

The Raunds Area Project
A Neolithic and Bronze Age Landscape
in Northamptonshire



The Raunds Area Project
A Neolithic and Bronze Age Landscape
in Northamptonshire

by Jan Harding and Frances Healy

With major contributions by: Aidan Allen, Tony Baker, Torben Bjarke Ballin,
Alex Bayliss, Angela Boyle, Philippa Bradley, Gill Campbell, Andy Chapman,
Simon Davis, Jon Humble, Simon Mays, Richard Macphail, Andrew Payne, Stéphane Rault,
Mark Robinson, David Tomalin, Dave Windell and Jo Woodiwiss.

And contributions by: Paul Backhouse, Polydora Baker, Alistair Barclay, Frances Blore,
Anthony Beck, Gordon Cook, Mark Copley, Anna Cselik, Vicky Crosby, Mary Davis,
Stephanie Dudd, Glynis Edwards, Richard Evershed, Andrew Foxon, Roger Grace,
Janet Henderson, Carl Heron, Claire E Jones, Ian Kinnes, Gerry McCormac, Liz Muldowney,
Stuart Needham, Dominic Powlesland, Christopher Bronk Ramsey, Ian Shepherd, Maisie Taylor,
Angela Wardle, Robert Whiteman, Patricia Wiltshire and David F Williams.



ENGLISH HERITAGE

Published by English Heritage, Kemble Drive, Swindon SN2 2GZ

Copyright © English Heritage 2007

Images (except as otherwise shown) © English Heritage
Application for the reproduction of images should be made to the National Monuments Record. Every effort has been made to trace the copyright holders and we apologise in advance for any unintentional omissions, which we would be pleased to correct in any subsequent edition of this book.

First Published 2007

10 9 8 7 6 5 4 3 2 1

ISBN 1 873592 99 X
ISBN 978 1 873592 99 1

Product Code 51176

British Library Cataloguing in Publication Data
A CIP catalogue record for this book is available from the British Library.

All rights reserved
No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information storage or retrieval system, without permission in writing from the publisher.

Brought to publication by David M Jones
Publishing, English Heritage
Edited and designed by Patricia Briggs
Indexed by Alan Rutter
Principal illustrators: John Vallender and Chris Evans
Further illustrations by: Lesley Collett, Judith Dobie,
Mick Gibbons, David Goodger, Eddie Lyons,
Karen Nichols, Rob Read and Miranda Schofield

Printed and bound in Great Britain by 4Edge Ltd, Hockley, www.4edge.co.uk

Frontispiece A reconstruction by Judith Dobie of the primary features of the Long Barrow. The opium poppies in the foreground were represented by seeds preserved in the waterlogged fills of the ditches that flanked the mound subsequently built over these features.

Contents

<i>List of illustrations</i>	vii	■ Panel 2.1 The prehistoric palaeohydrology and floodplain development of the river Nene in the Raunds area.....	19
<i>List of tables</i>	ix	2.2.2 The Mesolithic.....	21
<i>List of contributors</i>	x	2.2.3 The Neolithic.....	22
<i>Preface</i>	xii	■ Panel 2.2 The environmental record of the Long Barrow Ditches.....	24
<i>Acknowledgements</i>	xiii	2.2.4 The Bronze Age.....	27
<i>Summary</i>	xv	2.3 The monuments in their setting.....	28
<i>Résumé</i>	xvi	2.3.1 The Long Barrow.....	28
<i>Zusammenfassung</i>	xvii	2.3.2 The Causewayed Ring Ditch.....	28
<i>A note on radiocarbon dates</i>	xviii	2.3.3 Barrow 3.....	29
1 Introduction		2.4 The deposition of animal bone.....	29
1.1 Location and topography.....	1	2.4.1 The Barrow 1 cattle cairn.....	29
1.2 Previous and subsequent work in the area.....	4	2.4.2 The Riverside Structure.....	29
1.3 The Raunds Area Project.....	7	2.4.3 Barrow 3.....	29
1.4 The prehistoric project.....	8	2.5 Cremation deposits and the use of wood in cremation ritual.....	30
1.4.1 Irthlingborough Island.....	8	2.6 Farming?.....	33
1.4.2 West Cotton.....	10	2.6.1 The evidence for farming in the Neolithic.....	33
1.4.3 Stanwick.....	10	2.6.2 The evidence for farming in the Bronze Age.....	34
1.4.4 Redlands Farm.....	10	2.7 The environmental studies in their regional and national context.....	34
1.5 Excavation and recovery on site.....	12	3 The development of the monuments	
1.5.1 Irthlingborough island.....	12	<i>Frances Healy, Jan Harding and Alex Bayliss</i>	
1.5.2 Stanwick.....	13	3.1 Patterns and themes <i>Jan Harding</i>	37
1.5.3 West Cotton.....	13	■ Panel 3.1 Chronology.....	38
1.5.4 Redlands Farm.....	13	3.2 Hunter-gatherers and the first monuments.....	45
1.6 Strategies of environmental recovery		3.2.1 Introduction <i>Jan Harding</i>	45
<i>Gill Campbell and Mark Robinson</i>	14	3.2.2 The 5th millennium and before at Raunds.....	47
1.7 The physical survival of the evidence.....	14	■ Panel 3.2 Treethrow holes in the north of Irthlingborough island.....	51
1.7.1 Earthworks.....	14	3.2.3 The first monuments.....	53
1.7.2 Environmental evidence.....	14	■ Panel 3.3 Wood-working at the Long Barrow.....	80
1.8 Other implications for the limits of inference.....	15	3.2.4 Discussion <i>Jan Harding</i>	86
1.9 Post-excavation strategies.....	16	3.3 The mid to late 4th millennium.....	90
1.10 Report structure.....	16	3.3.1 Introduction <i>Jan Harding</i>	90
2 Environment and land use in the valley bottom <i>Gill Campbell and Mark Robinson</i>		3.3.2 Continuity and new monuments.....	90
2.1 Introduction.....	18	3.3.3 Discussion.....	110
2.1.1 Survival of the environmental evidence.....	18	3.4 The early to mid-3rd millennium.....	111
2.1.2 Contribution of the various lines of evidence.....	18	3.4.1 Introduction <i>Jan Harding</i>	111
2.2 The Environmental Sequence: a bird's-eye view from the Late Devensian to the Late Bronze Age.....	19		
2.2.1 The Late Devensian.....	19		

