

The Thames through Time

The Archaeology of the Gravel Terraces of the Upper and Middle Thames

Early Prehistory: to 1500 BC

Part 1 – The Ice Ages: palaeogeography, Palaeolithic archaeology
and Pleistocene environments

by Anthony Morigi, Danielle Schreve and Mark White

Part 2 – The Mesolithic, Neolithic and early Bronze Age and the
establishment of permanent human occupation in the valley

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Preface

This volume is the third in our series *The Thames through Time*, funded from the Aggregates Levy Sustainability Fund, which seeks to provide an accessible and up to date synthesis of the large quantity of archaeological data recovered over more than a century of quarrying and other development on the gravel terraces of the river Thames. Previous publications have covered the later prehistoric, Roman and Anglo-Saxon periods, from c 1500 BC to AD 1000. A final volume, covering the period AD 1000-2000, is currently in preparation.

The present volume reviews knowledge of the earlier prehistory of the Upper and Middle Thames Valley. Archaeological syntheses very often take the Neolithic period as their point of departure, with only a brief and wary glance back over the shoulder at the daunting and unfamiliar world of the Palaeolithic and Mesolithic. This imbalance has, however, been significantly redressed by a number of projects carried out via the Aggregates Levy Sustainability Fund, not least because quarrying has often provided the means by which these ancient deposits and remains can be accessed. In the present volume, therefore, we have been delighted to work with specialists in Quaternary geology and palaeontology, as well as Palaeolithic archaeology, in order to extend the coverage of *The Thames through Time* as far back as

the evidence currently allows, over a period of half a million years and more. As well as introducing fascinating material that may up to now have remained very unfamiliar to most of us, this also enables us to set the Mesolithic and subsequent human occupation of the valley in a much longer (and truer) context. In particular, it illustrates the close relationship between the climate and the environment and natural resources of the valley, which have seen extreme fluctuations over the period covered by this volume. It also points up starkly how fast change happens in modern human societies, and how much we ourselves, only relatively recent arrivals in the region, have moulded and changed its landscape and environment to meet our material and cultural needs.

As in previous volumes, we use colourful double page spreads to summarise and illustrate important aspects of the evidence covered in detail in the main text. For Part 1 this is supplemented by a series of inset pages explaining some of the more specialised techniques and approaches used in Quaternary science and Palaeolithic archaeology, and a glossary of technical terminology is provided at the end of the volume.

Anne Dodd, Series Editor
January 2011

A NOTE ON RADIOCARBON DATES

Any volume dealing with the transitions from the Palaeolithic to the Mesolithic, and from the Mesolithic to the Neolithic, faces the problem of reconciling the different ways in which the scholars of these periods express radiocarbon dates. Radiocarbon dating is effective only for the later part of the Palaeolithic (covered in Part 1, Chapters 6 and 7), and for this period, to avoid potential confusion, we have wherever possible given each date firstly in uncalibrated form and secondly in calibrated form expressed in years BP (Before Present) and years BC. For the Neolithic and later periods, dates are conventionally expressed as calibrated dates BC, and we have followed this practice in Part 2. It is the intervening period – the Mesolithic – which presents the greatest difficulties. For this period, which is covered in Part 2 of this volume, although we have generally cited radiocarbon determinations as calibrated dates BC, in a few cases, especially those concerning the earlier part of the Holocene, we have cited dates as both cal BP and cal BC.

The radiocarbon dates cited in Part 1 have been calibrated using CalPal and the CalPal 2007 Hulu calibration data (www.calpal.de/). (Absolute dates for

the earlier parts of the Palaeolithic are obtained using methods other than radiocarbon dating which do not require calibration, and are cited as calendar years BP.)

In Part 2 no attempt has been made to recalibrate dates, which are cited as they are given in the publications from which they have been obtained. Although this means that the calibrated dates have been produced using a range of different calibration data, the differences are usually slight. Where dates have been calibrated for Part 2 of this volume, we have used OxCal (v. 4.1; Bronk Ramsey, C, 2009 Bayesian analysis of radiocarbon dates, *Radiocarbon* 51 (1), 337-360) and the IntCal04 calibration data (Reimer *et al.* 2004, IntCal04 terrestrial radiocarbon age calibration, 0-26 cal kyr BP, *Radiocarbon*, 46 (3), 1029-1058). All calibrated dates have been rounded outwards to the nearest 10 years. In Part 2, some dates are cited which have been estimated using Bayesian models. Since discussion of these models is beyond the scope of this volume, we have not attempted to distinguish such estimated dates from simple calibrated dates. Where possible, the laboratory number and the uncalibrated radiocarbon determination is also given, although, especially in older publications, this information is sometimes not available.

