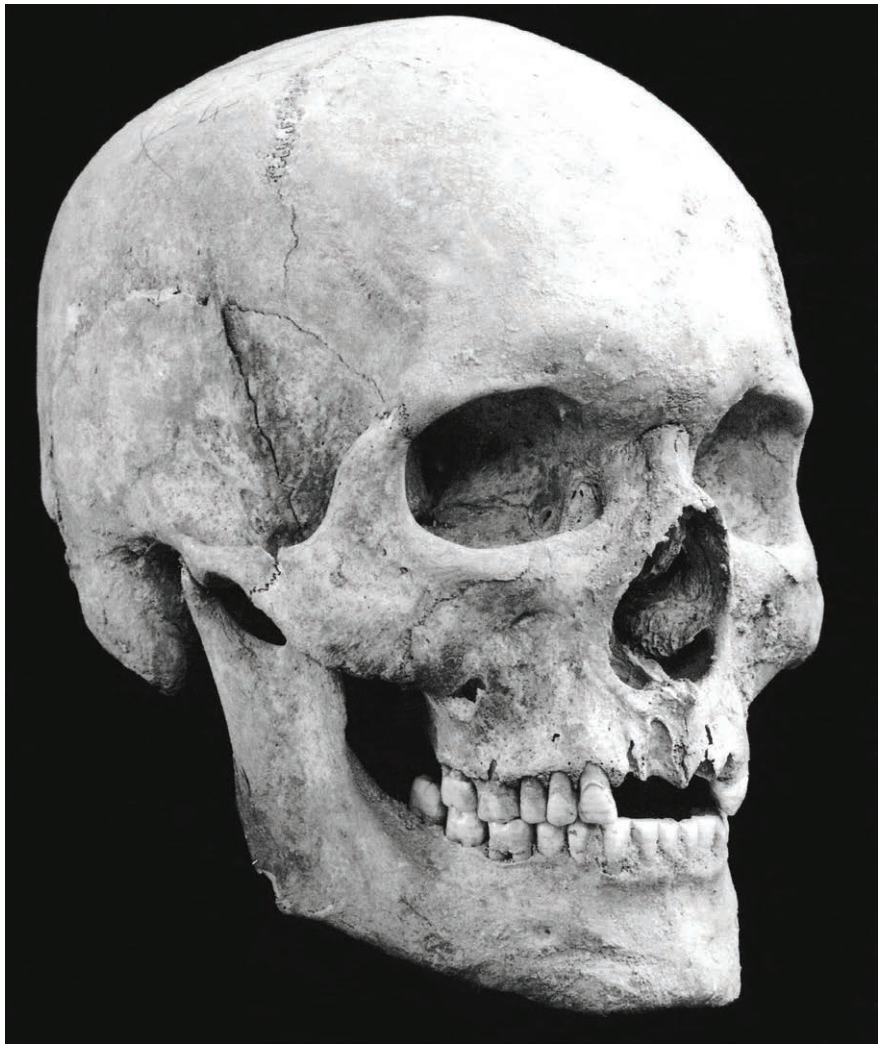
WINCHESTER STUDIES

General editor: Martin Biddle

9.i

THE PEOPLE OF EARLY WINCHESTER



A citizen of medieval Winchester. The skull of a robust adult male from a medieval earth grave in the cemetery of Winchester Cathedral.
(CG 1965, MG 688, Final phase 78–80, mid 14th to 15th cent.)

WINCHESTER STUDIES 9.i

THE PEOPLE OF EARLY WINCHESTER

Edited by
CAROLINE M. STUCKERT

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Caroline M. Stuckert (Parts 2, 3, and 5),
Martin Biddle and †Birthe Kjølbye-Biddle (Part 1),
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General Editor's Preface to the Reprinted and Open Access Edition

Since 2021, volumes in the *Winchester Studies* series have been made available in facsimile of the original out-of-print editions. Developments in digital technologies now enable academic publishing to reach wider audiences with options to read online or print on demand. From the earliest days of the development of technology to enable online publication, we have been exploring options for digitising our volumes, while maintaining close attention to the quality of reproduction, especially of our large scale and complex illustrations. Those familiar with our volumes will understand and appreciate the care that has been taken with the illustrations. The team at Archaeopress have ensured important facets like scale and pagination are maintained throughout each volume. It is only through the expertise, dedication, and enthusiasm of Archaeopress and their team that this attention to detail and accuracy in digital reproduction has been achieved, and for that we are very grateful.

