

Contents

List of Figures	xi
List of Tables	xix
Abstract	xxiii
1. Introduction	1
1.1. Research context and constraints.....	1
1.2. Recent advances in cremation studies	2
1.3. Brief overview of the cremation process in archaeology	3
1.4. Brief overview of radiocarbon dating cremated human remains	4
1.5. Brief overview of analysing strontium isotopes in cremated bone	5
1.6. Terminology.....	5
2. The Spread of Cremation Rites from Mainland Europe to Britain	11
2.1. The European Mesolithic (<i>c.</i> 8000–4000 cal BC)	11
2.1.1. Mesolithic cremation burial in Iberia, France and Belgium	11
2.1.2. Mesolithic cremation burial in Ireland	13
2.1.3. Mesolithic cremation burial in Britain.....	14
2.1.4. Mesolithic cremation burial elsewhere in Europe: a brief review	15
2.2. The European Neolithic (<i>c.</i> 5600–3000 cal BC)	16
2.2.1. Neolithic cremation burial in Iberia, France and Belgium	16
2.2.2. Neolithic cremation burial in Ireland.....	20
2.3. Summary of the spread of cremation rites	21
3. Neolithic Mortuary Rites Associated with Monuments in Britain (<i>c.</i>4000–2500 BC)	23
3.1. The Early Neolithic (<i>c.</i> 4000–3500 BC).....	24
3.1.1. Early Neolithic inhumations and monument construction	24
3.1.2. Early Neolithic cremations and associated monuments	28
3.2. The Middle Neolithic (<i>c.</i> 3500–3000 BC).....	33
3.2.1. Middle Neolithic inhumations and associated monuments	33
3.2.2. Middle Neolithic cremation cemeteries and associated monuments.....	35
3.3. The Late Neolithic (<i>c.</i> 3000–2500 BC)	40
3.3.1. Late Neolithic inhumations and associated monuments.....	41
3.3.2. Late Neolithic cremation cemeteries and associated monuments	43
3.4. The ‘lost’ cremation cemeteries	51
3.4.1. Duggleby Howe	51
3.4.2. Cairnpapple.....	54
3.5. The arrival of Beaker inhumation rites (<i>c.</i> 2500 BC).....	55
3.6. Summary of Neolithic mortuary rites associated with monuments in Britain.....	57
4. ‘Other’ Neolithic Burial Deposits	61
4.1. The Early Neolithic (<i>c.</i> 4000–3500 BC).....	61
4.1.1. Non-monumental Early Neolithic inhumations	61
4.1.2. Non-monumental Early Neolithic cremations	63
4.2. The Middle Neolithic (<i>c.</i> 3500–3000 BC).....	66
4.2.1. Non-monumental Middle Neolithic inhumations.....	66
4.2.2. Non-monumental Middle Neolithic cremations	70
4.3. The Late Neolithic (<i>c.</i> 3000–2500 BC)	72
4.3.1. Non-monumental Late Neolithic inhumations	73
4.3.2. Non-monumental Late Neolithic cremations.....	74
4.3.3. Other forms of deposition.....	77
4.4. Summary of ‘other’ Neolithic burial deposits	77
5. Methods	79
5.1. Recording and pyre technology	79
5.1.1. Cleaning.....	79
5.1.2. Total weight	80

5.1.3. Preservation and completeness	81
5.1.4. Dehydration: shrinkage, warping and fissuring	81
5.1.5. Bone fragmentation	82
5.1.6. Bone colouration.....	83
5.1.7. Identification of skeletal elements	83
5.1.8. Pyre goods and pyre debris	84
5.2. Recording demographic data	84
5.2.1. Minimum number of individuals (MNI).....	85
5.2.2. Age at death	85
5.2.3. Biological sex	86
5.2.4. Pathological data.....	88
5.2.5. Radiocarbon dating	89
6. Stonehenge.....	93
6.1. Introduction to Stonehenge.....	93
6.1.1. Brief summary of the previous excavations at Stonehenge.....	94
6.2. The Aubrey Holes of Stonehenge.....	96
6.3. Excavation of Aubrey Hole 7	100
6.4. Osteological analysis	103
6.4.1. Weight.....	103
6.4.2. Fragment size.....	103
6.4.3. Colour and efficiency.....	103
6.4.4. Completeness and preservation	104
6.4.5. Pyre technology	104
6.4.6. Minimum number of individuals (MNI).....	105
6.4.7. Age at death	105
6.4.8. Biological sex	105
6.4.9. Pathological lesions	105
6.4.10. Radiocarbon dating and strontium isotope results.....	107
7. Mortuary Remains: Selected Case Studies.....	113
7.1. The selection of case study sites.....	113
7.2. Middle Neolithic archaeological sites (c. 3500–3000 BC)	113
7.2.1. Case study #1: Imperial College Sports Ground	113
7.2.2. Case study #2: Dorchester-on-Thames	117
7.2.3. Case study #3: Bryn Celli Ddu	130
7.2.4. Case study #4: Llandegai Henge A.....	133
7.2.5. Case study #5: West Stow	138
7.3. Late Neolithic archaeological sites (c. 3000–2500 BC).....	144
7.3.1. Case study #6: Forteviot	144
7.3.2. Case study #7: Ferrybridge.....	148
7.3.3. Cast study #8: Balbirnie	152
8. Analysis and Synthesis of Middle and Late Neolithic Cremated Human Remains	155
8.1. Methodological approaches	155
8.1.1. The database	155
8.1.2. The analysis	155
8.1.3. The osteological samples	155
8.1.4. Problems and limitations	156
8.2. Analysis of the demographic data from Neolithic cremated remains.....	158
8.2.1. Minimum number of individuals (MNI) and spatial organisation.....	159
8.2.2. Age at death	172
8.2.3. Biological sex	189
8.3. Analysis of the cremation process and pyre technology	201
8.3.1. Fragment size and fragmentation	201
8.3.2. Dehydration, fissuring, warping and other heat-induced bone modifications	205
8.3.3. Pyre temperature and preservation	205
8.3.4. Pyre debris	206
8.3.5. Grave goods and inclusions	208
8.3.6. Deposit weight.....	214

8.4. The radiocarbon dates.....	226
8.4.1. Radiocarbon dates for all Middle Neolithic cremated remains	226
8.4.2. Radiocarbon dates for all Late Neolithic cremated remains.....	227
9. Discussion	239
9.1. The ‘missing’ dead.....	239
9.2. The identities of those selected for cremation burial.....	240
9.3. The nature of deposition and the importance of ‘token deposits’.....	242
9.4. Cremations associated with circular monuments	243
9.5. The destructive and transforming properties of fire	244
10. Future Directions and Closing Remarks	245
10.1. Future directions	245
10.1.1. Systematic review	245
10.1.2. Population dynamics.....	245
10.1.3. Radiocarbon dating	246
10.1.4. Strontium stable isotopes.....	246
10.1.5. Location of cremation deposits and the purposes of isolated pits	247
10.1.6. Grave goods and inclusions	247
10.2. Closing remarks	248
References	249
Appendix 1: Cremated Human Remains Recording Form	277
Appendix 2: Dataset Summary	285