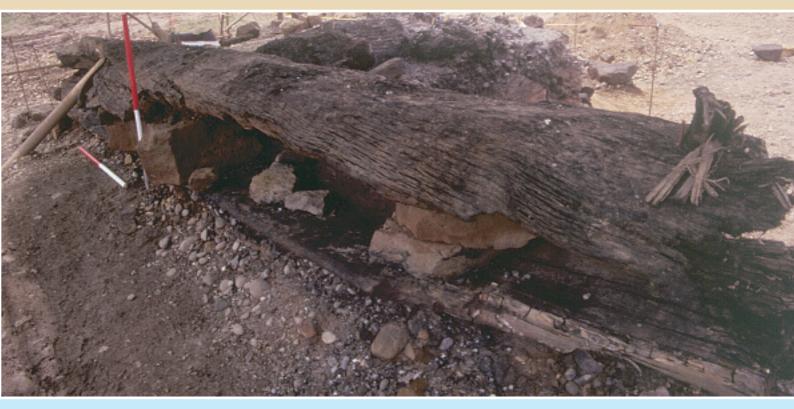
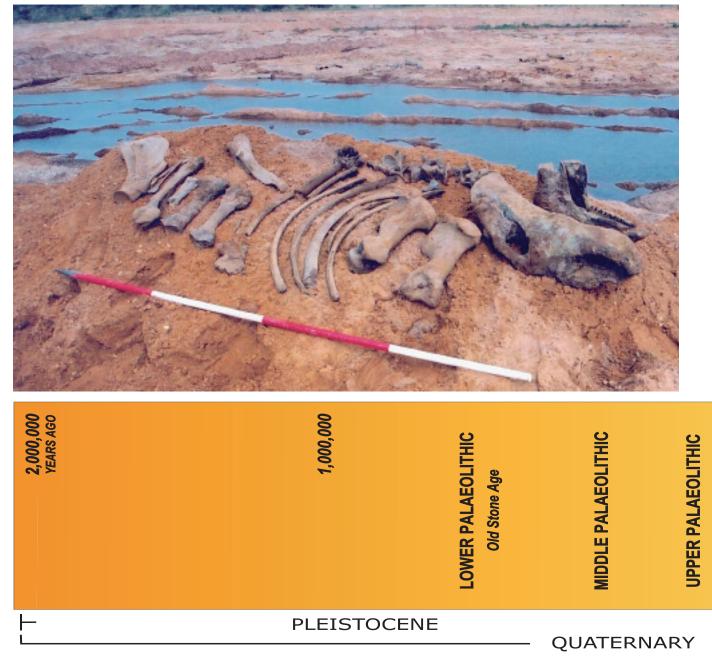
Making Archaeology Matter: Quarrying and Archaeology in the Trent Valley



David Knight and Blaise Vyner



Top photograph: Woolly rhinoceros remains recovered from late Pleistocene sand and gravel deposits at Whitemoor Haye Quarry, Staffordshire (© Birmingham Archaeology)

Cover photograph: Bronze Age logboat discovered during watching brief at Shardlow Quarry, Derbyshire. Photograph: D. Knight

Contents

1	Introduction	2
2	Archaeological Procedures	3
	Preliminary assessment	3
	Detailed assessment and evaluation	5
	Full investigation	8
	Post-excavation and reporting	10
3	Archaeological Finds	11
	Stone artefacts	11
	Metalwork and pottery	12
	Bone, antler and skeletons	13
	Organic deposits and tree trunks	14
	Wooden artefacts and carbonised material	15
	Structural remains and archaeological features	15
4	Discoveries: what to do	17
	Local Government Archaeological Officers	17
	Finds Liaison Officers	18
	District Coroner	18
	English Heritage	18
5	Archaeology and the Law	19
	The Treasure Act	19
	Burials and human bones	19
	Ownership of finds	19
6	Further Sources of Information	20

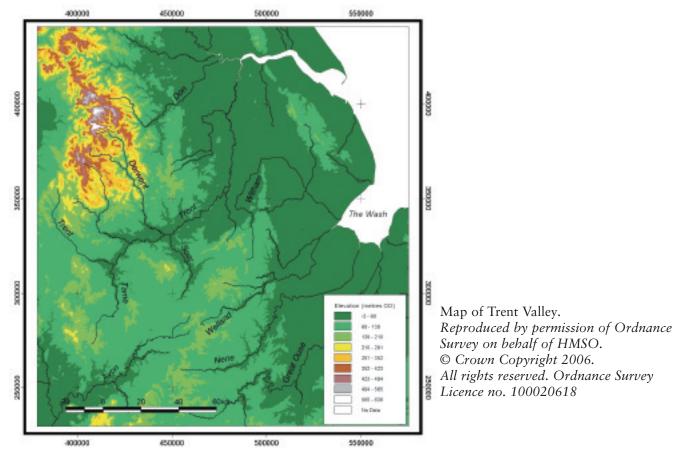


Excavation of a prehistoric pit alignment at Barrow-upon-Trent, Derbyshire. Rows of pits, perhaps originally flanked on one or both sides by an earthen bank, were commonly used as boundaries during the Iron Age (photograph: D. Knight)