3.4.2	Abandonment and change.....	112	4.2	The treatment of the human body.....	224
■ Panel 3.4	Flint and stone axes.....	123	4.2.1	The 4th millennium and early 3rd millennium.....	224
■ Panel 3.5	Flint arrowheads.....	124	4.2.2	The late 3rd millennium and the 2nd millennium.....	228
3.4.3	Discussion.....	126	4.3	Graves and grave goods.....	239
3.5	The later 3rd millennium and the early Bronze Age monuments.....	126	4.3.1	The use of stone.....	239
3.5.1	Introduction.....	126	4.3.2	Grave size and furnishing in the late 3rd millennium and the 2nd millennium.....	240
3.5.2	West Cotton and the remainder of the terrace.....	127	4.3.3	Grave goods.....	243
3.5.3	Irthlingborough Island.....	148	4.3.4	Conclusion.....	256
3.5.4	Redlands Farm.....	167	4.4	People and animals.....	256
3.5.5	Other activity.....	172	■ Panel 4.1	Possible patterns of movement through the post- and stake-settings beneath Barrows 5 and 3.....	211
3.5.6	The chronology of the Bronze Age barrows.....	173	■ Panel 4.2	Three of the artefacts from the primary burial in Barrow 1.....	252
3.5.7	Implications of the upsurge of activity in the late 3rd millennium.....	179	■ Panel 4.3	The Barrow 1 cattle bone deposit.....	258
3.6	Society and the work of monument construction.....	182	5	Raunds in the region	
■ Panel 3.6	Time and labour.....	184	5.1	The wider Raunds landscape.....	264
■ Panel 3.7	The post-barrow flint industries.....	187	5.2	And beyond.....	267
3.7	After the monuments.....	189	5.2.1	Settlement.....	269
3.7.1	Flint knapping on the barrows.....	189	5.2.2	The location of Neolithic monuments.....	276
3.7.2	The Field Systems.....	191	5.2.3	The distribution of round barrows and ring ditches.....	281
3.7.3	Reuse of barrows.....	196	5.2.4	Communities and cattle.....	283
3.7.4	Land use beyond the settlements.....	198	5.3	Ties and territories.....	285
4	Ceremonial practice and mortuary ritual		<i>Bibliography</i>		287
4.1	The forms and uses of monuments.....	199	<i>Index</i>		319
4.1.1	The early 4th millennium.....	199			
4.1.2	The mid- to late 4th millennium.....	207			
4.1.3	The early to mid-3rd millennium.....	210			
4.1.4	The late 3rd and early 2nd millennia.....	210			

Illustrations

1.1	Location, showing selected sites mentioned in the text.....	2	3.27	Long Barrow: sections through mound and ditches.....	78
1.2	The area today and the area of the Raunds Area Project.....	3	3.28	Long Barrow: bone, antler and waterlogged wood.....	79
1.3	Geology of the area shown in Figure 1.2.....	4	3.29	Long Barrow: comparative plans of facades and palisade trenches.....	83
1.4	The Nene valley in the Raunds area.....	6	3.30	Long Barrow: comparative plans of cists, chambers and other central features.....	84
1.5	Trench layout.....	9	3.31	Probability distributions of dates from the Long Barrow.....	84
1.6	West Cotton: plan of prehistoric monuments and features.....	11	3.32	Barrows 7 and 8: plan, sections and detail.....	85
1.7	Monuments known in 1983 and 1992.....	12	3.33	Barrow 7: plan of possibly Neolithic features.....	86
3.1	Distribution of microliths, burins and truncated pieces.....	48	3.34	Long Mound: plan of west end.....	91
3.2	Mesolithic artefacts.....	49	3.35	Long Mound: composite section through west end.....	92
3.3	Principal plan and section conventions.....	49	3.36	Long Mound and Long Barrow: Artefacts.....	93
3.4	Section of F5488.....	49	3.37	Long Barrow: distribution of prehistoric pottery.....	95
3.5	Distribution of leaf arrowheads, ground flint axeheads and stone axeheads.....	50	3.38	Long Barrow: distribution of flint debitage.....	96
3.6	Probability distributions of construction dates of individual monuments.....	54	3.39	Long Barrow: distribution of retouched flint implements.....	97
3.7	Long Mound: overall plan.....	55	3.40	Long Enclosure: overall plan.....	98
3.8	Long Mound: plan of surface and features beneath east end.....	56	3.41	Long Enclosure: north end and trial trenches.....	99
3.9	Long Mound: plan of surface and features beneath west end.....	57	3.42	Long Enclosure: sections through north end, west side and south end.....	100
3.10	Long Mound: plan of east end.....	59	3.43	Long Enclosure: sections through east side.....	101
3.11	Long Mound: transverse section through west end.....	60	3.44	Probability distributions of dates from the Long Enclosure and Causewayed Ring Ditch.....	102
3.12	Long Mound: oblique section through east end, and transverse sections of the gully.....	61	3.45	Causewayed Ring Ditch: overall plan and detail of antler.....	103
3.13	Long Mound: plan of east end showing carbonised plank, gully and stakes in gully.....	62	3.46	Causewayed Ring Ditch: charred wood.....	104
3.14	Probability distributions of dates from the Long Mound and related features.....	63	3.47	Causewayed Ring Ditch: south-north section across monument.....	105
3.15	Avenue: plan.....	65	3.48	Causewayed Ring Ditch: sections.....	106
3.16	Avenue: sections.....	66	3.49	Southern Enclosure: plan.....	107
3.17	Probability distributions of dates from the Avenue.....	67	3.50	Southern Enclosure: sections through the ditch butts.....	108
3.18	Turf Mound: overall plan.....	68	3.51	Barrow 5: cremation in F47087.....	109
3.19	Turf Mound: detail of fully excavated area.....	69	3.52	Burnt, fragmentary macehead of banded amphibolite.....	109
3.20	Turf Mound: sections.....	70	3.53	Barrow 6: disarticulated remains of two adults in F3390.....	110
3.21	Turf Mound: plan and sections of eastern gully.....	71	3.54	Riverside Structure: excavated area, location of sections and location of stone axe.....	113
3.22	Probability distributions of dates from the Turf Mound and Grooved Ware pit.....	73	3.55	Riverside Structure: plan.....	114
3.23	Long Barrow: overall plan.....	74	3.56	Riverside Structure: axe marks on the outer main alder trunk.....	115
3.24	Long Barrow: pit F239 and cist F213.....	75	3.57	Riverside Structure: composite sections.....	116
3.25	Long Barrow: cist F213.....	76	3.58	Probability distributions of dates from the Riverside Structure.....	117
3.26	Long Barrow: facade trench cut by later palisade trench.....	77			

