

Durham E-Theses

Hidden in plain sight – revealing the forgotten monuments of northern England

WATSON, EMMA,ELIZABETH

How to cite:

WATSON, EMMA,ELIZABETH (2020) *Hidden in plain sight – revealing the forgotten monuments of northern England*, Durham theses, Durham University. Available at Durham E-Theses Online:
<http://etheses.dur.ac.uk/13808/>

Use policy

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a [link](#) is made to the metadata record in Durham E-Theses
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Please consult the [full Durham E-Theses policy](#) for further details.

*Hidden in plain sight – revealing the
forgotten monuments of northern England*

*How has archaeological research on the Neolithic and Early Bronze
Age monuments of northern England differed from that of other
regions within Britain and how has that affected our overall
understanding of British prehistory?*

Emma Watson

University of Durham

PhD Thesis

Abstract

The concept for this thesis came about through a growing realisation, from my BA and MA dissertations, that the Neolithic and Early Bronze Age monuments of northern England, although impressive both individually and within wider landscapes, were rarely mentioned in national syntheses. They were poorly understood, lacked research funding, were mainly undated and could consequently not add to a national understanding of these structures. But why had this occurred?

The thesis has therefore focussed on the past for explanations, the present for clarification and promising future research opportunities. An exciting case study into the Neolithic and Bronze Age monuments of East Yorkshire demonstrates the potential for future researchers.

This thesis could not have been completed without the help and support of my supervisors, Professor Chris Scarre and Dr David Petts. I am also hugely indebted to Dave Binns, Nick Boldrini and Brian Buchanan, for IT and GIS support; to Rob Young and Jennifer Watson for editing the thesis; and to John Chapman and Bisserka Gaydarska who made fragmentation come to life in Chapter 7.

I am also very thankful for the moral support I have received from Christopher and Harry Watson, Sarah Binns, Angela and Malcolm Capstick, Andrea Arrol and my colleagues in Durham County Council's Archaeology Department, without whom this PhD would never have been completed.

CONTENTS

1	Overall Thesis Introduction	20
1.1	The current situation	21
2	Antiquarians	26
2.1	Introduction	26
2.2	Methodology.....	28
2.3	John Leland	30
2.3.1	Leland's Results	31
2.3.2	Leland's Analysis	36
2.4	William Camden.....	37
2.4.1	Camden's Results.....	38
2.4.2	Camden's Analysis	44
2.5	John Aubrey	46
2.5.1	Aubrey's Results	47
2.5.2	Aubrey's Analysis.....	52
2.6	William Stukeley.....	54
2.6.1	Stukeley's Results	57
2.6.2	Stukeley's Analysis.....	62
2.7	The four antiquarians – Results and Analysis	64
2.8	Discussion.....	66
2.9	Difficulties faced by these four antiquarians.....	70
2.9.1	Travels around England	70
2.9.2	Acquaintances and Accommodation.....	73
2.9.3	Weather	75

2.9.4	Toponymy.....	76
2.9.5	Hostility	77
2.9.6	Instruments	77
2.9.7	Other factors noticed <i>en route</i>	78
2.10	Conclusion	79
3	Early Travellers.....	83
3.1	Introduction.....	83
3.2	John Speed.....	85
3.2.1	John Speed's Results	86
3.2.2	John Speed's Analysis.....	96
3.3	John Ogilby	97
3.3.1	John Ogilby's Results.....	98
3.3.2	John Ogilby's Analysis	105
3.4	Edmund Gibson	106
3.4.1	Edmund Gibson's Results.....	106
3.4.2	Edmund Gibson's Analysis	108
3.5	Foreign Travellers to England.....	108
3.6	Celia Fiennes.....	109
3.7	Ordnance Survey	111
3.7.1	Order of Ordnance Survey map dates	112
3.7.2	Ordnance Survey timeline.....	115
3.7.3	Historical timeline	121
3.7.4	Ordnance Survey Analysis.....	124
3.8	Overall Analysis	125
3.8.1	Weather	125
3.8.2	Roads and Routeways.....	127

3.8.3	Acquaintances and accommodation	133
3.8.4	Language barriers	135
3.8.5	Hostility.....	136
3.8.6	Instruments.....	137
3.9	Discussion.....	139
3.10	Conclusion.....	140
4	Early excavations	143
4.1	Introduction	143
4.2	Early county histories.....	143
4.2.1	Victoria County History.....	144
4.2.2	Victoria County History results	144
4.2.3	Other early County histories.....	145
4.2.4	Other early County histories Results	146
4.2.5	Early County Journals.....	149
4.3	Early excavations in Britain	151
4.3.1	Burl (2000) results - references to publications and excavations of Britain's Neolithic and Bronze Age stone circles	152
4.3.2	Kinnes (1992) Results – Early Neolithic non-megalithic long barrows.....	162
4.3.3	Kinnes (1979) Results – Early Neolithic round barrows and ring-ditches ...	166
4.4	Analysis and Discussion.....	168
4.5	Conclusion.....	173
5	Current Situation and Sources of Evidence.....	176
5.1	Introduction	176
5.2	Methodologies	178
5.2.1	Pastscape	178
5.2.2	REF2014	182