10,000	6000	4000		2000	L ال
MESOLITHIC Middle Stone Age	NEOLITHIC New Stone Age	BRONZE AGE	IRON AGE	ROMAN	EARLY MEDIEVA MEDIEVAL POST MEDIEVA PRESENT
\vdash		HOLOCE	NE		

1 Introduction

This booklet aims to provide a brief introduction to the archaeological issues associated with gravel quarrying. Its geographical focus is the Trent Valley, one of the major sources of sand and gravel in the UK. The continuing demand for sand and gravel, combined with an increasing awareness of the rich archaeology of the river terraces and floodplain, encouraged the establishment in 2001 of Trent Valley GeoArchaeology. The organisation is a co-operative of stakeholders, including researchers, heritage managers and industrial representatives. It provides a mutually supportive framework for multidisciplinary research within the region which is of benefit to the entire community. It has initiated and supported a wide variety of research projects in the Trent Valley, including the recent volume *Trent Valley Landscapes* and a host of other projects reported on the organisation's web site (www.tvg.bham.ac.uk), as well as providing the inspiration for this booklet.



2 Archaeological Procedures

When planning a new quarry or an extension to an existing quarry, preliminary consultations should be held with the appropriate planning authority. Under the terms of Planning Policy Guidance Notes 15 and 16, developments which require planning permission, including quarrying and associated infrastructure, have to be accompanied by an assessment of archaeological and other historic features which may be present in the affected area. Depending upon the results of assessment, permission to go ahead may be withheld or may be permitted upon condition that further or full examination of the area is undertaken. These notes outline the range of actions which may be required to mitigate adverse effects on the historic environment.

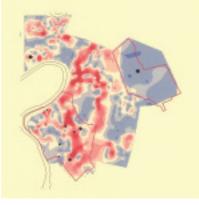


Plotting old channels of the Trent in the floodplain near Nottingham (photograph: D. Knight)

Proposed Southern and Eastern Extensions, Besthorpe Quarry, Nottinghamshiru

Archaeological Dosking Assessment for Lafurge Aggregates Lul

By Andy J. Hersand, Elleren Applaton, Kellly-Challis and David Knight.



Desk-based assessment of proposed extension to Besthorpe Quarry, Nottinghamshire (reproduced by permission of Lafarge Aggregates Ltd)

Preliminary Assessment

A report on preliminary assessment of the archaeological and historic potential of an area, if not submitted with a planning application, is usually required before it can be considered. The purpose of assessment is to ensure that any archaeological or historic features are identified and appropriately safeguarded or recorded in advance of development.

Desk-based assessment

This usually involves a site visit to establish whether or not any historic features are immediately visible on the site, a check on the records held in the local authority Historic Environment Record, and a review of air photographs, maps, documents and published sources held there and elsewhere.

Aerial photographs

Most areas of the country have been the subject of general air photography on successive occasions since 1945, and there are now many photographs available which have been taken for a wide range of planning purposes. These photographs provide detailed information about historic features visible on the ground surface, such as earthwork boundaries and old tracks. Because the soils contained within ditches and pits retain more moisture than the surrounding subsoil, ripening crops can also reveal archaeological sites which are no longer visible on the surface. This occurs because the crop growing over a ditch or pit will have access to more moisture and thus remain green when the surrounding crop is yellowing. A reverse effect is produced by buried walls, which encourage overlying crops to ripen early.



Confluence of the Rivers Trent (top) and Derwent (bottom), showing old river channels and a mosaic of ridge and furrow indicating the former extent of medieval arable fields (© Simmons Aerofilms)

Walk-over surveys

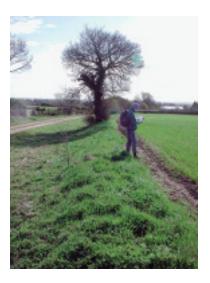
A brief walk-over survey should include access to the whole of any affected area in order to identify any surface features of archaeological or historic interest.



