syndale, our late summer excavation site.

August 21st & 22nd, Field Trip to Hadrian's Wall

See page 31 for details.

August 23rd to September 5th, Excavation at Syndale, near Faversham, Site of the Roman Town of Durolevum

The site of the lost Roman town of Durolevum (left) is now established at Syndale, near Faversham. The town appears in the Antonine Itinerary, but its location was later forgotten, until it was

re-discovered and confirmed as the site of the town by the activities of the Kent Archaeological Field School. Previous work by KAFS and Time Team (below) has revealed a plethora of Roman buildings. This year we will spend two weeks excavating and recording Roman buildings on the



west side of the town. Beginners are welcome on the Monday to Friday courses, with the option to continue for further days (same daily fee applies). Experienced participants may book the days they wish. Topics taught each day are: Monday: History of the Site & Why dig? Tuesday: Excavation Techniques; Wednesday: Site Survey; Thursday: Archaeological Recording; Friday: Small Finds Recording. The non-member's fee is £35 per day, KAFS member's special fee is £30 per day.

KAFS COURSES

September 11th & 12th, Archaeological Drawing

A beginner's and refresher course introducing participants to drawing archaeological artefacts. The reasons for drawing artefacts and the principles of archaeological illustration will be taught. There will be practical sessions each day demonstrating how to illustrate pottery, bone, metal and other artefacts found on archaeological sites. Course led by Jane Russell, who was senior illustrator of the UCL Field Archaeology Unit.

September 18th to September 25th, Field Trip to Pompeii and the Bay of Naples

See page 6 for details.

October 9th to October 16th, Field Trip to Roman and Medieval Spain

See page 8 for details.

October 23rd & 24th, Field Trip to Bath and the Roman Cotswolds

See below for details.

October 30th & 31st, How to Identify Roman, Anglo-Saxon and Medieval Pottery

The course will introduce students to the practical problems of identifying Roman, Anglo-Saxon and Medieval pottery. The types of pottery from each period will be explained and examples will be available for examination. A course for those who want to distinguish the many types of pottery found on British sites.



December 4th to December 9th, Field Trip to Roman Germany — the Edge of Empire

See page 9 for details.

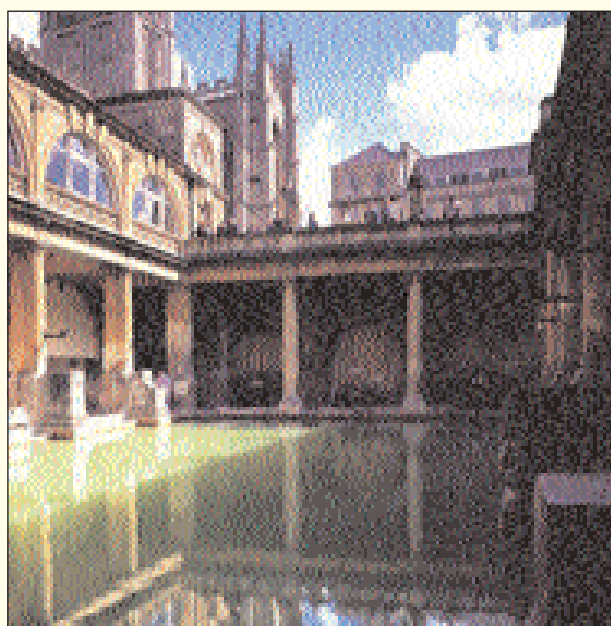


BATH AND THE ROMAN COTSWOLDS

OCTOBER 23RD & 24TH

We will spend the weekend visiting the Roman bath

complex at Bath, Chedworth Roman villa and the newly re-opened museum at Cirencester in the Cotswolds. The course will be led by Stephen Clews, curator of the Roman Baths Museum, who will take us on an exclusive tour behind the scenes in the Roman bath complex and offer special access to the bath-house and mosaics at Great Witcombe Roman Villa. We will be running this trip with *BBC History Magazine*, but KAFS members only may attend for £110 for the weekend, which includes entrance fees and transport through the Cotswolds on Saturday.