5.2.3	ADS	185
5.2.4	COPAC	185
5.2.5	BAR Reports	186
5.2.6	PPS.....	186
5.3	Results	187
5.3.1	PASTSCAPE	187
5.3.2	REF2014.....	202
5.3.3	ADS	206
5.3.4	COPAC	208
5.3.5	BAR	212
5.3.6	PPS.....	214
5.3.7	ANTIQUITY.....	216
5.4	Analysis of the Results.....	221
5.4.1	PASTSCAPE	221
5.4.2	REF2014.....	225
5.4.3	ADS	225
5.4.4	COPAC	226
5.4.5	BAR Reports	226
5.4.6	Proceedings of the prehistoric society.....	226
5.4.7	ANTIQUITY.....	226
5.5	Overall Discussion and Conclusion	227
6	Case Study 1: barrows of the Yorkshire Wolds in 20 th Century publications.....	231
6.1	Introduction.....	231
6.2	GEOGRAPHICAL AND CULTURAL INTRODUCTION	231
6.3	Methodology	234
6.4	Results	235

6.4.1	V. Gordon Childe (1940) Prehistoric Communities of the British Isles.....	235
6.4.2	Glyn Daniel (1950) The Prehistoric Chamber Tombs of England and Wales 238	
6.4.3	Leslie Grinsell (1953, 1975) The Ancient Burial Mounds of England	241
6.4.4	Paul Ashbee (1960) The Bronze Age Round Barrow in Britain.....	243
6.4.5	Paul Ashbee (1970, 1984, 2 nd edition) The Earthen Long Barrow in Britain	247
6.4.6	Frances Lynch (1997) Megalithic Tombs and Long Barrows in Britain.....	250
6.4.7	Ann Woodward (2000) British Barrows. A Matter of Life and Death	253
6.4.8	Total Results.....	255
6.5	Analysis of findings.....	258
6.6	Discussion.....	261
6.7	Conclusion.....	269
7	Case study 2: the burial mounds of the Yorkshire Wolds in East Yorkshire	275
7.1	ATTRITIONAL SEQUENCE	277
7.2	LEGACY DATA AND EXCAVATION TECHNIQUES.....	291
7.3	RESULTS.....	297
7.4	FRAGMENTATION AND PERSONHOOD CATEGORIES	312
7.5	Burial, Cremation, Human Body Fragmentation Analysis and Discussion.....	328
7.6	OVERALL DISCUSSION	345
7.7	CONCLUSIONS AND FURTHER RESEARCH OPPORTUNITIES	354
8	Conclusion	361
8.1	Future Research	381
9	References.....	402
9.1	Online	402
9.2	Bibliography	403

TABLE OF TABLES

Table 1 - Leland's total references per English county	34
Table 2 – Camden's total references per English county, with the later additions by Gibson	40
Table 3 – Aubrey's total references per English county	50
Table 4 – Stukeley's total references per county.....	59
Table 5 – Number of counties visited by the 4 antiquarians, within each region in England	64
Table 6 – English counties referenced by each of the 4 antiquarians	65
Table 7 – Ogilby's transverse maps of England.....	103
Table 8 – Total additions per English region, to Camden's itineraries, by Gibson	106
Table 9 – Total additional references per English county, by Edmund Gibson	107
Table 10 – The year of publication of each of the Ordnance Survey's maps for England, Scotland and Wales.....	120
Table 11 - Dates of the earliest to latest publications of the Victoria County Histories ...	145
Table 12 – Other early counties histories, their years of publication and authors	147
Table 13 – Other early county histories, colour-coded by year of publication (pink-pre-1700; green-1700-1750; orange-1750-1800; blue-1800-1850; yellow-1850+).....	149
Table 14 - Early county and local journals and their years of commencement	150
Table 15 – Dates for the number of referenced stone circles for each time period per country	152
Table 16 – British counties and the total references to stone circles per period of time (in 50-year time-slots)	154
Table 17 – Total numbers of non-megalithic long barrows per British county, from Kinnes' 1992 data	162
Table 18 – Total number of non-megalithic Early Neolithic round mounds and ring-ditches, from Kinnes' 1979 data	166
Table 19 – Data gathered from the Advanced Search of PastScape, September 2017.....	179
Table 20 – Time periods for REF2014 entries	184
Table 21 - Locations for REF2014 entries.....	184
Table 22 – ADS referencing criteria	185