Pit alignments and other boundary features showing as cropmarks near Cromwell, Nottinghamshire (© English Heritage. NMR. Derek Riley Collection)

These include buildings or their remains, as well as earthworks such as building foundations, boundary banks, pits and hollows indicative of past activity in the area. Walk-over surveys are most effective when vegetation is low and there is good sunlight. If these conditions do not prevail, it is easy to miss historic features.

Recording a medieval plough headland, formed where the plough was turned, near the Roman town of Margidunum, Nottinghamshire (photograph: G. Kinsley)



Detailed Assessment and Evaluation

Desk-based assessment may not provide sufficient information to establish whether or not there is archaeological information at any particular location. Further assessment may be required, which may include a variety of approaches designed to find out whether or not there may be archaeological or historic potential below the ground. The purpose of assessment and evaluation is to confirm the nature of any archaeological or historic resources and to establish strategies which can preserve or record them. The better the information that is available, the better the chance that development can proceed without unforeseeable disruption.

Geophysical and other remote sensing techniques

Buried archaeological features such as pits or ditches may also be identified through a range of geophysical techniques. Resistivity survey can reveal features which have a different resistance from the surrounding subsoil to an electrical current. Magnetometer survey can

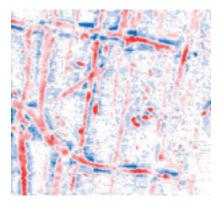


Magnetometer survey in progress near the Roman town of Margidunum, Nottinghamshire (photograph: B. Vyner)



Captain's Pingle, Barrow-upon-Trent: 3D representation of gradiometer survey plan (Survey for TPAU by Adrian Butler; reproduced by permission of University of Leicester Archaeological Services and Lafarge Aggregates Ltd)

identify pits or other features which contain material with a particular magnetic signature. Computer manipulation of the survey results can clarify and enhance the information provided by survey.



Captain's Pingle, Barrow-upon-Trent, Derbyshire: magnetometer survey plan showing curvilinear Romano-British ditched enclosure. Linear anomalies running obliquely across the enclosure correspond to the furrows associated with medieval ridge and furrow cultivation (Survey for TPAU by Adrian Butler; reproduced by permission of University of Leicester Archaeological Services and Lafarge Aggregates Ltd)

Fieldwalking

Where agriculture allows the ground surface to be seen, methodical walk-overs can retrieve artefacts indicative of underlying archaeological sites. This is particularly effective in recovering flints from prehistoric sites and robust artefacts of metal or well-fired pottery – most likely to be of Roman or medieval date. Sites which do not yield such material, however, will remain invisible.



Surface scatters of Romano-British roof tile and pottery near the Roman town of Margidunum, Nottinghamshire (photograph: G. Kinsley)



Earthworks of a sub-square embanked enclosure at Sawley, Derbyshire, interpreted as possibly the remains of a small Roman fort. Rectangular medieval fish ponds can be seen in the triangular field between the enclosure and the main road (Copyright reserved Cambridge University Collection of Air Photographs)



Fieldwalking of weathered ploughed fields near South Muskham, Nottinghamshire (photograph: D. Garton)

Earthwork and building surveys

If proposed development is permitted, detailed surveys of surface archaeological features or building remains may be required. This comprises a measured survey combined with detailed photography and written description. Detailed examination and recording of features often reveals unsuspected information which enables the age and history of the feature to be better understood.



Eighteenth century water mill in the Trent Valley near Netherseal, Derbyshire (photograph: R. Sheppard)

Test-pitting

The hand excavation of a series of small pits, usually on a grid, can be a useful way of establishing whether or not buried archaeology is present. In particular, it may establish whether surface finds of flint or pottery are related to surviving archaeological deposits or are simply remnants of destroyed archaeology.



Excavation of test-pit at Collingham, Nottinghamshire (photograph: D. Knight)

Borehole data and augering: geoarchaeological assessment

Boreholes, coring and machine-dug test-pits are often recommended to establish the presence and extent of



Borehole through alluvial deposits in the Trent floodplain near Clifton, Nottingham (photograph: P. Inker)

buried gravel and other mineral deposits; these techniques can also be useful in establishing whether or not there is archaeological interest at a particular location. Investigation of levels which are deeper than the base of the ploughsoil has the potential to identify archaeological deposits which may belong to very early time periods.

Evaluation trenching

Where survey has identified the potential survival of archaeological deposits, evaluation excavations are often needed to determine the extent of survival of the archaeology, its importance, and the nature of the work needed to complete its investigation and recording. Evaluation trenches are usually fairly limited in size, commonly 2 metres wide and 20 to 30 metres long; they are conveniently excavated using a JCB or Hymac using a ditching bucket to remove topsoil and to reveal the clean, undamaged, surface of the subsoil. Ancient ditches and pits are usually – although not invariably – filled with soils which contrast in colour and consistency with the surrounding gravel and silt subsoils.