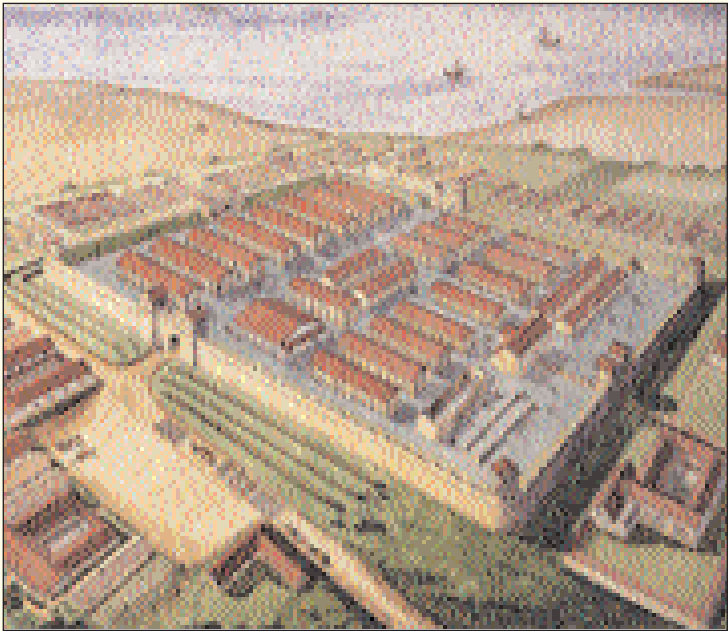


KAFS COURSES

FIELD TRIP TO HADRIAN’S WALL

AUGUST 21ST & 22ND

An exciting trip to the very edge of the Roman Empire. We will visit Housesteads, Birdoswald, Vindolanda and South Shields (right) Roman forts, the Roman military baths at Chesters, the Roman supply depot at Corbridge, and the working replica Roman baths at Segedunum. Our guide for the weekend is Professor David Breeze, author and expert on Hadrian’s Wall. We will be running this trip with *History Today*, but KAFS members only may attend for £110 for the weekend, which includes entrance fees and coach travel to sites along Hadrian’s Wall.



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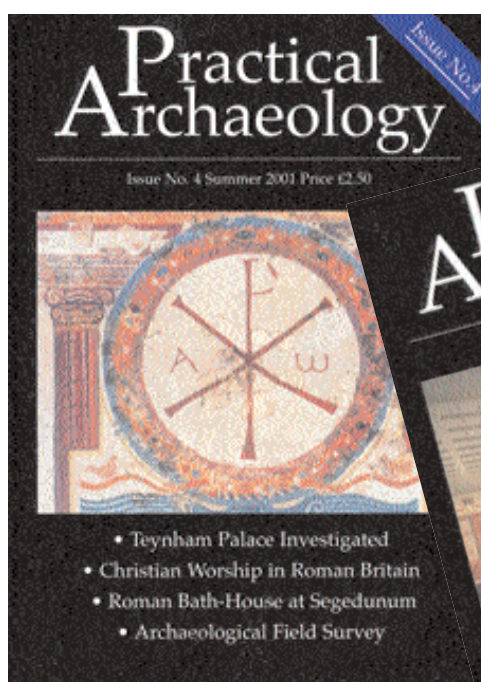
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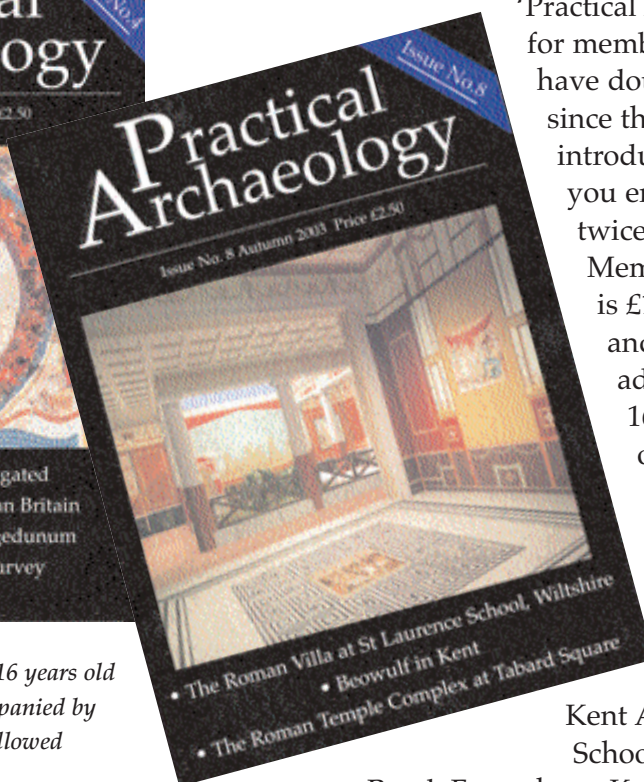
Please note that courses are bookable in advance only and are non-refundable or transferable. Member's 10% discount does not apply to special fees and field trips. Children under 16 years old are welcome on courses, but must be accompanied by an adult; under-16s are not allowed on excavations.

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Practical Archaeology



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'Practical Archaeology' is published for members of the KAF S club. We have doubled the number of pages since the first copy and have just introduced colour.. We hope that you enjoy the new look of the twice-yearly magazine.

Membership for a single person is £15, for two adults it is £25, and family membership (two adults and two children under 16 years old*) is £30. For overseas membership please add £5. Membership entitles you to a 10% discount on courses at the KAFS, except for special fees and on field trips. Please return the completed form to:

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