3.59	Barrow 6 and Ditched Enclosure: overall plan	118	3.97	Barrow 1: sections through primary burial F30426	161
3.60	Ditched Enclosure: ditch sections	119	3.98	Barrow 1: charred oak planks over the burial in F30426	162
3.61	Ditched Enclosure: Grooved Ware rim fragment	120	3.99	Barrow 1: primary burial	163
3.62	Cotton 'Henge': trench plans and sections	121	3.100	Barrow 1: the central cairn after the removal of the bone	164
3.63	Circular cropmark recorded in 1962	122	3.101	Barrow 1: bone and stone cairn over central grave	165
3.64	West Cotton and the terrace to the south	128	3.102	Barrow 1: east-west section S204	166
3.65	West Cotton: Magnetometer survey results and excavated features	129	3.103	Barrow 1: detail of truncated Collared Urn	166
3.66	Long Mound: burnt wood	130	3.104	Barrow 1: secondary burial F30449	167
3.67	Beaker from the Long Mound, Beaker or Grooved Ware sherd and Beaker sherds from the Turf Mound	131	3.105	Barrow 4: overall plan	168
3.68	Probability distributions of dates from round barrows and from Beaker or early Bronze Age burials elsewhere	132	3.106	Barrow 4: charred oak planks in mound	169
3.69	Turf Mound: F6047	133	3.107	Barrow 4: south-west to north-east section	170
3.70	Barrow 6 and Ditched Enclosure: excavation in progress	134	3.108	Long Barrow: location of Beaker burials and middle Bronze Age cremation cemetery	171
3.71	Barrow 6: detail of central area	135	3.109	Long Barrow: detailed plans of Beaker burials and middle Bronze Age cremations	172
3.72	Barrow 6: burials in F3390 and F3259	136	3.110	Long Barrow: detailed plan of posthole alignment	173
3.73	Barrow 6: burial in F3259	136	3.111	Barrow 7: grave F2000	174
3.74	Barrow 6: composite section	137	3.112	Barrow 9: plan	175
3.75	Barrow 6: cremations	138	3.113	Barrow 9: grave plans	177
3.76	Double Ring Ditch: plan	139	3.114	Barrow 9: sections across barrow and through outer and inner ditches	178
3.77	Double Ring Ditch: sections	140	3.115	Minor Features: postpits F4932 and F4933 at West Cotton	179
3.78	Barrow 5: plan	142	3.116	Minor Features: Wessex/Middle Rhine Beaker from Redlands Farm	179
3.79	Barrow 5: central features	143	3.117	Probability distributions of dates for disarticulated human remains, articulated inhumations and cremations	180
3.80	Barrow 5: sections	144	3.118	The development of the monuments: 4th millennium	182
3.81	Segmented Ditch Circle: plan	145	3.119	The development of the monuments: later 3rd to early 2nd millennia	183
3.82	Segmented Ditch Circle: after excavation	146	3.120	Reconstruction of the West Cotton monument complex	189
3.83	Segmented Ditch Circle: antler pick on surface of primary silt	146	3.121	Viewshed for Ring Ditch 5	190
3.84	Segmented Ditch Circle: antler pick near base of F87641	146	3.122	Viewshed for Barrow 9	191
3.85	Segmented Ditch Circle: sections	148	3.123	Field Systems and related structures: overall plan	192
3.86	Segmented Ditch Circle: charred oak timber	149	3.124	Probability distributions of dates from postholes in fencelines	194
3.87	Probability distributions of dates from the Segmented Ditch Circle	149	3.125	Field Systems and related structures: spearhead probably from ditch 23	197
3.88	Barrow 3: postholes and other features beneath the mound	150	4.1	Barrow 6: reconstructions showing posts and stakes likely to have been standing at successive stages	214
3.89	Barrow 3: sections of features in and beneath the mound	151	4.2	Grave size in relation to number of grave goods, sex and age	216
3.90	Barrow 3: overall plan	152			
3.91	Barrow 3: section S530	154			
3.92	Barrow 3: section S508	156			
3.93	Barrow 3: limestone scatter in upper mound	158			
3.94	Barrow 3: cluster 30782	159			
3.95	Barrow 3: F30663, cremation 6411	159			
3.96	Barrow 1: overall plan	160			

4.3	Grave size in relation to number of grave goods and grave furniture	217	5.5	Distribution of chisel, oblique, indeterminate and barbed-and-tanged arrowheads	268
4.4	Barrow 6: primary grave group	226	5.6	Distribution of notches, denticulates and denticulate scrapers and piercers	269
4.5	Barrow 5: primary deposit	229	5.7	Viewshed for the Long Mound	270
4.6	Barrow 1: primary grave group	236	5.8	Viewshed for the Long Barrow	271
4.7	Barrow 1: secondary inhumation	237	5.9	Viewshed for the Cotton 'Henge'	272
4.8	Long Barrow: secondary inhumations	238	5.10	Viewshed for Crow Hill	273
4.9	Barrow 7: grave F2000	241	5.11	Viewshed for struck flint concentration at Top Lodge	274
4.10	Barrow 9: graves	242	5.12	Viewshed for struck flint concentration at Mallows Cotton	275
4.11	Cremation grave goods	244	5.13	Neolithic monuments in the Welland-Nene-Great Ouse area and transects through them	278
4.12	Cremation grave goods	246	5.14	Schematic sections through the transects shown in Figure 5.13	279
4.13	Barrow 1: the building of the cattle skull cairn	257	5.15	Distribution of round barrows and ring ditches in Northamptonshire and Peterborough	282
5.1	Distribution of all struck flint	264			
5.2	Distribution of microliths, microburins and burins	265			
5.3	Distribution of blades	266			
5.4	Distribution of leaf arrowheads, laurel leaves, serrated flakes and blades, ground flint and stone axeheads	267			

Tables

2.1	Charcoal and charred plant remains from cremations in relation to sex, age, date and accompanying artefacts	32	4.5	Summary of burial locations within and among barrows of 3rd and 2nd millennium cremations and articulated inhumations at Raunds and among those burials listed in Appendix SS7.1 for which data are available	232
3.1	Radiocarbon age determinations	40	4.6	Summary of burial positions of 3rd and 2nd millennium inhumations at Raunds and among those burials listed in Appendix SS7.1 for which data are available	234
3.2	Radiocarbon dates for skeletons associated with Wessex/Middle Rhine Beakers in Britain and with other stylistically early Beakers in the south Midlands	176	4.7	Summary of the incidence of inhumation grave goods by sex and age for 3rd- and 2nd-millennium burials at Raunds and for those burials listed in Appendix SS7.1 for which data are available	249
4.1	Summary of funerary, ceremonial and possibly ceremonial sites of 4th millennium Cal BC or possibly 4th millennium Cal BC date in the Nene valley, excluding those at Raunds	202	4.8	Summary of the incidence of inhumation grave goods by sex and age for 3rd and 2nd millennium burials at Raunds and for those burials listed in Appendix SS7.1 for which data are available	251
4.2	Non-structural postholes and possible postholes in definite or possible relationship to the Raunds monuments	219	4.9	Grave goods from the primary burial in Barrow 1	254
4.3	Summary of finds of human bone at Raunds by period, excluding redeposited fragments	225	4.10	'Special' deposits of cattle bone in the south-east midlands, in approximate chronological order	261
4.4	Summary of the sex and age composition of 3rd and 2nd millennium cremations and articulated inhumations at Raunds and among the burials listed in Appendix SS7.1	231	5.1	Correlation of Neolithic monument types and location types in the south-east midlands	277