Excavation of an evaluation trench near the Roman town of Crococalana, Brough, Nottinghamshire (photograph: H. Jones)

Full Investigation

The results of assessment and evaluation may confirm that further recording of archaeological or historic features is required before development can proceed, although often such work can be programmed to accompany the early stages of site preparation.

Watching brief during topsoil-stripping

Adequate recording of archaeological information can often be accommodated though undertaking a watching brief during topsoil-stripping operations. In these circumstances, topsoil can be removed using machinery fitted with toothless buckets to enable a clean surface to be revealed. Topsoil and other overburden is removed carefully in shallow spits under the supervision of archaeologists. Revealed archaeology is hand-excavated and recorded as part of a running programme. Where large areas are involved, this can be an effective way of managing the required archaeological recording as part of site preparation.



Watching brief during the stripping of topsoil at Rampton Quarry, Nottinghamshire (photograph: V. Score)

Excavation

Assessment and evaluation may reveal archaeological or historical information of sufficient interest and importance to justify either its preservation or its full detailed investigation. Topsoil removal can be undertaken under archaeological supervision, but the extent of survival of archaeology – and its complexity – may require archaeological information to be recorded in detail before development can start.



Excavation of an Iron Age pit alignment at Fleak Close, Barrow-upon-Trent, Derbyshire. (photograph: D. Knight)

Unexpected discoveries

Proper assessment and evaluation will minimise the risk of unexpected discoveries, but it should be borne in mind that some kinds of archaeological and historical evidence are not susceptible to available prospection methods. In particular, isolated burials and finds are difficult to detect and these are often of special interest. Particular difficulties are also encountered in locating archaeological sites buried beneath substantial depths of floodplain alluvium; stripping of this material often reveals important archaeological remains. These discoveries may seem to present a challenge from a quarrying perspective, but can be met by an agreed method of working and are not usually extensive enough to cause significant operational delays. In these circumstances, consideration should also be given to the potential for positive publicity arising from information of exceptional archaeological interest.



Excavation of wattlework panels forming part of medieval fishweir exposed during watching brief at Swarkestone Quarry, Derbyshire (photograph: B. Lewis)



Medieval wicker basket, used to catch eels and probably other fish species, located during watching brief at Hemington Quarry, Leicestershire (© University of Leicester Archaeological Services)



Bronze Age logboat revealed during watching brief at Shardlow Quarry, Derbyshire; the boat contained sandstone blocks, which may represent cargo transported from upstream (photograph: D. Garton)

Post-Excavation and Reporting

The archaeological and historical conditions attached to planning permissions are only discharged following the completion of analysis and reporting on the results of investigations. This is followed by the deposition of all documentary records and artefacts in an appropriate museum.

• Assessment and evaluation of archaeological and historic evidence involve specialist analyses of the recovered artefacts and samples in order to interpret the remains which have been found.



Microscopic examination of charred plant remains preserved in soil samples from Romano-British features at Tiln Quarry, Nottinghamshire (photograph: B. Lewis)

• The data arising from specialist analysis of the finds are combined with the information gained from the examination of maps, air photographs, documents, fieldwork and excavation to produce a narrative explanation about the past.



Tudor map of Newark showing medieval courses of RiverTrent, mills, bridges and contemporary settlements (© The British Library board. Cotton Mss Augustus 1.i 65. All rights reserved)

- The full results of analysis and reporting are usually presented in published form in a journal or individual technical report, although there are also opportunities to make this information available on the web.
- In many cases an illustrated summary of the results is also distributed to the public in brochure or leaflet form.





Popular booklet on excavations along the A46 between Newark and Lincoln, prepared on behalf of the Highways Agency (reproduced by permission of Highways Agency)

Published monograph on excavations of an Anglo-Saxon settlement at Catholme, Staffordshire

3 Archaeological Finds

Individual finds can be important, but information on where finds come from can tell us much more than just the finds alone. Many finds can be dated in some way and so are likely to provide a date for the context in which they have been found. Finds such as flint or pottery can also provide an indication of what kinds of activity were taking place at a particular location. For these reasons any finds should, if at all possible, be left in their original position until expert advice has been obtained.