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Our thanks are also due to the many colleagues and institutions, listed in the picture credits, who have been so helpful in providing us with images and allowing us to make use of copyright material, and also to Kelly Powell of OA who carried out the associated administration for us. The French and German summaries were translated by Nathalie Haudecoeur-Wilks and Markus Dylewski respectively and the index was compiled by Chris Hayden.

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Anthony Morigi publishes with the permission of the Executive Director of the British Geological Survey, and the work of Danielle Schreve and Mark White for this volume is a contribution to the AHOB (Ancient Human Occupation of Britain) project.

Summary

The Thames Valley is a rich source of evidence for understanding past climate and environmental change, the effects on plant and animal populations, and the challenges and opportunities these presented for early humans. Much of this evidence has come to light in the course of gravel quarrying on the terraces of the Thames and its tributaries. This volume provides an up to date overview of the early prehistory of the Upper and Middle Thames Valley, set within its wider regional context. The first part of the volume focuses on the geological, palaeontological and archaeological evidence for the Pleistocene, or the epoch of the Ice Ages. This information is synthesised by the authors in chronologically-ordered chapters, beginning more than half a million years ago, and ending with the rapid climatic amelioration that marked the onset of the Holocene epoch, the period of warmer conditions within which we are still living today. Each chapter reviews the evidence for successive glaciations and interglacials, their effects on the course of the river Thames itself, the contemporary climatic and environmental conditions, and the plants, animals and hominins present.

The second part of the volume takes up the story from the beginning of the Holocene, around 11500 years ago. Two chapters introduce this era, describing its topography and its changing environment, the character of its archaeological remains and the history of research. The authors review the evidence for early hunter-gatherer populations in the Mesolithic and the transition to a 'Neolithic' way of life at *c* 4000 cal BC, with the introduction of domesticated plants and animals, pottery and different ways of making stone and flint tools and treating the dead. Three chapters outline present knowledge of the changing character of settlement from the Neolithic to the end of the early Bronze Age, and the creation and development of ceremonial and funerary monuments. The volume ends with three chapters presenting more detailed considerations of the evidence for Neolithic and early Bronze Age ritual, ceremony and cosmology; funerary practices; and procurement, production and exchange of materials throughout the period. An overlying theme is the rich social lives and belief systems of the inhabitants and their gradually increasing impact on the environment.

Zusammenfassung

Das Tal der Themse ist eine reichhaltige Nachweisquelle für das Verständnis früherer Klimate, ökologischen Wandel, die Auswirkungen auf Flora und Fauna sowie die Herausforderungen und Möglichkeiten die diese für die frühen Menschen darstellten. Viele dieser Nachweise kamen beim Kiesabbau in den Flussterrassen der Themse und ihrer Nebenflüsse zutage. Dieser Band beschreibt einen Überblick des aktuellen Forschungsstandes des prähistorischen oberen und mittleren Tals der Themse im regionalen Kontext. Der erste Teil des Bandes befasst sich mit den geologischen, paläontologischen und archäologischen Zeugnissen des Pleistozän, der Eiszeit.

Diese Informationen wurden vom Autor in chronologisch geordnete Kapitel gegliedert, mit dem Beginn vor mehr als einer halben Millionen Jahre und endend mit der rapiden Melioration, welche den Übergang ins Holozän beschrieb, die warme Periode in der wir heute noch leben. Jedes Kapitel überprüft die Nachweise aufeinanderfol-

gender Vereisungen und Zwischeneiszeiten, ihre Auswirkungen auf den Verlauf der Themse, die herrschenden Klimate und Umweltbedingungen, sowie die anzutreffenden Flora, Fauna und die Hominiden.