List of contributors

- Aidan Allen: Formerly of English Heritage, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD
- Paul Backhouse BA: Graphics Manager, Oxford Archaeology, Janus House, Osney Mead, Oxford OX2 0ES
- Tony Baker: Formerly of the Northamptonshire Archaeology Unit
- Polydora Baker, BA, PhD: English Heritage, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD
- Torben Bjarke Ballin, CandPhil, PhD, FSA Scot, MIFA: Lithic Research, Banknock Cottage, Denny, Stirlingshire FK6 5NA
- Alistair Barclay, BSc, PhD: Wessex Archaeology, Portmay House, Old Sarum Park, Salisbury SP4 6EB
- Alex Bayliss, BA: Scientific Dating Co-ordinator, English Heritage, 1 Waterhouse Square, 138-42 Holborn, London EC1N 2ST
- Anthony Beck, BA: Department of Archaeology, University of Durham, South Road, Durham DH1 3LE
- Frances Blore, BTech Hons: 12 Blende Road, Llandeilo SA19 6NE
- Angela Boyle, MA(Hons), MA: GUARD, Gregory Building, University of Glasgow, Glasgow G12 8QQ
- Philippa Bradley, BA, Dip Post-ex, MPhil, AIFA: Wessex Archaeology, Portmay House, Old Sarum Park, Salisbury SP4 6EB
- Gill Campbell BSc, MSc: English Heritage, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD
- Andy Chapman, BSc: Northamptonshire Archaeology, Northamptonshire County Council, 2 Bolton House, Wootton Hall Park, Northampton NN4 9BE
- Lesley Collett: Formerly of Oxford Archaeology, Janus House, Osney Mead, Oxford OX2 0ES
- Gordon T Cook, BSc, PhD: Scottish Universities Research and Reactor Centre, Scottish Enterprise Technology Park, Rankine Avenue, East Kilbride, Glasgow G75 0QF
- Mark Copley, BSc, MSc, PhD: Research Assistant, Organic Geochemistry Unit, Biogeochemistry Research Centre, School of Chemistry, University of Bristol, Cantock's Close, Bristol BS8 ITS
- Anna Cselik, BSc: Formerly of the Archaeological Conservation Section, Ancient Monuments Laboratory
- Vicky Crosby BA, PhD: English Heritage, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD
- Mary Davis, BA, Dip Arch Con: Department of Archaeology and Numismatics, National Museums and Galleries of Wales, Cathays Park, Cardiff CF10 3NP
- Simon J M Davis, BSc, Ph D: Instituto Português de Arqueologia, Avenida da Índia 136, P-1300-300 Lisboa, Portugal
- Judith Dobie: Graphic Artist, English Heritage, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD
- Stephanie N Dudd, BSc, Ph D: Formerly of the Organic Geochemistry Unit, Biogeochemistry Research Centre, School of Chemistry, University of Bristol, Cantock's Close, Bristol BS8 ITS
- the late Glynis Edwards, BA, Dip Cons
- Chris Evans BA: Graphic Artist, English Heritage, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD
- Richard P Evershed, BSc, PhD: Professor in Biogeochemistry, Organic Geochemistry Unit, Biogeochemistry Research Centre, School of Chemistry, University of Bristol, Cantock's Close, Bristol, BS8 ITS
- Andrew Foxon MA, AMA, PhD, FSA Scot: 39 Droghadfadyle Road, Port Erin, Isle of Man IM9 6EN
- Mick Gibbons: Graphic Artist, formerly of English Heritage, 23 Savile Row, London W1X 1AB
- David Goodger: Graphic Artist, formerly of English Heritage, 23 Savile Row, London W1X 1AB
- Roger Grace, BA, PhD: Computer Officer, Department of Psychology, University of Essex
- Jan Harding BA, PhD: Senior Lecturer, School of Historical Studies, Armstrong Building, University of Newcastle upon Tyne, Newcastle upon Tyne NE1 7RU
- Frances Healy, BSc(Econ), Dip Archaeol, PhD, FSA, FSA Scot, MIFA: 20 The Green, Charlbury, Oxon OX7 3QA
- Janet Henderson: Formerly of English Heritage, 23 Savile Row, London W1X 1AB
- Carl Heron, BTech, PhD: Senior Lecturer in Archaeological Sciences, Department of Archaeological Sciences, University of Bradford, Bradford, West Yorkshire, BD7 1DP
- Jon Humble BA, MA: Inspector of Ancient Monuments, English Heritage, 44 Derngate, Northampton NN1 1UH
- Claire E Jones, BA: Archaeological Archives Curator, English Heritage, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD

- Ian Kinnes, BA, PhD, FSA: Formerly of the Department of Prehistory and Early Europe, British Museum
- Eddie Lyons: Graphic Artist, English Heritage, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD
- Richard I Macphail, BSc, MSc, PhD: Institute of Archaeology, University College London, 31–34 Gordon Square, London WC1H 0PY
- Simon Mays: English Heritage, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD
- Professor F Gerald McCormac, BSc, PhD: School of Archaeology and Palaeoecology, The Queen's University of Belfast, Belfast BT7 1NN, Northern Ireland
- Liz Muldowney, BA, MA, formerly of English Heritage, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD
- Stuart Needham BA, PhD, FSA, formerly of the Department of Prehistory and Europe, British Museum, Great Russell Street, London WC1B 3DG
- Karen Nichols: Senior Graphic Artist, Wessex Archaeology, Portway House, Old Sarum Park, Salisbury SP4 6EB
- Andrew Payne, BSc: Archaeometry Branch, English Heritage, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD
- Dominic Powlesland, BA: The Landscape Research Centre, Bridge Barn, Yedingham, Malton, North Yorkshire YO17 8SL
- Christopher Bronk Ramsey, BSc, PhD: Research Laboratory for Archaeology and the History of Art, University of Oxford, 6 Keble Road, Oxford OX1 3QJ
- Stéphane Rault, BA: Formerly of the Department of Archaeology, University of Newcastle upon Tyne, Newcastle upon Tyne NE1 7RU
- Mark Robinson, MA, Ph D, FSA: Oxford University Museum of Natural History, Parks Road, Oxford OX1 3PW
- Ian A G Shepherd, MA: Planning and Environmental Services, Aberdeenshire Council, Woodhill House, Westburn Road, Aberdeen AB1 6GB
- Maisie Taylor, BA, Cert Ed, FSA, MIFA: Flag Fen Bronze Age Centre, The Droveaway, Northey Road, Peterborough PE6 7QF
- David Tomalin, AMA, PhD, FSA: Department of Archaeology, Avenue Campus, University of Southampton, Southampton SO17 2BF
- John Vallender: Graphics Manager, English Heritage, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD
- Angela Wardle, BA, PhD: Museum of London Specialist Services, Mortimer Wheeler House, Eagle Wharf Road, London N1 7ED
- Robert Whiteman: Formerly of Oxford Archaeology, Janus House, Osney Mead, Oxford OX2 0ES
- Patricia Wiltshire: Institute of Archaeology, University College London, 31–34 Gordon Square, London WC1H 0PY
- David F Williams, PhD, FSA: Department of Archaeology, University of Southampton
- Dave Windell: Formerly of Northamptonshire Archaeology Unit
- Jo Woodiwiss: Formerly of Northamptonshire Archaeology Unit

Preface

The Raunds Area Project was one of the major fieldwork initiatives of the 1980s. Although prompted by the need for large-scale rescue excavations, it broke new ground by linking these to an integrated investigation of local landscape history, which incorporated fieldwalking, earthwork and geophysical survey, environmental investigations and documentary research. Partnership between English Heritage and the Northamptonshire Archaeology Unit brought the benefits of complementary expertise and resources. The initial emphasis of the project was on landscape development from the late Iron Age onwards, in keeping with what was then known of the archaeology. But the progressive discovery of Neolithic and Bronze Age monuments concealed and preserved beneath a blanket of alluvium covering the floor of the Nene valley transformed perceptions of the area's prehistory. It is this pre-Iron Age evidence that is presented here.

Human presence at Raunds spans the transition from the hunter-gatherer lifeways of the 5th millennium BC to the livestock-rearing and monument-building of the early 4th millennium. Importantly, the earliest monuments were, with one exception, not the long barrows and causewayed enclosures already well known from the same period. Rather, they were of diverse form, unimposing, and almost devoid of human remains, deliberately placed artefacts, or animal remains. This emphasises the extent to which valley-floor locations can expand our understanding of the period, and the extent to which contemporary use of different topographies may have been complementary rather than uniform. Much later, at the turn of the 3rd and 2nd millennia BC, the evidence highlights the complexity of funerary practice and associated activities. Raunds also makes a unique contribution to the understanding of early Bronze Age society and its funerary rites, in the form of a barrow mound piled high with the skulls of almost two hundred cattle.

This publication brings these and many other threads of evidence together. It also explores one of the directions that archaeological publication can now take, as it both synthesises a large body of evidence and makes it accessible in digital form, putting the reader in a position to analyse and reinterpret the data.