Table 23 – COPAC referencing criteria	186
Table 24 – Monument totals per English region – Pastscape results	188
Table 25 -Total number of extant and lost monuments in England (Y-extant; N-lost; R-restored)	191
Table 26 – Preservation of monuments by English region.....	192
Table 27 – North-east England’s monument types and their current status.....	193
Table 28 – North-west England’s monument types and their current status.....	194
Table 29 - North central England’s monument types and their current status	195
Table 30 – South central England’s monument types and their current status	196
Table 31 – South-east England’s monument types and their current status.....	197
Table 32 – South-west England’s monument types and their current status.....	198
Table 33 – The totals of scheduled monuments per English region (S-scheduled; N-not scheduled; D-de-scheduled; ?-unknown).....	199
Table 34 – Results of the trawl through the Archaeology Data Service’s database	206
Table 35 - Agencies providing reports to ADS, with 10 or more entries.....	207
Table 36 – COPAC records	208
Table 37 – References with titles containing an English region within their titles	208
Table 38 – COPAC records and their regional discussions	209
Table 39 – COPAC records pertaining to northern England	209
Table 40 – COPAC specific regional references per British and Irish region	210
Table 41 – Locations of and types of COPAC monument data per British and Irish region	211
Table 42 – England’s British Archaeological Report locational references.....	213
Table 43 – Total BAR references per English region.....	213
Table 44 – Total number of BAR reports pertaining to each region of Britain and Ireland	214
Table 45 - Totals and percentages of PPS articles per English region	215
Table 46 – Antiquity totals and percentages per English region.....	216
Table 47 – Total Antiquity references per country.....	218
Table 48 - Comparison of the results from REF2014, ADS, COPAC and Pastscape	218
Table 49 – Neolithic monument totals for East Yorkshire.....	233
Table 50 - Results of a Pastscape Search, July 2015 (E Watson, MA Thesis, 2016)	233

Table 51 – Total number of Indexed page references per author.....	255
Table 52 - Total Indexed references per English region per author	257
Table 53 – Sum of Indexed page references and sum of total number of figures, plates and illustrations per English region.....	258
Table 54 – Total Neolithic and Bronze Age monuments for the Yorkshire Wolds and the Great Wold Valley	278
Table 55 – Chronological chart of gathered radiocarbon dates for Neolithic long and round mounds in East Yorkshire and the Great Wold Valley (Manby et al., 2003; Gibson & Bayliss, 2010)	281
Table 56 -Total lost barrows over time in the Yorkshire Wolds and Great Wold Valley ...	288
Table 57 – Current state of 1,127 barrows in the Yorkshire Wolds and Great Wold Valley	288
Table 58 – The four categories of deposition within the 490 excavated barrows	299
Table 59 – Secure contexts with both cremation and inhumation within barrows	306
Table 60 - In situ burning within Neolithic long and round barrows and Bronze Age barrows	309
Table 61 – Possible evidence of violence within the Yorkshire Wolds’ and Great Wold Valley’s barrows	317
Table 62 - Total number of bodies per barrow type.....	330
Table 63 - Neolithic monuments of the wider Shap landscape	385
Table 64 - Neolithic monument types and totals, NY Moors	390
Table 65 - Bronze Age monument types and totals, NY Moors.....	392
Table 66 - N/EBA monuments of the A1 corridor	396

Table of Figures

Figure 1 – Total references per English county by John Leland	35
Figure 2 – Radar chart of the total number of sites per English county by Leland	35
Figure 3 – Map of the locations of Leland’s site visits within England.....	36
Figure 4 -Total references per English county by both William Camden and later Edmund Gibson	41
Figure 5 – Radar chart of the total number of sites per English county by Chandler (without Gibson’s additions)	42
Figure 6 - Map of the locations of Camden’s site visits within England (without Gibson’s additions)	43
Figure 7 - Map of the locations of Camden’s site visits within England, with Gibson’s additions	43
Figure 8 – Route taken by Camden, whilst visiting sites in Northumberland	45
Figure 9 – Radar chart of the total number of sites per British county by Aubrey	49
Figure 10 – Total references per British county by John Aubrey	52
Figure 11 – Map of the locations of Aubrey’s references within Britain	52
Figure 12 - Inscription at Aldborough Cross	54
Figure 13 - Aldborough Cross, North Yorkshire	54
Figure 14 – Total references per English county by William Stukeley	60
Figure 15 – Radar chart of the total number of sites per British county by Stukeley	61
Figure 16 – Map of the locations of Stukeley’s site visits within Britain	62
Figure 17 - Saxton 1590, Image 7, of the location of Stonehenge, Wiltshire.....	84
Figure 18 - Speed 1611/2, Image 62 of Stonehenge, Wiltshire.....	87
Figure 19 - Speed 1611/2, Image 62. Beautiful illustration of Stonehenge, Wiltshire.....	87
Figure 20 - Speed 1676, Image 35 of Stonehenge, Wiltshire	87
Figure 21 - Speed 1676, Image 35 Illustration of Stonehenge, Wiltshire.....	88
Figure 22 - Speed 1676, 21-2. Representation of The Hurlers stone circle, Cornwall	88
Figure 23 - Dunmail Raise Cairn, at the Hundred boundary, to south-east of Thirlmere, shown in location to Ambleside, Great Langdale and Patterdale (Speed 1611/2, Image 19)	89
Figure 24 - Speed 1676, Image 96. Dunmail Raise Cairn, at the Hundred boundary, to south-east of Thirlmere, shown in location to Ambleside, Great Langdale and Patterdale	89