Der zweite Teil des Bandes beginnt mit dem Anfang des Holozän, vor etwa 11500 Jahren. Zwei Kapitel stellen die Epoche vor, indem sie die Topografie und die sich ändernde Umwelt beschreiben, sowie auf die Beschaffenheit der archäologischen Hinterlassenschaften und die Geschichte deren Erforschung eingehen. Die Autoren begutachten Indizien, die auf frühe Jäger und Sammler Bevölkerungen im Mesolithikum hinweisen und gehen auf den Übergang zur neolithischen Lebensart um etwa 4000 v.Chr. ein, welche durch die Einführung von domestizierten Pflanzen und Tieren, Keramik und der andersartigen Herstellung von Stein- und Flintwerkzeugen, sowie dem Umgang mit den Toten, ihren Ausdruck findet. Drei Kapitel widmen sich dem heutigen

Wissensstand über sich ändernden Siedlungsstrukturen am Übergang vom Neolithikum zur frühen Bronzezeit, sowie der Herstellung und Weiterentwicklung von zeremoniellen und begräbnisorientierten Monumenten. Der Band endet mit drei Kapiteln, welche sich detaillierter mit den Nachweisen neolithischer und früh bronzezeitlicher Rituale, Zeremonien und Kosmologie,

Begräbnissitten sowie deren Anwendung auseinandersetzen. Des Weiteren werden Beschaffung, Produktion und Austausch von Materialien während dieser Epoche untersucht. Überspannende Themen sind das reichhaltige Sozialleben und das Glaubenssystem der Einwohner und wie diese sich zunehmend stärker auf die Umwelt auswirken.

Résumé

La Vallée de la Tamise constitue une source riche de témoignages nous aidant à comprendre les changements climatiques et environnementaux passés, leurs effets sur les plantes et les populations animales, ainsi que les défis et les opportunités qu'ils ont présenté pour les premiers humains. Beaucoup de ces témoignages sont apparus lors de l'exploitation des terrasses gravières de la Tamise et de ses affluents. Ce volume fournit une vue d'ensemble de la préhistoire ancienne de la Moyenne et Haute Vallée de la Tamise, présentée dans son contexte régional plus large. La première partie du volume est centrée sur les témoignages géologiques, paléontologiques et archéologiques du Pléistocène, ou de l'ère glaciaire. Cette information est synthétisée par les auteurs dans des chapitres classés chronologiquement, commençant il y a plus de 500 000 ans et s'achevant avec l'amélioration climatique rapide qui a marqué le début de l'Holocène, période aux conditions climatiques plus chaudes durant laquelle nous vivons encore aujourd'hui. Chaque chapitre réexamine les témoignages de glaciations successives et interglaciaires, leurs effets sur le cours même de la rivière de la Tamise, les conditions climatiques et environnementales contemporaines ainsi que les plantes, animaux et hominiens présents.

La seconde partie de ce volume enchaîne sur l'histoire du début de l'Holocène, il y a environ 11500 ans. Deux chapitres introduisent cette ère, grâce à la description de sa topographie et de son environnement en cours de mutation, du caractère de ses vestiges archéologiques et de l'histoire de la recherche. Les auteurs revoit les preuves des populations des premiers chasseurs-cueilleurs au Mésolithique et la transition vers un style de vie 'Néolithique' environ 4000 ans av. J.-C., avec l'introduction de plantes et d'animaux domestiqués, la céramique et les différentes manières de fabriquer des objets en pierre ou en silex et de traiter ses défunts. Trois chapitres résument la connaissance actuelle du caractère changeant de l'habitat du Néolithique à la fin du Bronze ancien, ainsi que la création et le développement de monuments cérémoniaux et funéraires. Le volume s'achève par trois chapitres présentant d'autres réflexions détaillées sur les indices recueillis relatifs aux rituels, aux cosmologies et aux pratiques funéraires du néolithique et du Bronze ancien; ainsi que sur l'obtention, la production et l'échange de matériaux tout au long de cette période. Le thème prédominant est celui des vies sociales et des systèmes de croyances riches des habitants et leurs impacts de plus en plus marqués sur l'environnement.