Flint and chert

Flint and chert are types of particularly hard stone which can be worked to produce artefacts with sharp edges such as axes, knives, saws, arrowheads and scrapers. Unlike items of wood or other organic materials, artefacts made from flint and chert survive for very long periods. Changing forms of stone tools allow their approximate date to be established, and study of the forms of tools found in gravel quarries along the Trent suggests activity in the region from at least 250,000 years ago. Amongst the earliest Stone Age tools are handaxes of Lower Palaeolithic type found during gravel quarrying along the Trent in Derbyshire and Nottinghamshire. Not until the Late Upper Palaeolithic, around 13,000 to 10,000 years ago, are flint artefacts found at 'activity' sites.

Other stone artefacts

Other types of stone are generally too soft to be used for small tools, as they will not take an edge and can break easily. One of its main uses, following the introduction of cereals in the Neolithic period, has been for milling grain. Apart from general use as a building material, stone has also been used for objects such as weights, whetstones and hammer stones, all of which may turn up as 'stray' finds during topsoil removal.



Romano-British rotary quern for grinding grain, broken in antiquity and re-used as a post-pad, from Captain's Pingle, Barrow-upon-Trent, Derbyshire (photograph: D. Knight)



Late Upper Palaeolithic flint blades from Farndon, Nottinghamshire (photograph: G. Owen; © R. Jacobi)



Grooved sandstone blocks from Hemington Quarry, Leicestershire, interpreted as probably anchors for medieval fishing tackle (photograph: C. Salisbury; reproduced by permission of Oxbow Books)

Metalwork

Because of their value, and their potential for being melted down and re-used, metal items were seldom disposed of as rubbish in the past. Instead, items of bronze and iron are frequently found with burials in graves or as stray finds reflecting accidental loss. In the quarry context, the Bronze Age and Iron Age practice of ritual deposition of weapons and other objects in rivers and marshy places is especially interesting.



Middle Bronze Age bronze rapier retrieved from the conveyor belt at Langford Quarry, Nottinghamshire, after passing comparatively unscathed through the crusher (reproduced by permission of the Thoroton Society of Nottinghamshire)

Pottery

Complete pots are usually only found where they have been placed with burials, but sherds of pottery are often present in quantity on occupation sites dating from the Neolithic period to the present day. Pottery sherds are important as they are often the only evidence for the date of a site; they may also provide information on where activities such as eating and drinking took place within settlements.



Complete pottery Beaker of Late Neolithic/Early Bronze Age date from a pit at Rampton, Nottinghamshire, possibly deposited with a human burial (photograph: D. Walker)



Early Bronze Age copper dagger with remnants of organic scabbard from Lockington, Leicestershire (photograph: Graham Norrie; reproduced by permission of Birmingham Archaeology)

Surface scatter of Romano-British pottery and tile fragments near Margidunum, Nottinghamshire (photograph: G. Kinsley)



Bone and antler

Bone and antler have been used to make tools and ornaments since Palaeolithic times, but unfortunately examples of these rarely survive in the acidic conditions of the Trent gravels. The organic fills of old river channels and other waterlogged environments have preserved more impressive bone remains, including the individual bones of both humans and animals. Such remains can provide valuable information on past human activity, as demonstrated by the remarkable Mesolithic remains from Staythorpe in Nottinghamshire that are illustrated here.



Barbed Mesolithic antler harpoon from the Trent riverbank at Long Eaton, Derbyshire or Thrumpton, Nottinghamshire (photograph: A. Inscker, Brewhouse Yard Museum, Nottingham)



Red deer antler with cut mark, associated with Mesolithic activity at Staythorpe, Nottinghamshire (© ARCUS, University of Sheffield)

Skeletons

Human burials are the subject of legislation noted below. Skeletal remains of both humans and animals are often of considerable archaeological interest and should be safeguarded pending proper examination.



Mesolithic human female femur (leg bone) from Staythorpe, Nottinghamshire (© ARCUS, University of Sheffield)



Woolly rhinoceros remains recovered from late Pleistocene sand and gravel deposits at Whitemoor Haye Quarry, Staffordshire (© Birmingham Archaeology)

Organic deposits

Waterlogged conditions frequently occur in gravel areas, particularly along the courses of ancient river valleys (palaeochannels). These old river channels may be completely obscured by later flood deposits or by redeposited gravel, but many may still be observed as abandoned water-filled channels, bands of darker soil or linear depressions. Over the past decade, routine examinations of palaeochannels in the Trent valley have changed fundamentally our understanding of prehistoric environments in the region. The combination of waterlogging and airless conditions allows the preservation of wood, peat and other organic material, some of which may incorporate evidence for past human activity. Preserved timber may retain axe and other cutting marks indicating its former treatment and use, while peat can preserve tree, plant and cereal pollen which can provide information on earlier land-use in the area. All organic material also has the potential for radiocarbon dating.