Figure 25 - Speed 1676, 87-8. Dunmail Raise Cairn, shown in location to Helvellyn	89
Figure 26 - Speed 1611/2, Image 19. Three Shire Stones, noted on top of Wrynose Pass, Cumbria	90
Figure 27 - Speed 1676, Image 96. Three Shire Stones, noted on top of Wrynose Pass, Cumbria	90
Figure 28 - Speed 1611/2, Image 28. The Shire Stones, at the junction of 3 counties, namely, Gloucestershire, Warwickshire and Oxfordshire	90
Figure 29 - Speed 1676, Image 56. The Shire Stones, at the junction of 3 counties, namely, Gloucestershire, Warwickshire and Oxfordshire	90
Figure 30 - Speed 1611/2, Image 35. The Holme standing stone.....	91
Figure 31 - Speed 1676, Image 17. The Holme standing stone	91
Figure 32 - The Holm Stone, now only referenced as a Triangulation Point, placed between 1870-1890 (https://digimap.edina.ac.uk/roam/map/historic)	91
Figure 33 -Speed 1611/2, Image 55. The three Shires stones, at Staffordshire's northern boundary, no longer visible probably due to the later quarries and coal pits at this location	91
Figure 34 - Speed 1676, Image 76. The three Shire Stones	92
Figure 35 - Speed 1676, Image 78. The three Shire Stones	92
Figure 36 - Speed 1610, Image 66. County Stone, Westmorland – same stone as in Lancashire below.....	92
Figure 37 - Speed 1676, Image 94. County Stone, Westmorland – same stone as in Lancashire below.....	92
Figure 38 - Speed 1610, Image 36. County Stone, Lancashire - same stone as in Westmorland above.....	92
Figure 39 - Speed 1676, Image 84. County Stone, Lancashire - same stone as in Westmorland above.....	92
Figure 40 - (https://digimap.edina.ac.uk/roam/map/historic/1850s). The County Stone, Westmorland and Lancashire, still extant in 1850	93
Figure 41 - (https://digimap.edina.ac.uk/roam/map/os/accessed January 2019). The County Stone, Westmorland and Lancashire. Now known as the Cross-Stone	93
Figure 42 - Speed 1611/2, Image 62. The Shyre Stones, north-west of Ditteridge	93
Figure 43 - Speed 1676, Image 35. The Shyre Stones, north-west of Ditteridge	93

Figure 44 - The Three Shire Stones, now a place name, rather than an archaeological site (https://digimap.edina.ac.uk/roam/map/os/ accessed January 2019)	94
Figure 45 - Speed 1610, Image 66. The Shire Oaks, between the West Riding, Derbyshire and Nottinghamshire.....	94
Figure 46 - Speed 1676, Image 76. The Shire Oaks, between the West Riding, Derbyshire and Nottinghamshire.....	94
Figure 47 - Speed 1676, Image 139. The Principal Roads, and their Branches leading to the Cities and chief Towns in England and Wales with their computed distances	96
Figure 48 - Ogilby 1698, Image 29. The Shire Stone, Warwickshire.....	99
Figure 49 - Ogilby 1675, Image 103. The 'blew' (blue) stone, Cornwall.....	99
Figure 50 - Ogilby 1675, Image 308. Dunmail Raise Stones, Cumberland	100
Figure 51 - Ogilby 1675, Image 151. The 4 Shire Stones, Gloucestershire.....	100
Figure 52 - Ogilby 1675, Image 185. 3 Shire Stones, Oxfordshire	100
Figure 53 - Ogilby 1675, Image 164. Robin Hood's Stone, Yorkshire	101
Figure 54 - Ogilby 1675, Image 217. Standing stones between St David's and Holywell .	101
Figure 55 - Ogilby 1675, Image 226. Merres Pill standing Stone, Devon	101
Figure 56 - Ogilby 1675, Image 226. Roundle standing stone, Devon	101
Figure 57 - Ogilby 1675, Image 242. Standing stone outside Norwich	101
Figure 58 - Ogilby 1675, Image 244. Standing stone, Suffolk.....	101
Figure 59 - Ogilby 1675, Image 253. A standing stone near Wisby, Lincolnshire	102
Figure 60 - Ogilby 1675, Image 253. A standing stone and 2 upstanding posts, Lincoln ..	102
Figure 61 - Ogilby 1675, Image 275. Standing stone, Burford.	102
Figure 62 - Ogilby 1675, Image 284. A 'blew' (blue) stone, between York and Lancaster.	102
Figure 63 - Ogilby 1675, Image 23. Location of the Rollright Stones stone circle, Oxfordshire	104
Figure 64 - Ogilby (Senex version) 1719, Image 11. Rollright Stones stone circle reference	104
Figure 65 - Ogilby 1675, Image 43. Text regarding Devil's Arrows standing stones, North Yorkshire	104
Figure 66 - Ogilby 1675, Image 42. Map of Boroughbridge area	104