Acknowledgements

Fieldwork by the Central Excavation Unit was funded entirely by English Heritage; fieldwork by the Northamptonshire Archaeology Unit was jointly funded by Northamptonshire County Council (Planning and Transportation Department), English Heritage, the Manpower Services Commission and the Training Commission. Fieldwork by the Oxford Archaeological Unit was funded by ARC, as were the initial site narrative and assessment. With this exception, post-excavation has been entirely funded by English Heritage, whose long-term support for the project is gratefully acknowledged.

The principal excavators were Andy Chapman, Tony Baker, Phil Voice, Dave Windell and Jo Woodiwiss (West Cotton); Claire Halpin (Irthlingborough); David Neal (Stanwick); John Moore, Mark R Roberts and Graham Keevill (Redlands Farm); and Frances Blore (Stanwick 1991–2). They and their teams worked hard and long, often in difficult circumstances, to extract and record the information that has proved such a rich resource. A particular mention must be made of Dave Windell, who was the director of the West Cotton excavations throughout the fieldwork stage and was therefore responsible for keeping the excavations and the team on track, and for dealing with the complexities of the funding and politics inevitably associated with such a complex operation. Assistance with machinery and co-operation was provided by ARC Ltd (now Hanson), and many local organisations, including Raunds Town Council and Wellington Tannery, also provided assistance. Thanks are also due to the residents of Raunds and Stanwick, who showed interest and good will towards both the work and the excavators.

In post-excavation, Jon Humble, who led the project from 1991 to 1997, pushed the analysis of the Irthlingborough archive forward, infusing enthusiasm and direction into what must at times have seemed endless tasks. He has subsequently been unfailingly helpful and supportive. His assistants were initially Aidan Allan and subsequently Stéphane Rault, who accomplished the project's move to Newcastle, providing much-needed knowledge and continuity. In Newcastle, Denise Wilson, Glyn Goodrick and the entire staff of the Department of Archaeology (now part of the School of Historical Studies) have provided practical support.

The form and content of this publication owe much to Tim Williams. Alex Gibson, who monitored the publication project, has provided positive and practical support. His capacity for cutting confidently and unsentimentally through problems has been an invaluable asset.

Assembling the results of parts of a larger project, itself undertaken by three separate organisations, had inherent problems, which could not have been overcome without a generous and unflagging flow of help and information from Andy Chapman and Steve Parry of Northamptonshire Archaeology; Vicky Crosby, Liz Muldowney, Brian Attewell and Ed McSloy of English Heritage; Angela Boyle, Philippa Bradley and Alistair Barclay of Oxford Archaeology; and Claire Halpin of Hertfordshire Archaeological Trust.

The data became manageable thanks to its integration into a single GIS-ready digital archive by Dominic Powlesland and Anthony Beck, who have given unstintingly of their time and patience in overcoming problems and making it possible to examine the area and its landscape in ways that would otherwise have been impossible.

Alex Bayliss has provided the chronological framework that underpins and shapes the whole work.

All the specialist contributors have added depth and perspective to the narrative. We appreciate the endurance of those who have stayed with the project for many years: Mark Robinson from the first, David Tomalin from 1986, and Gill Campbell from 1988. The labour of recording a lithic assemblage of over 20,000 pieces fell largely to Peter Makey. Torben Bjarke Ballin rose to the challenge of writing it up.

The staff of English Heritage's Graphics Office have also been involved throughout, John Vallender having produced some of the first and last illustrations to be completed. In his role as Graphics Manager he has grappled successfully with the integration of graphics of varying vintage and in varying media and with source material and briefs of varying quality, as well as managing to programme a large body of work in the face of many conflicting demands on the Office's time. The skill, good humour, patience and forbearance of the entire Graphics Office are wholeheartedly acknowledged.

The project could not have been placed in its surrounding landscape had not Glenn Foard, Christine Addison and Susan Freebrey of Northamptonshire Heritage and Ben Robinson of Peterborough City Council provided SMR data and support and given generously of their time in problem-solving and question-answering. It was particularly welcome that Bob Bewley of English Heritage agreed to reschedule the National Mapping Programme for Northamptonshire to prioritise the Raunds study area. Alison Deegan of the NMP has since been generous with advice and information, and Jacqueline Minchinton, Records and Resources Management Officer of Northampton Museum and Art Gallery, has kindly provided information about excavations by Dr Robb at Redlands Farm.

Many other friends and colleagues have provided information and support, and thanks are extended to all of them, especially to Dr Robert Shiel of the University of Newcastle for advice and help on the soils of the area; to Dr Charly French of the University of Cambridge for providing a text of the Etton Landscape monograph in advance of its publication; to Peter Marshall for comment on the use of radiocarbon dating; and to an anonymous referee for generous and constructive comments on the draft.

The Visitors of the Ashmolean Museum have generously provided the photographs of bracers attributed to petrological group VI used in Panel 4.2 and in SS3.7.1 and the University of Cambridge Collection of Air Photographs has provided the photograph reproduced as Figure 3.63.

Philippa Bradley would like to thank Jon Humble for discussing his unpublished results and for providing the flint recording system. She is grateful to all the specialists who worked on material from the long barrow for their hard work and for many fruitful discussions about their results, and to Alistair Barclay for commenting on earlier versions of the Long Barrow text. She is also grateful to Francis Pryor for photographs of the flint axe and worked wood from the Long Barrow and to Michael Dudley, formerly of the Ashmolean Museum, for photographs of grave goods from the same monument.

Gill Campbell would like to thank Dr Mark Robinson and the late Professor John Evans for their help with identifications, and Dr Mark Robinson for comments on earlier versions of her text.

Andy Chapman would like to thank all the 300 individuals who worked at West Cotton during the five seasons of fieldwork on both the prehistoric and medieval sites.

Simon Davis has been fortunate in having had the help of numerous people while studying the strange and perhaps unique faunal assemblage from Barrow 1. In particular he is most grateful to Roger Jones of the Ancient Monuments Laboratory, and Claire Halpin, Jon Humble and Nicholas Balaam of the CEU who kindly produced the spatial plots of finds at Irthingborough and who provided me with much advice. Sebastian Payne suggested a method for recording the wear stages of cattle maxillary teeth and for measuring their circumferences. He also read several earlier versions of the report and offered many useful suggestions. Caroline Grigson of the Odontological Museum, Royal College of Surgeons drew his attention to several useful references in the literature. John Mack and Nigel Barley of the Museum of Mankind introduced him to some of the customs practised by people in Africa and Madagascar today. He has had useful advice concerning burial practices in the Classical world from Robert Cook of Cambridge, Michael Jameson of Stanford University, California and Crawford Greenewalt of the University of California at Berkeley.

He is also grateful to Claire Halpin for entrusting him with the horse mandible from Barrow 3, to Sebastian Payne for commenting upon an earlier version of his report on it, and to Vera Eisenmann who taught him much about equid teeth.

The late *Glynis Edwards* was grateful to Bridget Ibbs, Peter Meehan and the late Colin Slack, who, together with her, undertook conservation of selected artefacts.

Richard Evershed and his colleagues would like to acknowledge NERC for financial support for mass spectrometry facilities (GR3/2951, GR3/3758 and F60G6/36/01) and a research grant (GR3/10153).

Ian Kinnes would like to thank Alex Gibson and Ian Longworth for advice and discussion, especially concerning the extraordinary vessel from grave 742 in Barrow 9.