Martin Biddle
March 2023

GENERAL EDITOR'S PREFACE

The Winchester excavations of 1961–71 began in a wholly *ad hoc* manner in July 1961 in response to the impending construction of a new hotel on the site of the Cathedral Car Park. There was then no statutory protection for the buried remains of the urban past, and it was entirely due to the efforts of Roger Quirk CB, whose study of the Old and New Minsters had led him to the view that the site of the hotel lay within the New Minster Precinct and might even include the site of the minster church itself, that arrangements were made for an excavation which lasted from July until the end of the year, and beyond during the early stages of construction.

Everything had to be improvised. When a cemetery of tenth- to eleventh-century date was uncovered, it was to Don Brothwell, then one of Dr Jack C. Trevor's group located in the Duckworth Laboratory in the Department of Archaeology and Anthropology at Cambridge (where I had graduated that summer) that I naturally turned for study of the physical anthropology of the burials.

As the excavations continued over the following decade, on many sites and on an ever increasing scale, Don Brothwell, who had by then moved to the Department of Anthropology at the British Museum (Natural History), now the Natural History Museum, took the lead role in dealing with the vast quantities of human remains recovered from excavations on the Cathedral Green notably, indeed nobly, assisted by his colleagues, Theya Molleson and Rosemary Powers.

Outside Cambridge, Manchester, and London there were then no major centres for the study of buried human remains in this country, and few people qualified to do the work. The excavation of the Lankhills Roman cemetery in 1967–72 highlighted the problem: no-one could be found to carry out a comprehensive study of the Romano-British skeletons and we were fortunate to obtain the help of Miss Mary Harman to provide the initial aging and sexing of the bodies, essential for the production of the report.

The Department of Anthropology at the University of Pennsylvania in Philadephia is one of the most distinguished centres for the study of ancient human remains. As recorded in Part 1 (pp. 1–6) it was in 1974 that Connie Stuckert from the Penn department visited Winchester to discuss a possible subject for a doctoral dissertation. In the course of time, in addition to continuing work on her dissertation, she agreed to prepare a full report on the Lankhills skeletons, and eventually took on the editing of this present volume.

Today, with the introduction of fully-funded archaeological investigation of sites threatened by development, a vibrant tradition of palaeoanthropology has developed in this country, resulting in the appearance of an already considerable and constantly increasing number of outstanding publications. The work at Winchester stood on the cusp between the older, amateur tradition by which local doctors were recruited to report on skeletal material and the new world of a highly professional discipline.

Winchester was fortunate from the start in securing the advice and active involvement of Professor Don Brothwell and his colleagues at the Natural History Museum and most fortunate again at a later stage to secure the crucial contribution of Dr Connie Stuckert who has brought to

conclusion this study of the human remains of over 3000 people covering some 1300 years of the population history of an English city, an achievement apparently hitherto unparalleled.

I am particularly grateful to members of the Winchester Research Unit office in Oxford, Katherine Barclay, Clare Chapman, and Francis Morris for their unstinting help in seeing this volume through the press.

Martin Biddle

Encaenia
25 June 2015

Note: the appearance of a volume on human osteology in a series devoted so far mainly to archaeology and history suggested the need for a Glossary, which appears here as Appendix D (pp. 442–56).

EDITOR'S PREFACE

A long journey began when I first walked into Martin Biddle's office in the summer of 1974. I could not have foreseen that 40 years later the end result would be this volume. Trained as both an archaeologist and physical anthropologist, at the time I was a young graduate student hunting a research topic that would permit me to use skeletal data as a resource in addressing cultural dynamics. Specifically, I was interested in the seemingly rapid and radical transition from the lifestyle and cultural patterns of a Roman province to that of Anglo-Saxon England. By the early 1970s emerging archaeological data was beginning to present a picture of this culture change that was at variance with aspects of the rather meagre historical record, and infinitely more complex, but no one, at that time, had looked at the composition of the populations involved. Was there truly massive population replacement? Or did the population remain essentially unchanged, indicating far more complex cultural processes at work?

I decided to tackle this question in one region of England, using a variety of statistical techniques and collecting the largest sample of both Roman period and Early Anglo-Saxon skeletons possible at that time in a circumscribed geographic area. Hampshire quickly became the logical place to look. Ultimately I was able to obtain data from over 770 skeletons from nine separate sites, two Romano-British and seven Early Anglo-Saxon. The results of that research, partially funded by grants from the National Science Foundation and the University of Pennsylvania, constitute Part 3 of this volume.

Many people helped along the way, and I am deeply indebted to all of them, named and unnamed. Sadly, some are no longer with us.