Figure 67 - Ogilby (Senex version) 1719, Image 16. Senex' annotated map of Boroughbridge area.....	104
Figure 68 - Ogilby 1675, Image 115. Location of Stonehenge, Wiltshire	105
Figure 69 - Ogilby 1719, Image 41. Senex' annotated map of Stonehenge	105
Figure 70 – Historical timeline of events for the Ordnance Survey mapping project	124
Figure 71 - Ogilby 1675, Image 235. Flooding on the Leicester road	126
Figure 72 - Ogilby 1675, Image 235. Winter flooding on the Leicester road.....	126
Figure 73 - Ogilby 1675, Image 238. Soham, Cambridgeshire	131
Figure 74 - Ogilby 1675, Image 85. Dunchurch Lane, Warwickshire	131
Figure 75 - Ogilby 1675, Image 220. Ogilby's annotated map.....	132
Figure 76 – Pie chart of the percentage of first references to each of the stone circles per time period for England	155
Figure 77 - Number of first references to each of the stone circles per time period for England.....	156
Figure 78 - Burl 2000 Regional interest in stone circles over time	157
Figure 79 - Kinnes (1992) Total number of English county non-megalithic long barrows and their excavation decade	163
Figure 80 - Kinnes (1992) Regional interest in Neolithic non-megalithic long mounds over time	164
Figure 81 - Kinnes (1979) Total number of Neolithic round barrows and ring ditches and their excavation decade	167
Figure 82 - Kinnes (1979) Regional interest in non-megalithic Early Neolithic round mounds over time	168
Figure 83 – Location of each of the 3,873 Neolithic and Earlier Bronze Age Pastscape records	187
Figure 84 – Pie chart of percentages of monuments per English region – Pastscape results	188
Figure 85 – Map showing the preservation status of N/EBA monuments within England	192
Figure 86 – Annotated map of extant and lost monuments within north-east England ..	193
Figure 87 - Annotated map of extant and lost monuments within north-west England ..	194

Figure 88 - Annotated map of extant and lost monuments within north central England	195
Figure 89 - Map of extant and lost monuments within south central England	196
Figure 90 - Map of extant and lost monuments within south-east England.....	197
Figure 91 – Map of extant and lost monuments within south-west England (1)	198
Figure 92 - Map of extant and lost monuments within south-west England (2)	198
Figure 93 - Map of scheduled, not scheduled and de-scheduled monuments within north-east England.....	199
Figure 94 - Map of scheduled, not scheduled and de-scheduled monuments within north-west England.....	200
Figure 95 - Map of scheduled, not scheduled and de-scheduled monuments within north central England	200
Figure 96 - Map of scheduled, not scheduled and de-scheduled monuments within south central England	201
Figure 97 - Map of scheduled, not scheduled and de-scheduled monuments within south-eastern England	201
Figure 98 - Map of scheduled, not scheduled and de-scheduled monuments within south-western England	202
Figure 99 – REF2014 pie chart – locations of UK universities’ journal and book entries..	203
Figure 100 – Pie chart of the percentage of entries per English region.....	206
Figure 101 - Total number of PPS article references for Britain and Ireland	214
Figure 102 - Total PPS articles per region.....	215
Figure 103 - Total percentage of PPS articles per English region.....	216
Figure 104 – Overall Antiquity references per English region.....	217
Figure 105 – Doughnut of the percentages of Antiquity references per English region ..	217
Figure 106 – Pie chart of the total Antiquity references per country	218
Figure 107 – Pie chart of the percentage of Pastscape totals for northern England, as compared to the rest of England.....	219
Figure 108 - Pie chart of the percentage of REF2014 totals for northern England, as compared to the rest of England.....	219
Figure 109 – Pie chart of the percentage of ADS entries for northern England, as compared to the rest of England	219