Richard Macphail acknowledges long-term funding by English Heritage and the support of Tim Williams (English Heritage), the Central Archaeological Service (Nick Balaam, Alex Gibson and Jon Humble), the Institute of Archaeology, University College London and Newcastle University (Jan Harding and Stéphane Rault). Frances Healy (Newcastle University) greatly contributed to the report by clarifying the dating and contextual sequence at Raunds, and by discussion of the many issues that make Raunds so interesting a site. He also wishes to thank the following colleagues: Marie-Agnès Courty (CNRS, France; discussion and preliminary diagnosis of the dark red clay coatings), Cyril Bloomfield (UCL; Pnitric data), Jöhan Linderholm and Roger Emglemark (Umeå University; phosphate and magnetic data, and discussion); Robert Shiel (Newcastle University; advice on statistical analysis); and Gill Campbell (English Heritage), Mark Robinson (Oxford University Museum) and PEJ Wiltshire (UCL) for their collaboration; Kevin Reeves (UCL; microprobe), Jenny Brigham (UCL; analytical data); Frances Blore, Joy Ede, Claire Halpin, and Tom MacDonald of the CEU; Andy Chapman and Dave Windell of the Northamptonshire Archaeological Unit; Philippa Bradley and Graham Keevill of Oxford archaeology; the Institut National Agronomique, Paris-Grignon and Stirling University (thin section manufacture). Two anonymous referees are thanked for their comments.

Stuart Needham benefited from comments and information from Alison Sheridan, including news of the new Beech Hill House date funded by the Society of Antiquaries of Scotland. Jan Lanting and his colleagues are to be thanked profusely for offering to date the critical burial context for dagger and pommel, while Frances Lynch kindly provided the other highly relevant new date for Bedd Branwen grave H. He also thanks Glynis Edwards and David Dungworth for their identifications of hilt remains and alloy composition respectively.

Andrew Payne's geophysics report could not have been written without the contributions of Mark Cole, Peter Cottrell, Neil Linford, Paul Linford and Gregory Fookes to the survey programme in the fieldwork and data-processing stages, and also the support of Andrew David. Mark Cole originally produced a report on three of the barrow sites and the more detailed account subsequently published here draws substantially on Mark's earlier assessments of the results with some modification where necessary in the light of additional information from the excavated barrows. The section on the Cotton 'Henge' is based on information kindly provided by Jon Humble. The assistance of Eddie Lyons during the production of the digital graphics is also gratefully acknowledged.

Summary

In the course of the Raunds Area Project and subsequent excavations some 3.5km of the floor of the Nene valley were investigated, including more than 20 Neolithic and Bronze Age monuments, most of them previously obscured by later archaeology and by Saxon and early medieval alluvium. The record begins with a slight human presence in the early Holocene, which became progressively more marked. By around 5000 Cal BC, one spot at the confluence of the Nene and a tributary had long been a regular stopping-place, where flint was knapped and tools suitable for a whole range of domestic tasks were discarded once they were blunted and finished-with. Beyond this site, there was intermittent activity all along the well-wooded valley.

Soon after 4000 Cal BC Neolithic artefacts began to be discarded at the same confluence and, within a couple of hundred years, a landmark had been built there – the Long Mound, about 135 metres long, 18 metres wide and perhaps 1.5 metres high. Its scale means that its construction could have been a communal event, bringing together perhaps 50 or a 100 people. Indeed, the pattern of stakeholes beneath it suggests that it was divided into hurdle-defined compartments, each of which could have been built by a different group. It was built of turf, cut from an area of something like 100m by 100m, which can only have been the product of grazing. In other words, livestock were being kept by about 3800 Cal BC, and had already begun to alter the vegetation. Three other monuments, the Long Barrow, the north part of the Turf Mound, and the Avenue, were also built in the first half of the 4th millennium.

The plants, insects and pollen from waterlogged bottoms of the Long Barrow ditches indicated that it stood in a lightly grazed clearing in recent cleared woodland. Opium poppy seeds expand the range of ultimately near eastern plant species introduced to Britain in the 4th millennium. Also in the ditch were clusters of woodchips and offcuts from the construction of the revetment. The flint axehead used to do the job had been left at the barrow, its battered and damaged cutting edge precisely fitting some of the cutmarks on the wood. In the narrower, lower end of the barrow was a burial chamber, built of small limestone slabs, in which were weathered fragments of a single human long bone.

By 3000 Cal BC a chain of five or six diverse monuments stretched along the river bank (the Long Mound, the Long Enclosure, the Turf Mound, the Causewayed Ring Ditch, the Avenue, perhaps the Southern Enclosure, and the Long Barrow). There is little sign that people lived here, rather that they lived nearby, possibly on the valley sides, pasturing their herds among the monuments and visiting them more formally when occasion demanded. For the next 500 years or more, both people and their animals seem to have come to the valley bottom less often. Trees grew on and around some of the monuments; late Neolithic artefacts were scarce; and the only site definitely dated to this period was the Riverside Structure, a timber platform at the edge of a channel of the Nene, into an upper layer of which cattle bones and a couple of human long bones were either washed by the river or deliberately deposited. The focus of ceremonial activity may have shifted to a little-understood monument, the Cotton ‘Henge’, which survives as two concentric ditches on the occupied valley side.

By about 2200 Cal BC the valley was more heavily grazed and less wooded than ever before. At this stage, monument-building accelerated. Except for the Segmented Ditch Circle, the new monuments were round barrows – at least 20 in all, nine of which were excavated. Two of them covered post- and stake settings. Unlike the earlier monuments, almost all contained burials, some of them richly furnished. The most outstanding is a male inhumation in Barrow 1, accompanied by numerous artefacts, some of them exotic, covered first by a limestone cairn, and then by a heap of about 200 cattle skulls, which were already defleshed when brought to the grave. The barrows were progressively enlarged, as cremation gradually became the normal burial rite. The valley bottom remained uninhabited, while settlement on the valley sides became more marked and activity began to extend onto the surrounding Boulder Clay plateau. Cremations continued to be buried in and around the mounds down to about 1000 Cal BC, by which time two overlapping systems of paddocks and droeways had been laid out. The terrace began to be settled when these had gone out of use, in the early 1st millennium Cal BC.

Résumé

Au cours du projet d'étude de la région de Raunds, et des excavations qui ont suivi, on a examiné quelques 3,5 km du fond de la vallée de la Nene, y compris plus de vingt monuments, datant du néolithique et de l'âge du bronze, dont la plupart était demeurée jusque là dissimulée par une archéologie postérieure et des alluvions datant de la période saxonne et du début du Moyen-Âge. Les premiers indices consistent en une légère présence humaine au début de l'Holocène, qui s'est progressivement accentuée. Dès environ 5000 ans cal av. J.-C., un endroit, à la confluence de la Nene et d'un de ses affluents, constituait depuis longtemps une halte régulière, où on débitait le silex et où on rejetait des outils, propres à toute une variété de tâches domestiques, une fois qu'ils étaient émoussés et qu'on en avait fini avec eux.