Augering of palaeochannel deposits in Trent Valley near Shardlow, Derbyshire (photograph: D. Knight)



Late prehistoric palaeochannel at Hicken's Bridge, Astonupon-Trent, Derbyshire; deposits of peat show as a dark wedge in the side of the excavation (photograph: A.J. Howard)

Tree trunks and stumps

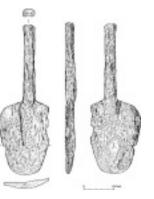
Large tree trunks and stumps, indicative of ancient floodplain woodlands, are sometimes preserved by waterlogging. Parts of trees may show evidence of felling or other forest management, while trunks and branches can be tree-ring dated very accurately.



One of many Neolithic and Bronze Age oak tree trunks preserved in the reworked gravels at Langford Quarry, Nottinghamshire (photograph: L. Elliott)

Wooden artefacts

Waterlogging sometimes allows the preservation of wooden artefacts which do not survive in dry ground. These remind us of the importance of wood and the wide range of uses to which it was put. Wood was extensively used for tools and weapons, while stems of willow and hazel



were used for objects such Iron Age oak shovel found at as wickerwork containers, Hoveringham Quarry, baskets, and traps.

Nottinghamshire (S. Allen. York Archaeological Trust)

Carbonised material

Incomplete burning of organic material can result in its long-term preservation in carbonised form, often readily recognizable as a spread of charcoal and black ash. Once partly burnt, wooden items, nuts and woody plant material can be preserved for very long periods. Carbonised material can be radiocarbon-dated, while examination of these remains can provide important information on what was grown and eaten in the past.

Laboratory analysis of *charred plant* remains (photograph: Jacqui *Huntley*; © English Heritage)



Structural remains and archaeological features

Quarrying may reveal an enormous diversity of structural remains of all periods, including building foundations, stone or timber bridge foundations, or timber causeways. Particularly common are spreads of burnt shattered stones indicative of prehistoric 'burnt mounds'. These may occur alongside ditches, pits, postholes and other features dug into the subsoil and filled with soil contrasting in colour and consistency to the natural deposits into which they were dug.



Prehistoric burnt mound revealed during watching brief at Hoveringham Quarry, Nottinghamshire. The photograph shows an irregular patch of burnt, shattered stones and the top of a rectangular pit filled with alluvial clay (foreground). Excavation found the pit to have a timber lining designed to retain water. The burnt stones may have been heated in a nearby hearth and thrown into the trough, possibly to heat water for cooking (photograph: L. Elliott)

The important point is to notice anything which appears to be unusual and to leave areas preserving these remains undamaged until specialist examination can take place. Some examples of recent discoveries made during gravel quarrying in the Trent valley are shown on the following page.



View of an Iron Age sub-rectangular ditched enclosure at Fleak Close, Barrow-upon-Trent, Derbyshire, demarcated by a single ditch many times recut and possibly by a long-vanished internal bank (photograph: D. Knight)



13th century bridge pier foundation, Hemington Quarry, Leicestershire (photograph: S. Ripper, University of Leicester Archaeological Services, © Leicestershire County Council)



Wood-lined trough in a Bronze Age burnt mound at Willington, Derbyshire (photograph: M. Beamish; © University of Leicester Archaeological Services)



Multiphase Iron Age round house, Hoveringham Quarry, Nottinghamshire, showing two phases of timber bedding trench and later post-hole ring (photograph: L. Elliott)



Small Iron Age ditched enclosure at Hoveringham Quarry, Nottinghamshire (photograph: L. Elliott)



Timber frame of a Norman mill dam recorded at Hemington Quarry, Leicestershire (reproduced from the Archaeological Journal by permission of P. Clay and the Royal Archaeological Institute)

4 Discoveries: what to do

If you think that you have found something of archaeological interest, try to avoid damaging it and inform management of your discovery. Ideally, artefacts should be left where they are. Do avoid letting wooden, bone or other organic objects dry out, and resist the temptation to try cleaning them! If you have access to a camera, it would be helpful to photograph the find, preferably at the site of discovery but otherwise in the quarry office.

- Inform management of your discovery. This booklet may be used to explain its potential interest.
- The quarry company may retain the services of an archaeological consultant, or it may have already commissioned an archaeological contractor to undertake some of the works detailed in this booklet. Either of these can be contacted for advice.
- The local county or district archaeology officer can assist with information and advice. Contact details are listed below.