Figure 110 - Pie chart of the percentage of COPAC entries for northern England, as compared to the rest of England	219
Figure 111 – Comparison of Pastscape monument totals versus the total references in REF2014, ADS and COPAC.....	220
Figure 112 - Total articles about sites, monuments or landscapes in northern England, as compared with the rest of England	221
Figure 113 - Recorded excavations for the period 2000-2013, for the period 1500BC-AD1086 (https://england.wordpress.com)	228
Figure 114 -The location of the Yorkshire Wolds in England.....	232
Figure 115 - All barrows, extant and lost, in East Yorkshire (and Gypsey Race Valley, North Yorkshire)	232
Figure 116 – Childe (1940) Total indexed page references per region.....	235
Figure 117 - Childe (1940) Total indexed page references per English county	236
Figure 118 – Childe (1940) Total Figures, Plates and Illustrations per county	237
Figure 119 - Childe (1940) Total Figures, Plates and Illustrations per region and country	238
Figure 120 - Daniel (1950) Total indexed page references per region	239
Figure 121 - Daniel (1950) Total indexed page references per English county	239
Figure 122 - Daniel (1950) Total Figures, Plates and Illustrations per county.....	240
Figure 123 - Daniel (1950) Total Figures, Plates, and Illustrations per region and country	241
Figure 124 - Grinsell (1953, 1975) Total indexed page references per region	241
Figure 125 - Grinsell (1953, 1975) Total indexed page references per English county	242
Figure 126 – Grinsell (1953, 1975) Total Figures, Plates and Illustrations per county	243
Figure 127 - Ashbee (1960) Total indexed page references per region	244
Figure 128 - Ashbee (1960) Total indexed page references per English county	245
Figure 129 - Ashbee (1960) Total Figures, Plates and Illustrations per county	246
Figure 130 - Ashbee (1960) Total Figures, Plates and Illustrations per region and country	246
Figure 131 - Ashbee (1984) Total indexed page references per region	247
Figure 132 - Ashbee (1984) Total indexed page references per English county	248
Figure 133 - Ashbee (1984) Total Figures, Plates and Illustrations per county	249

Figure 134 - Ashbee (1984) Total Figures, Plates and Illustrations per region and country	249
Figure 135 - Lynch (1997) Total indexed page references per region.....	250
Figure 136 - Lynch (1997) Total indexed page references per English county.....	251
Figure 137 - Lynch (1997) Total Figures, Plates and Illustrations per county	252
Figure 138 - Lynch (1997) Total Figures, Plates and Illustrations per region and country	252
Figure 139 - Woodward (2000) Total indexed page references per English county.....	253
Figure 140 - Woodward (2000) Total Figures, Plates and Illustrations per county.....	253
Figure 141 - Woodward (2000) Total Figures, Plates and Illustrations per region and country	254
Figure 142 – Bar chart of total number of Indexed page references per author.....	255
Figure 143 – Chart showing peaks of interest in some English regions over others, per author	256
Figure 144 - Chart showing all indexed references per author for northern England's counties.....	257
Figure 145 - Geographic distribution of samples used for the Beaker phenomenon study (Olade et al. 2018, 191). Extra annotation by E Watson.	269
Figure 146 -The Road Across the Wolds, David Hockney (https://saltmillshop.co.uk/products)	276
Figure 147 - English Heritage's National Mapping Programme to 30 September 2000. Each square represents 25 square kilometres. Bewley (2001, 77, Figure 2).....	287
Figure 148 – Changing barrow heights over time in the Yorkshire Wolds and Great Wold Valley	289
Figure 149 – Locations of Greenwell & Mortimer's barrow excavations.....	292
Figure 150 - Greenwell's excavation order (1877)	294
Figure 151 - Mortimer's map of the excavated barrows and their numbers within his 'Aldro Group'	296
Figure 152 - Barrows with evidence of taphonomic loss	298
Figure 153 - Hill shading and Contours, showing the locations of barrows with evidence of taphonomic loss.....	298
Figure 154 – Doughnut of the total numbers of barrows per deposition type.....	300

Figure 155 – Pie chart of the percentages of the total numbers of adult burials per barrow	301
Figure 156 - Pie chart of the percentages of the total numbers of young person burials per barrow	302
<i>Figure 157 - Pie chart of the percentages of the total numbers of child or infant burials per barrow</i>	<i>302</i>
Figure 158 - Pie chart of the percentages of the total numbers of adult cremations per barrow	303
Figure 159 - Pie chart of the percentages of the total numbers of young person cremations per barrow.....	303
Figure 160 - Pie chart of the percentages of the total numbers of child or infant cremations per barrow.....	304
Figure 161 - Barrows with a single burial or cremation.....	305
Figure 162 - Petersen (1972, 38) - Map showing barrows with cremation/inhumation associations	307
Figure 163 - Number of holes or graves within each barrow, versus total number of empty holes/graves.....	313
Figure 164 – Too few cremated bones within barrows	314
Figure 165 – Additional or replacement human body parts within barrows	315
Figure 166 – Pie chart of animal bones deliberately placed with human burials and/or cremations	318
Figure 167 – Unworked animal bones, directly associated with human bones.....	319
Figure 168 - Unworked animal teeth, directly associated with human bones.....	320
Figure 169 - Unworked animal antlers or tusks, directly associated with human bones..	321
Figure 170 - Map from page 543, Ritual in EBA grave goods, by Woodward & Hunter (2015, Figure 12.2)	323
Figure 171 - Map of chosen locations from page 27, The Beaker People 2019 book	324
Figure 172 - Worked bone implements, directly associated with human bones.....	325
Figure 173 – Other worked implements, directly associated with human bones.....	326
Figure 174 – Pie chart showing the types of jet items found in these barrows, and their percentages.....	327