Special thanks goes to the General Editor of Winchester Studies, Martin Biddle, and the late Birthe Kjølbye-Biddle for unfailing guidance, assistance, and support over four decades and two continents, even when our opinions differed. It has been an incredible collaboration. The project would not have been possible without access to the skeletons themselves, and for this I am grateful to a small army of people including Giles Clarke, Kenneth Qualmann, Sonia Hawkes, Alison Cook, Vera Evison, Audrey Meaney, John Musty, Don Brothwell, Rosemary Powers, Adrien Rance, Fred Aldsworth, Robin Harvey, Leslie Webster, David Rudkin, and Graham Johnson. My assistant in England in 1976–77, Sylvia Meacock, with her combination of manual dexterity and training as a nurse, proved invaluable in sticking skulls back together. Later, after Martin Biddle had invited me to publish the Lankhills bones as part of this volume, I returned to Winchester several times to investigate the skeletal pathology of the Lankhills sample, now presented here in Part 2, which had not been part of my original project. Michael Zimmerman M.D., Ph.D. and Morrie Kricun M.D. both provided essential diagnostic assistance and information, although I must accept any errors as mine alone. Thanks also go to the University of Southampton, Einstein Medical Center in Philadelphia, and to Dr David Wilson, St Luke's Hospital, Oxford, for the many radiographs needed for this study. A trans-Atlantic project of this sort would not have been possible without the unflagging support of the Anthropology Department, University of Pennsylvania as well as my doctoral dissertation committee, and also many individuals at both the Winchester Research Unit and the then City Archaeologist's Office, Winchester. My thanks to all of them.

Work on the Cathedral Green Anglo-Saxon and medieval skeletons proceeded along a completely different track, involving a separate group of researchers initially led by Don Brothwell and subsequently brought to completion by Theya Molleson. An overview of the history of this project is given in Part 1.

Delays in publishing a project of this magnitude are perhaps inevitable, but also create issues that must be addressed. It would be incorrect to assume that because work started 40 years ago, all the data accumulated and methodology employed are both 40 years old and also outdated. This project has been a work in progress, sometimes moving forward, sometimes on hold, for many years. It is true that if we were to design a comprehensive study of this nature today, it would be done somewhat differently, would stress greater consistency in methodology, and would take greater advantage of scientific advances not available until recently. That said, many of the techniques employed in this study are still in use today, and are still valid. As, we believe, are the results.

One of the most significant challenges we have faced is the potential impact on our findings of data from more recent excavations, especially those at Lankhills in 2000–5 and at the other Romano-British cemeteries in Winchester. As new information has become available, we have evaluated and incorporated it as appropriate, and an extended discussion will be found in Part 2. Another challenge has lain in the increasing use of DNA analyses to address questions of population movements in general, and the Romano-British/Anglo-Saxon transition in particular. In England, most of this work has been done in parts of the country other than Hampshire, and has been done using modern populations as the sample, not skeletal material from the period. It of course raises the question of whether conclusions based on older statistical techniques continue to be valid. Part 3 discusses this question in some detail. At present, DNA studies do not appear to contradict our results.

Long delays in publication have also opened up new opportunities to include important work in this volume that would not have been possible ten or twenty years ago. Katie Tucker has stepped forward with a new and greatly improved forensic analysis of the Lankhills decapitations. Jock Macdonald has provided an updated and revised interpretation of the ritual involved, which has been able to incorporate all the decapitations from Lankhills, including those from the later excavations, and has also been able to take advantage of the data provided by physical anthropology.

When I agreed in 2008 to edit the entire volume, I realized that a very large task lay before me. It could not have been accomplished without the help of Theya Molleson in bringing Part 4 into final form, for which I am most thankful indeed. Dr Janet Monge, Department of Anthropology, University of Pennsylvania, and Dr Hans-Chr. Petersen, Department of Statistics, University of Southern Denmark, provided timely assistance on several occasions. I also owe thanks to Helen Rees of the Winchester City Museums for all sorts of assistance, and most especially to Katherine Barclay of the Winchester Research Unit. She was a remarkable source of information and advice, a problem-solver extraordinaire, and she saved my sanity more than once. To these, and the many other research and excavation teams, staff, and volunteers who all touched this project at one time or another, my deepest thanks.

Caroline M. Stuckert

Newtown Square, Pennsylvania
5 June 2014

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Photographs and radiographs by courtesy of Martin Biddle, Einstein Medical Center (Philadelphia), Jay Erwin, Morrie Kricun, Natural History Museum (London), St Luke's Hospital (Oxford), Caroline M. Stuckert, Katie Tucker, and the University of Southampton.

Line drawings by Simon Hayfield, Rosemary Powers, and Mark Redknap.