Iron Age fired clay loomweight from Hoveringham Quarry, Nottinghamshire (photographed in Quarry Offices by L. Elliott)

Local Government Archaeological Officers

Derbyshire, Derby and the Derbyshire Dales: HER Officer, Environmental Services department, Shand House, Dale Road South, Matlock, Derbyshire DE4 3RY 01629 580000 ext 3357

Leicester: City Archaeologist, City Council Offices, New Walk Centre, Welford Place, Leicester LE1 6ZG 0116 252 7282

Leicestershire County Council (also covering Rutland): Senior Planning Archaeologist, Historic and Natural Environment Team, Room 500, County Hall, Leicester Road, Glenfield, Leicestershire LE3 8TE 0116 265 8322

Lincoln City Council: Heritage Information Officer, Department of Development and Environmental Services, City Hall, Beaumont Fee, Lincoln LN1 1DF 01522 873478

Lincolnshire: Conservation Services, Planning and Conservation Group, Development, City Hall, Beaumont Fee, Lincoln, Lincolnshire LN1 1DN 01522 782070

North East Lincolnshire: Environmental Planning, Civic Offices, Knoll Street, Cleethorpes DN35 8LN 01472 323586

Boston, North Kesteven and South Kesteven: Community Archaeologist, c/o Heritage Lincolnshire, The Old School, Cameron Street, Heckington, Sleaford NG34 9RW 01529 461499

North Lincolnshire: HER Officer, North Lincolnshire Museum, Oswald Road, Scunthorpe DN15 7BD 01724 843533

Northamptonshire: HER Officer, Built and Natural Environment Team, PO Box 133, County Hall, Northampton NN1 1AX 01604 236061

Nottingham City: Leisure and Community Services, Brewhouse Yard Museum, Castle Boulevard, Nottingham NG7 1FB 0115 9153623

Nottinghamshire: Environment Department, Trent Bridge House, West Bridgford, Nottinghamshire NG2 7QX 0115 9772129

Staffordshire: HER Officer, Environmental Planning Unit, Riverway, Stafford ST16 3TJ 01785 277281

Stoke-on-Trent: HER Officer, Potteries Museum, Hanley, Stoke-on-Trent ST1 3DW 01782 232597

Finds Liaison Officers

The Portable Antiquities Scheme supports a network of finds specialists who can provide advice and information on finds.

Derbyshire and Nottinghamshire: Finds Liaison Officer, Derby City Museum, The Strand, Derby DE1 1BS 01332 716665

Leicestershire and Rutland: Finds Liaison Officer, Room 500, Environment and Heritage Services, County Hall, Glenfield, Leicestershire LE3 8TE 0116 265 8325

Lincolnshire: Finds Liaison Officer, Conservation Services, Planning and Conservation Group, Development, City Hall, Beaumont Fee, Lincoln, Lincolnshire LN1 1DN 01522 552361

North East Lincolnshire and North Lincolnshire: Finds Liaison Officer, North Lincolnshire Museum, Oswald Road, Scunthorpe DN15 7BD 01724 843533

Northamptonshire: Finds Liaison Officer, Built and Natural Environment, PO Box 133, County Hall, Northampton NN1 1AX 01604 237249

Staffordshire: Finds Liaison Officer, Birmingham City Museum and Art Gallery, Chamberlain Square, Birmingham B3 3DH 0121 303 4636

The District Coroner

The district coroner should be informed immediately of discoveries of human burials or of metalwork and coin discoveries. The address will be in the local telephone directory.

English Heritage

English Heritage may offer specialist advice and information where discoveries are likely to be of regional or national importance.

East Midlands (historic counties of Derbyshire, Leicestershire, Lincolnshire and Nottinghamshire): English Heritage, 44 Derngate, Northampton NN1 1UH 01604 735400

West Midlands (Staffordshire): English Heritage, 112 Colmore Row, Birmingham B3 3AG 0121 625 6820



Bronze Age logboat from Shardlow Quarry, Derbyshire, during conservation by York Archaeological Trust (© York Archaeological Trust)

What happens next?

Your discovery, if an artefact, will be examined by experts who will be able to establish the date and nature of the find. Ownership of finds is covered in Section 5 below. If you have found an archaeological feature or an organic deposit, the findspot should be examined in order to record the extent and nature of the archaeological or historic remains. This will establish whether further archaeological excavation or recording will be required. After removal from the site, finds will be examined further, cleaned and, if necessary, conserved to ensure their long-term preservation.

5 Archaeology and the Law

The Treasure Act

The Treasure Act 1996 requires finders to report all discoveries of treasure to the district coroner within 14 days of discovery. Treasure can include any object other than a coin which is over 300 years old and whose metallic content is more than 10% gold or silver, coins over 300 years old with a gold or silver content of more than 10%, groups of ten or more coins of any composition over 300 years old and associated items such as a pot in which any of the above were contained. Other objects, deemed by the Secretary of State to be of outstanding historical, archaeological or cultural importance, may also be designated as treasure.