Figure 175 – Location of Barrow 276 (orange diamond) with 3 missing skulls and Barrow 72 (orange triangle) with 3 extra skulls	336
Figure 176 - Location of Barrow 276 (orange diamond) with 3 missing skulls and Barrows 72 and XLVII (orange triangles) with 3 extra skulls each	337
Figure 177 – Barrow locations with additional or replacement human body parts	338
Figure 178 – Small food vase used to replace missing lower human jaw in Mortimer’s Barrow 40 (1905, 229)	338
Figure 179 - Definite (*yellow star) and possible (◊orange diamond) fragmentation within the Yorkshire Wolds’ barrows	343
Figure 180 - Definite (*yellow star) and possible (◊orange diamond) fragmentation cluster, west of Driffield, East Yorkshire	343
Figure 181 - A further cluster of definite (*yellow star) and possible (◊orange diamond) fragmentation examples, in barrows along the later Roman road, past the villages of Acklam and Kirby Underdale, East Yorkshire	344
Figure 182 - A third cluster of definite (*yellow star) and possible (◊orange diamond) fragmentation in barrows, to the south and west of Rudston monolith, once again roughly following the later Roman road.....	344
Figure 183 - Another cluster of barrows with examples of definite (*yellow star) and possible (◊orange diamond) bodily fragmentation at Sherburn and Ganton Wold	345
Figure 184 - All extant and lost Neolithic and Early Bronze Age monuments in northern England	375
Figure 185 - Location of monuments within wider Shap landscape	385
Figure 186 - Key monuments within the Shap landscape. Extant (blue) and lost (yellow)	385
Figure 187 - The remaining stones of the Shap avenue	386
Figure 188 - The remaining stones of the Shap avenue (orange diamonds), with all springs in the locality (blue circles)	386
Figure 189 - Spring at conjunction of Force Beck and stone avenue (close to A6, south of Shap)	387
Figure 190 - Gamelands stone circle, view to the north, from west to east (Watson 2014)	388

Figure 191 - Gamelands stone circle, view to the south, from east to west (Watson 2014)	388
Figure 192 - Pie chart of the Neolithic monument types and percentages on the NY Moors	391
Figure 193 - Pie chart of the Bronze Age monument types and percentages on the NY Moors	393
Figure 194 - Lilla Howe Bronze Age round barrow, Grosmont, North York Moors. Photograph – Emma Watson	393
Figure 195 - Bronze Age barrows on the NY Moors and their locations (from Spratt 1989, 33)	394
Figure 196 - Concentrations of rock art and other monuments on Barningham Moor	395
Figure 197 - Barningham rock art panel 100 (England's Rock Art no: 903; Durham County Council HER no: H1011)	395
Figure 198 - Barningham rock art panel 57 (England's Rock Art no: 856; Durham County Council HER no: H1003)	395
Figure 199 - Barningham rock art panel 52 (England's Rock Art no: 851; Durham County Council HER no: H1007)	395
Figure 200 - Map of the monuments on the A1 corridor	397
Figure 201 - Devil's Arrows stone row, Boroughbridge	398
Figure 202 - Alignment of Thornborough henges, Devil's Arrows and other henges (circles), as well as location of mires and springs (black square) within the A1 corridor landscape (from Harding 2013, 207, Fig 6.6)	399
Figure 203 - Alignment of henge monuments and Devil's Arrows stone row, A1 corridor, North Yorkshire (from Harding 2013, 201, Fig 6.2)	400

1 OVERALL THESIS INTRODUCTION

The aims of this thesis are to understand how and why the Neolithic and Early Bronze Age monuments of northern England have been marginalised in recent national discussions, through the consideration of the period 1500 to 1900; to further reveal the total numbers and importance of the Neolithic and Early Bronze Age monuments of northern England; and to evaluate current research and publications from a national perspective. From this, it will be possible to identify landscapes of interest within this region which merit further research and to demonstrate how a study of a landscape in northern England can yield ground-breaking results.