A l'extérieur de ce site, il y avait des signes d'activité intermittente tout au long de cette vallée bien boisée. Peu après 4000 ans cal av. J.-C. des objets manufacturés néolithiques commencèrent à être rejetés à cette même confluence et, en l'espace de quelques centaines d'années, on y avait construit un site remarquable, le '*Long Mound*' (Long Tertre), d'environ 135 mètres de long sur 18 mètres de large et peut-être 1,5 mètres de haut. Ses dimensions signifient qu'il se pourrait qu'il soit le résultat d'un travail collectif, rassemblant peut-être cinquante ou cent personnes. En fait, la disposition des trous de pieux que l'on a trouvés en-dessous, donne à penser qu'il était divisé en compartiments, délimités par des claies, il se pourrait que chacun de ceux-ci ait été construit par un groupe différent. L'ouvrage était construit de mottes de gazon, levées sur une aire d'environ 100 m. sur 100 m. qui ne pouvait être autre chose que le résultat de pâturage. En d'autres termes, on élevait du bétail vers environ 3 800 ans cal av. J.-C., et les animaux avaient déjà commencé à modifier la végétation. Trois autres monuments, le '*Long Barrow*' (Long Tumulus), la partie nord du '*Turf Mound*' (Tertre à Mottes de Gazon) et l'*'Avenue'*, furent également construits dans la première moitié du 4^{ème} millénaire.

Les plantes, les insectes et le pollen provenant des fonds imbibés d'eau des fossés du '*Long Mound*' indiquaient qu'il se dressait dans une clairière légèrement pâturée dans un bois récemment dégagé. Des graines de pavots à opium viennent augmenter la gamme d'espèces de plantes, originaires du Proche-Orient, introduites en Grande-Bretagne au 4^{ème} millénaire. Se trouvaient également dans le fossé des amas de copeaux et de morceaux de bois rejetés, provenant de la construction du revêtement. La tête de hache en silex utilisée pour accomplir cette tâche avait été laissée sur place, son côté tranchant, bossué et endommagé, correspondant exactement à certaines des traces de coupure sur le bois. A l'extrémité plus étroite et plus basse du tertre se trouvait une chambre funéraire, construite en petites dalles de calcaire, dans laquelle

on a découvert des fragments, qui avaient été exposés aux éléments, d'un seul os long humain.

Dès 3000 ans cal av. J.-C. une chaîne de cinq ou six monuments différents s'étendait le long de la rive (le *Long Mound*, le *Long Enclosure*, le *Turf Mound*, le *Causewayed Ring Ditch*, l'*Avenue*, et peut-être le *Southern Enclosure* et le *Long Barrow*). Il n'existe que très peu de témoignages de la présence de populations à cet endroit, il est plus probable qu'elles habitaient à proximité, peut-être sur les versants de la vallée, faisant paître leurs troupeaux parmi les monuments et s'y rendant plus cérémonieusement quand les circonstances l'exigeaient. Pendant les cinq cents années qui ont suivi, voire plus, il semble que populations et animaux soient tous deux venus moins souvent au fond de la vallée. Des arbres poussèrent sur et autour de certains des monuments; les objets manufacturés de la fin du néolithique étaient rares, et le seul site qui date, sans aucun doute, de cette période était la *Riverside Structure* (Structure de Bord de Rivière), une plateforme en bois, au bord d'un chenal de la Nene, dans une couche supérieure de laquelle furent apportés par la rivière, ou déposés délibérément, des ossements de bétail et une paire d'os longs humains. Il se peut que le foyer des activités cérémonielles se soit déplacé vers un monument mal compris, le *Cotton 'Henge'*, qui a survécu sous la forme de deux fossés concentriques sur le versant occupé de la vallée.

Dès environ 2200 ans cal av. J.-C. la vallée était plus intensément pâturée et moins boisée qu'à aucune autre période de son histoire. A ce stade, la construction de monuments s'accéléra. Mis à part le *Segmented Ditch Circle* (Cercle à Fossé Interrompu), les nouveaux monuments consistaient en tumulus ronds, – au moins vingt – dont neuf furent excavés. Deux d'entre ces tumulus couvraient des emplacements à poteaux et pieux. Contrairement aux monuments plus anciens, presque tous contenaient des sépultures, dont certaines étaient accompagnées d'un riche mobilier. La plus remarquable était une sépulture mâle dans le *Barrow 1*, accompagnée de nombreux objets, certains exotiques, recouverte d'abord d'un cairn calcaire, puis d'un tas d'environ deux cents crânes de bétail, qui avaient été décharnés avant d'être apportés sur la tombe. Les tumulus furent progressivement agrandis, au fur et à mesure que l'incinération devenait le rite funéraire normal. Le fond de la vallée resta inhabité, tandis que l'occupation des flancs de la vallée devenait plus marquée et que l'activité commençait à déborder sur le plateau de Boulder Clay. On continua à enterrer les incinérations dans et autour des tertres jusqu'à environ 1000 ans cal av. J.-C., date à laquelle deux systèmes concomitants d'enclos à animaux et de chemins de passage de bétail avaient été mis en place. La terrasse commença à être occupée quand ceux-ci furent devenus caducs, au début du 1^{er} millénaire av. J.-C..

Traduction: Annie Pritchard

Zusammenfassung

Im Zuge des Raunds Area Projekts und der damit verbundenen Ausgrabungsarbeiten wurden an die 3,5 km der Bodenfläche des Nene-Tales untersucht. Dazu gehörten auch mehr als 20 Grabmäler aus Neolithikum und Bronzezeit, von denen die meisten in der Zwischenzeit durch spätere archäologische Arbeiten und durch sächsische und mittelalterliche Ablagerungen verdeckt worden waren. Die Aufzeichnungen beginnen mit einer spärlichen menschlichen Präsenz im frühen Holozän, die allmählich zunahm. Um etwa 5.000 v. Chr. hatte sich eine Stelle am Zusammenlauf von Nene und einem Nebenfluss zu einer regelmäßigen Lagerstätte entwickelt, wo Feuerstein gebrochen und Werkzeuge für die verschiedensten häuslichen Zwecke weggeworfen wurden, nachdem sie stumpf und unbrauchbar geworden waren. Auch über diese Stelle hinaus sind über die gesamte Länge des bewaldeten Tales hin immer wieder Nachweise menschlicher Aktivität zu finden.

Bald nach 4.000 v. Chr. wurden am selben Zusammenfluss neolithische Artefakte entsorgt und es entstand im Lauf einiger Jahrhunderte eine Wall-Graben-Anlage, Long Mound genannt, mit einer Länge von ca. 135 Metern, einer Breite von 18 Metern und einer Höhe von etwa 1,5 Metern. Aufgrund ihrer Größe ist anzunehmen, dass es sich dabei um ein Gemeinschaftsprojekt gehandelt hat, an dem an die fünfzig bis hundert Menschen beteiligt waren. Die tiefliegenden Pfahllöcher lassen darauf schließen, dass der Wall-Graben in durch Flechtwerk getrennte Abteilungen unterteilt war, von denen eine jede möglicherweise von einer anderen Gruppe gebaut worden war. Errichtet wurde der Wall-Graben auf einer Rasenfläche, die aus einem etwa 100m x 100m großen Areal geschnitten wurde, bei dem es sich zweifelsohne um Weideland gehandelt haben muss. Das bedeutet in anderen Worten, dass die Menschen um 3.800 v. Chr. bereits Vieh gehalten haben, das zu diesem Zeitpunkt begonnen hatte, die Vegetation zu verändern. Drei weitere Grabmäler, Long Barrow, der nördliche Teil von Turf Mound und Avenue, wurden ebenfalls in der ersten Hälfte des vierten Jahrtausends errichtet. Pflanzen, Insekten und Pollen im wasserdurchtränkten Boden der Gräben des Long Barrow weisen darauf hin, dass das Hügelgrab auf der leicht abgegrasten Lichtung einer jüngst abgeholzten Waldung stand. Mit den Samen des Opiummohns wird das Spektrum der nahöstlichen Pflanzenarten, die im vierten Jahrtausend auf den britischen Inseln eingeführt wurden, noch erweitert. Im Graben befanden sich außerdem Holzteilchen und Schnittabfälle vom Bau der Auskleidungen. Eine zu diesem Zweck verwendete Flintaxt war im Hügelgrab zurückgeblieben. Ihre abgenutzte und lädierte Schnittkante passt genau in einige der Schnitte im Holz. Das schmalere, niedrigere Ende des Hügelgrabes war eine aus kleinen Kalksteinplatten gefügte Grabkammer, in der

die verwitterten Fragmente eines einzigen menschlichen Röhrenknochens gefunden wurden.