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LIST OF ABBREVIATIONS

Arch J	*Archaeological Journal*
Am J Phys Anthropol	*American Journal of Physical Anthropology*
Am Antiq	*American Antiquity*
Ann Eugen	*Annals of Eugenics*
Antiq J	*Antiquaries Journal*
A-P	Anterior–posterior: used e.g. to define shaft diameter of long bones
ASC skull	Anglo-Saxon Charnel skull from Cathedral Green
ASG	Anglo-Saxon Grave: designation for Anglo-Saxon burials at Cathedral Green
BABAO	British Association for Biological Anthropology and Osteoarchaeology
BAR	British Archaeological Reports
Brit Dent J	*British Dental Journal*
Brit J Radiol	*British Journal of Radiology*
CACP	Cathedral Car Park: site code used for burials found at excavations at this site in Winchester in 1961
Caries Res	*Caries Research*
CBA	Council for British Archaeology
CG	Cathedral Green: site code used for the Anglo-Saxon and medieval cemeteries of the Old Minster, New Minster, and the Norman and later cathedral in Winchester in 1962–70
CI	Cranial Index
Clin Radiol	*Clinical Radiology*
CPR	Crude Prevalence Rate
DCN	Data Code Number: used by the British Museum (Natural History) team to reference records of their work on individual bodies from the Anglo-Saxon and post-Conquest cemeteries on the Cathedral Green, Winchester
Dent Rec	*Dental Record*
DF	Degrees of freedom
DI	Dimorphism Index (stature)
DISH	Diffuse Idiopathic Skeletal Hyperostosis
dm	deciduous molar: lower case indicates immature dentition (Scheuer and Black, 2004, 149)
DNH	Dorset Natural History and Archaeological Society
Drug Develop Res	*Drug Development Research*
EHR	*Economic History Review*

Genet Epidemiol	*Genetic Epidemiology*
HB	*Human Biology*
HFC	Hampshire Field Club and Archaeological Society
I1	Incisor 1
I2	Incisor 2
Indet.	Indeterminate
Intl J Osteoarchaeol	*International Journal of Osteoarchaeology*
Intl J Paleopath	*International Journal of Paleopathology*
Israel J Med Sci	*Israel Journal of Medical Sciences*
JAMA	*Journal of the American Medical Association*
J Am Acad Orthop Surj	*Journal of the American Academy of Orthopaedic Surgeons*
J Am Dent Assn	*Journal of the American Dental Association*
J Anat	*Journal of Anatomy*
J Archaeol Sci	*Journal of Archaeological Science*
J Epidemiol Commun H	*Journal of Epidemiology and Community Health*
J Forensic Sci	*Journal of Forensic Sciences*
J Hum Evol	*Journal of Human Evolution*
J Int Assoc Dent Child	*Journal of the International Association of Dentistry for Children*
J Roy Anthrop Inst	*Journal of the Royal Anthropological Institute*
LEH	Linear enamel hypoplasia
LH	Lankhills: site code used to designate graves from the 1967–72 excavations
M^1	'upper' (i.e. maxilliary) Molar 1. Superscript is used similarly for the other upper teeth
M_1	'lower' (i.e. mandibular) Molar 1. Subscript is used similarly for the other lower teeth
MASCA	Museum Applied Science Center for Archaeology (University of Pennsylvania)
MG	Medieval Grave: designation for medieval burials at Cathedral Green. Grave numbers 1 to 499 are cist graves; numbers from 500 are earth graves.
MoLAS	Museum of London Archaeological Service (now MOLA)
Mol Biol Evol	*Molecular Biology and Evolution*
na	Not available
N, n	Number in population *or* number in sample or 'set' under consideration
n/N	Number of cases noted (n) in a larger set (N)
NM	New Minster, Winchester
No.	Number
nr	Not recorded
NS or ns	Not significant

OA	Osteoarthritis when discussing pathology; also, Oxford Archaeology when used to designate graves from the Lankhills 2000–5 excavations
OM	Old Minster, Winchester
P	Probability of statistical significance
PM1	Pre-molar 1, sometimes called PM3
PM2	Pre-molar 2, sometimes called PM4
PPA	Paleopathology Association
Proc Hants FC	*Proceedings of the Hampshire Field Club and Natural History Society*
Proc Roy Irish Acad	*Proceedings of the Royal Irish Academy*
Proc Soc Antiq London	*Proceedings of the Society of Antiquaries, London*
SAA	Society for American Archaeology
S.D.	Standard deviation
SHA	Society for Historical Archaeology
t	The *t*-statistic
TPR	True Prevalence Rate
Tr.	Trench
TRAC	Theoretical Roman Archaeology Conference
Trans Birmingham Warwickshire Archaeol Soc	*Transactions of the Birmingham and Warwickshire Archaeological Society*
WANHS	Wiltshire Archaeological and Natural History Society
WHO	World Health Organisation
WS 1	Martin Biddle (ed.), *Winchester in the Early Middle Ages*, Winchester Studies 1 (Oxford, 1976)
WS 2	D. J. Keene, *Survey of Medieval Winchester*, Winchester Studies 2, in two parts (Oxford, 1985)
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