Burials and human bones

All discoveries of human burials, or recognizable parts thereof, should be reported to the district coroner's office. Excavation or disturbance of human burials will usually require a Home Office licence, and should only be carried out by appropriate specialists.



Anglo-Saxon burial with iron shield-boss and spearhead from Windmill Hill, Cotgrave, Nottinghamshire (photograph reproduced by permission of M. Bishop, Nottinghamshire County Council Environment Dept)



Later Neolithic human skulls preserved within a log-jam in a former channel of the River Trent at Langford Lowfields Quarry, Nottinghamshire (photograph: D. Garton)

Ownership of finds

Ownership of finds resides with the landowner, unless a prior arrangement to the contrary is in force. It should be noted that rewards for the finders of treasure are increased if the discovery is maintained undisturbed for archaeological investigation.



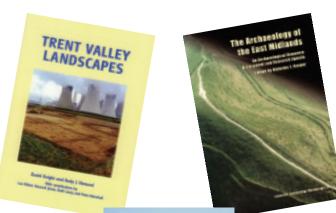
Early Bronze Age gold armlets from a pit at Lockington, Leicestershire (photograph: Graham Norrie; reproduced with permission of Birmingham Archaeology)

6 Further Sources of Information

General Reading

Cooper, N., ed. (2006) *The Archaeology of the East Midlands*, Leicester Archaeological Monograph 13, University of Leicester. Book cover image © University of Leicester Archaeological Services.

Knight, D. and Howard, A.J. (2004) *Trent Valley Landscapes: The Archaeology of 500,000 Years of Change*, Heritage Marketing and Publications Ltd, King's Lynn.





Websites

Council for British Archaeology: www.britarch.ac.uk

English Heritage: www.english-heritage.org.uk

Finds Liaison Scheme: www.finds.org.uk

Minerals Industry Research Organisation: www.goodquarry.com

National Ice Age Network: www.iceage.bham.ac.uk

OnTrent, action for wildlife, landscape and communities: www.ontrent.org.uk; book cover image © Peter Roworth, OnTrent

Quarry Products Association: www.qpa.org

Trent Valley GeoArchaeology: www.tvg.bham.ac.uk

Treasure Act 1996: www.opsi.gov.uk/ACTS/acts1996/96024--a.htm

Published by York Archaeological Trust © York Archaeological Trust, 2006

All Rights Reserved

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior written permission of the publisher.

Printed in England by Q3 Digital/Litho

ISBN-10: 1 874454 39 6 ISBN-13: 978 1 874454 39 7

Acknowledgements

This booklet was initiated, designed and published by York Archaeological Trust, and written by David Knight (Trent & Peak Archaeological Unit) and Blaise Vyner. It was funded by the Aggregates Levy Sustainability Fund, distributed by English Heritage on behalf of Defra. Illustrations are copyright of Trent & Peak Archaeological Unit, unless otherwise stated, and were produced with the assistance of Richard Sheppard (TPAU). Thanks are due to the many individuals and organisations, acknowledged in the figure captions, who granted permission for the use of illustrations and to Alison Wilson (TPAU) for assistance in the obtaining of copyright permissions. Thanks are also extended to John Walker (York Archaeological Trust) and Sarah Cole and Jon Humble of English Heritage for guidance and support during completion of the booklet, to Mike Bishop (Nottinghamshire County Council), Dave Barrett (Derbyshire County Council), Richard Clark (Leicestershire County Council), Mark Bennet (Lincolnshire County Council) and Jim Chapman (Caterpillar UK) for their comments on a draft of the text, and to Neil Beards (Tarmac Ltd) and the many other members of the aggregates industry who have provided advice and support during the development of this project.



Detail of Tudor map of Newark, showing medieval courses of RiverTrent, mills, bridges and contemporary settlements (© The British Library board. Cotton Mss Augustus 1.i 65. All rights reserved); see also page 10

Back cover: *Excavation of a small Late Iron Age penannular ditched enclosure at Rampton*, Nottinghamshire, possibly the drainage ditch for a small circular hut (left) and recording of late prehistoric palaeochannel of the Trent near Collingham, Nottinghamshire (right; photographs: D. Knight)









ISBN-10: 1 874454 39 6 ISBN-13: 978 1 874454 39 7 TRENT PEAK ARCHABOLOGICAL UNIT

Y-O-R-K