Um 3.000 v. Chr. erstreckte sich bereits eine Reihe von fünf bis sechs verschiedenen Grabmälern entlang dem Flusssufer (Long Mound, Long Enclosure, Turf Mound, Causewayed Ring Ditch, Avenue, möglicherweise Southern Enclosure und Long Barrow). Es gibt kaum Anzeichen dafür, dass Menschen hier gelebt haben. Wahrscheinlicher ist, dass sie sich in der Nähe, möglicherweise an den Talseiten, angesiedelt hatten und ihre Herden zwischen den Grabmälern weiden ließen. Die Grabmäler besuchten sie dann zu den jeweils dafür bestimmten Anlässen. Es hat den Anschein, dass Mensch und Vieh während der nachfolgenden fünf Jahrhunderte und auch etwas später, den Talboden weniger oft aufsuchten. Um die Grabmäler herum und auf diesen wuchsen Bäume, und Artefakte aus spät-neolithischer Zeit sind selten. Die einzige Stätte, die auf diese Zeit zurückgeht, ist die Riverside Structure, eine hölzerne Plattform am Ufer eines Kanals der Nene, wo in einer oberen Lage Rinderknochen und etliche menschliche Röhrenknochen gefunden wurden, die entweder vom Flusswasser angeschwemmt oder absichtlich dorthin verbracht wurden. Das Zentrum der zeremoniellen Aktivitäten hatte sich möglicherweise auf ein bisher noch wenig verstandenes Monument, das Cotton ‚Henge‘, verlagert, das auf der bewohnten Talseite als zwei konzentrische Gräben überdauert hat.

Um etwa 2.000 v. Chr. war das Tal bereits stärker abgegrast und weniger bewaldet als früher. Zu diesem Zeitpunkt nahm der Bau von Grabmälern zu. Außer dem Segmented Ditch Circle handelte es sich bei den neuen Monumenten um runde Hügelgräber, von denen mindestens 29 ausgegraben wurden. Zwei davon hatten einen Pfeilerunterbau. Im Gegensatz zu den früheren Grabmälern enthielten fast alle Grabüberreste, von denen einige reich ausgestattet waren. Vorrangig darunter ist eine männliche Hockerbestattung in Barrow 1, umgeben von zahlreichen Artefakten, einige davon recht exotischer Art, die zuerst von einem Hügel aus Kalksteinen und dann von einem Haufen von etwa 200 Rinderschädeln abgedeckt war, wobei die Schädel bereits abgefleischt waren, bevor sie in das Grab kamen. Als die Leichenverbrennung zum üblichen Beisetzungsritus geworden war, wurden die Hügelgräber nach und nach vergrößert. Der Talboden blieb weiterhin unbewohnt, während die Siedlungen an den Talseiten zunahmen und sich schließlich auch auf das umliegende Tillitplateau ausbreiteten. Bis etwa 1.000 v. Chr. wurden die Feuerbestattungen in den oder um die Grabhügel herum beigesetzt, und zu diesem Zeitpunkt waren auch bereits zwei einander überschneidende Systeme von Gehegen und Viehpfaden angelegt worden. Die Terrasse wurde im ersten Jahrtausend v. Chr. allmählich besiedelt, nachdem diese Systeme nicht mehr genutzt wurden.

Übersetzung: Ingrid Price-Gschlössl
für First Edition Translations Ltd, Cambridge

A note on radiocarbon dates

Simple calibrations, which relate the radiocarbon measurements directly to the calendrical time scale, have been calculated using the dataset published by Stuiver *et al* (1998) and the computer program Oxcal version 3.5 (Bronk Ramsey 1995; 1998; forthcoming). The calibrated date ranges cited in normal type have been calculated according to maximum intercept method of Stuiver and Reimer (1986). They are quoted at 95% confidence in the form recommended by Mook (1986), with end points

rounded outwards to 10 years. The estimated date ranges quoted in italics are derived from the mathematical modelling of the archaeological chronology and are posterior density estimates (Panel 3.1; SS6). Laboratory numbers are quoted in italics where they refer to posterior density estimates, and in normal type where they refer to samples or to simple calibrated date ranges. Weighted means have been taken from replicate measurements before calibration (Ward and Wilson 1978).

Note sur la datation a radiocarbone

De simples calibrations, qui font correspondre les mesures au radiocarbone directement à l'échelle calendaire, ont été calculées avec l'aide de données publiées par Stuiver *et al* (1998) et du programme informatique Oxcal version 3.5 (Bronk Ramsey, 1995; 1998; à paraître). Les gammes de dates calibrées données en caractères normaux ont été calculées suivant la méthode d'inclusion maximum de Stuiver et Reimer (1986). Elles sont citées avec un taux de confiance de 95% sous la forme recommandée par Mook (1986), les extrémités étant

arrondies vers l'extérieur à la dizaine d'années. Les gammes de dates estimées citées en italiques sont dérivées d'un modèle mathématique de chronologie archéologique et sont des estimations de densité postérieure (chapitre 3; SS6). Les nombres du laboratoire sont cités en italiques quand ils renvoient à des estimations de densité postérieure, et en caractères normaux quand ils renvoient à des échantillons ou à de simples gammes de dates calibrées. Les moyennes pondérées proviennent de mesures répliquées avant calibration (Ward et Wilson 1978).

Traduction: Annie Pritchard

Anmerkungen zur Radiocarbondatierung

Einfache Kalibrierungen, die einen direkten Zusammenhang zwischen den Radiocarbon-Messungen und der kalendrischen Zeitmessung herstellen, wurden anhand des von Stuiver u. a. (1998) veröffentlichten Datensatzes und des Oxcal Computerprogramms Version 3.5 (Bronk Ramsey 1995; 1998; erscheint demnächst) errechnet. Die in Normalschrift angegebenen kalibrierten Datenspannen wurden gemäß der Maximum Intercept Methode von Stuiver und Reimer (1986) errechnet. Sie werden mit einer statistischen Sicherheit von 95 % in der von Mook (1986) empfohlenen Form angegeben,

wobei die Endpunkte auf die nachfolgenden zehn Jahre aufgerundet wurden. Die in Kursivschrift gegebenen Datenspannungen wurden der mathematischen Modellierung der archäologischen Chronologie abgeleitet und sind a-posteriori-Schätzungen (Kapitel 3; SS6). Labornummern erscheinen kursiv, sofern sie sich auf a-posteriori-Schätzungen beziehen, und in Normalschrift, wenn es sich um Momentwerte oder einfache kalibrierte Datenbereiche handelt. Gewichtete Mittel wurden vor der Kalibrierung von Wiederholungsmaßen errechnet (Ward and Wilson 1978).

Übersetzung: Ingrid Price-Gschlössl
für First Edition Translations Ltd, Cambridge