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Simpson 1966; Hemp Knoll, Prehistoric Society, Robertson-Mackay 1980; Yarnton and Stanton Harcourt, Oxford Archaeology; Stanton Harcourt, Clarke 1970; Fig. 15.11, Oxford Centre for Gene Function, reproduced by permission of the Oxfordshire Architectural and Historical Society, after Boston *et al.* 2003, fig. 5; Mount Farm and Gravelly Guy, Oxford Archaeology; Fig. 15.12: Hemp Knoll, Prehistoric Society, after Robertson-Mackay 1980; Lambourn, Berkshire Archaeological Society, after Case 1956a; West Overton, Prehistoric Society, Smith and Simpson 1966; Radley, Oxford Archaeology; Fig. 15.13 Oxford Archaeology; Fig. 15.14 Dorchester, Prehistoric Society, after Whittle *et al.* 1992; Linch Hill Corner, reproduced by permission of the Oxfordshire Architectural and Historical Society, after Grimes 1943-4, figs 14 and 17; Fig. 15.15 Lambourn, Berkshire Archaeological Society, after Case 1956a; Gravelly Guy, Oxford Archaeology; Fig. 15.16 Prehistoric Society, Smith and Simpson 1966; Fig. 15.17 Oxford Archaeology; Fig. 15.18 Shorncombe, reproduced by kind permission of the Bristol and Gloucestershire Archaeological Society, Barclay and Glass 1995; Radley Oxford Archaeology; Fig. 15.19 Eynsham, Case 1977; Cassington, reproduced by kind permission of the Society of Antiquaries of London from the *Antiquaries Journal*, Recent Bronze Age discoveries in Berkshire and Oxfordshire, E T Leeds, 1934 ©; Fig. 15.20 Oxford Archaeology; Fig. 15.21: Field Farm, Wessex Archaeology, Butterworth and Lobb 1992; City Farm, reproduced by permission of the Oxfordshire Architectural and Historical Society, Case *et al.* 1964-5, fig. 5; Burn Ground, HMSO, Grimes 1960; Radley, Oxford Archaeology; Figs 15.22, 15.23 Oxford Archaeology; Fig. 15.24 artefacts, Wiltshire Archaeological and Natural History Society (©Wiltshire Heritage Museum, Devizes); burial, Cunnington 1907; Fig. 15.25 Hodcott Down, Berkshire Archaeological Society, after Richards 1986-90; Stanton Harcourt, Oxford Archaeology; Fig. 15.26 Stanton Harcourt and Radley, Oxford Archaeology; Snowhill, Gerloff 1975; Fig. 15.27 Field Farm, Wessex Archaeology, Butterworth and Lobb 1992; Aldbourne, British Museum, Kinnes and Longworth 1985; Fig. 16.1 Ros Lorimer Oxford Archaeology; Fig. 16.2 HMSO, Clarke *et al.* 1985; Fig. 16.3: Manton artefacts, Wiltshire Archaeological and Natural History Society (©Wiltshire Heritage Museum, Devizes); Yarnton and Radley, HMSO, Clarke *et al.* 1985; Gravelly Guy, Oxford Archaeology; Fig. 16.4 Oxford Archaeology; Fig. 16.5 Wiltshire Archaeological and Natural History Society (©Wiltshire Heritage Museum, Devizes); Fig. 16.6 © Museum of London; Fig. 16.7 photos, Alistair Barclay Oxford Archaeology; lower right, Michael Dudley Ashmolean Museum, University of Oxford; Figs 16.8, 16.9 Oxford Archaeology; Fig. 16.10 Ascott-under-Wychwood, Benson and Whittle 2007; Oxford Centre for Gene Function, reproduced by permission of the Oxfordshire Architectural and Historical Society, Boston *et al.* 2003, fig. 5; Radley, Oxford Archaeology; Fig. 16.11 Gerloff 1975; Fig. 16.12 Chelsea 'club', © Museum of London; Horton bark container, Thames Valley Archaeological Services, Pine and Preston 2004; Yarnton, Oxford Archaeology; Dagenham idol, Colchester Castle Museum (Colchester and Ipswich Museum Service); Fig. 16.13 Oxford Archaeology; Fig. 16.14 Ascott-under-Wychwood, Benson and Whittle 2007; Abingdon, reproduced by kind permission of the Society of Antiquaries of London from the *Antiquaries Journal*, A Neolithic site at Abingdon, Berks (second report), E T Leeds, 1928 ©; Fig. 16.15 Pierowall, we are grateful to the Society of Antiquaries of Scotland for permission to reproduce the image of the decorated stone from Pierowall, from N Sharples, 1984 *Excavations at Pierowall Quarry, Westray, Orkney, Proceedings of the Society of Antiquaries of Scotland*, vol. 114, illus. 28 (© Society of Antiquaries of Scotland); Knowth, Royal Society of Antiquaries of Ireland, Eogan and Richardson 1982; Barrow Hills, Radley, Oxford Archaeology; Fig. 16.16 reproduced by kind permission of the Bristol and Gloucestershire Archaeological Society, Needham and Saville 1981.