The interest in completing this thesis derived from my previous BA and MA dissertations. During my BA studies, certain regions appeared to be privileged above others in the amount of archaeological attention they received. I was looking particularly at the Neolithic and Early Bronze Age sites of northern England. From extensive reading on the subject, even on books about the prehistory of England or Britain, it was evident that there was little national focus on the monuments of northern England. Was this perhaps due to a disparity in monument numbers throughout Britain? Or were some areas receiving more coverage than others for different reasons?

I therefore undertook a study of and visited all Neolithic and Early Bronze Age circular ceremonial monuments in northern England, to ascertain the total numbers, varieties and the condition of 157 earthen, stone and timber structures within the counties of Northumberland, Durham, Cleveland, North Yorkshire and Cumbria. My MA then evaluated the extent to which northern England's N/EBA sites have been marginalised within 14 syntheses of the prehistory of Britain over a 70-year period, from 1930 to 2013. Northern England's sites, monuments and landscapes were only referenced in 9% of these books and frequently with generalised rather than specific name and site details, despite discovering that northern England has at least 30% of the known extant and lost monuments in England. During my research, I visited many fascinating and worthy sites of interest in northern England. It is such an archaeologically-rich region that the Neolithic and Early Bronze Age monumentscapes deserve a much deeper consideration and one which I felt I could embrace during this PhD.

This thesis plans to look at the past, present and future of the Neolithic and Early Bronze Age landscapes of northern England. If one starts from the perspective of the present day, one can then consider what was achieved in the past and look towards what is needed for students and academics to undertake future research, to make the northern story as valuable as that of other regions.

1.1 THE CURRENT SITUATION

With thousands of Neolithic and Bronze Age structures in northern England, the region is critically important and informative from an archaeological perspective. In the west, the Cumbrian mountains, valleys and lowlands offer stone and timber circles, henges, interrupted ditched enclosures, long and round cairns, standing stones, stone avenues and rock art. Further east, in Northumberland, Durham and Yorkshire, there are vast numbers of rock art sites, long and round barrows, with henges, avenues, cursuses, standing stones and stone circles. The region has some of the greatest Neolithic and Bronze Age landscapes and the most unique monuments in Britain, such as the Rudston monolith, associated cursuses and barrows; the rock art and four-poster stone circles of Northumberland; the Boroughbridge stone row and nearby, huge henges and cursuses; the former Shap stone avenue and stone circles; and the stone circles of Castlerigg and Long Meg and her Daughters, close to Mayburgh henge and King Arthur's Round Table, all in Cumbria. Many of its beautiful landscapes are sparsely populated in the modern era, masking their prehistoric secrets beneath wild or manicured hills and valleys. Northern England's monuments are inspiring, beautiful and resonant; their locations are often rugged; their purposes largely unknown. Thanks to these rural locations, many of the upland areas of northern England have high monument survival rates. Examples include the rock art, cairns and enclosures of Barningham Moor, County Durham; the vast numbers of Bronze Age barrows and associated landscapes of the North York Moors; and the stone circles, stone avenue, long cairn, Type I and Type II henges of the Lake District. Other riverine and lowland areas have equally high monument numbers although, in many cases, the majority of these have been lost through commercial development and quarrying. However, aerial photography and excavation have been used to bring these landscapes to life too, such as the Neolithic and Bronze Age structures of the A1 corridor in North Yorkshire, the Milfield Basin in Northumberland and the Wolds in East Yorkshire.

Despite this abundance of Neolithic and Bronze Age monuments, as demonstrated from my previous research (Watson 2016), there has been less overall interest in the prehistory of northern England in recent times, as compared with work done elsewhere. For the most part, mapping projects, sometimes of specific monument types, have been completed but have not led to wide-scale excavations or research foci, despite many excellent university archaeology departments in northern England. Given the clear disparity in the level and intensity of archaeological research on the Neolithic and Early Bronze Age, within and between different regions of Britain, this research project will investigate the imbalance between research on the monuments of northern England and that of other regions within Britain. The thesis will take into consideration the differing histories of research and whether these have shaped the current situation. It will identify the current situation regarding extant and lost monuments, current levels of research and will explore the distinctiveness of the extant N/EBA monuments of this region. It will then consider, through a focussed case study, how further attention to these monuments might rebalance our overall understanding of British prehistory. My previous MA had covered national syntheses from 1930 to 2013, which all demonstrated a similar lack of interest in the Neolithic and Early Bronze Age monuments despite the research potential of northern England, but it was clear that a study was needed to look earlier in time. The first antiquarians to properly document an interest in the England's prehistoric monuments were John Leland, William Camden, John Aubrey and William Stukeley. These men straddled an era of enlightenment, where the past was recognised as both important to understand but also key to the nation's concept of its own right to rule, its power and its long-standing history, which needed to be strong enough to fight the incoming threats from leaders throughout Europe at that time.

The first part of this study seeks to identify when England's Neolithic and Early Bronze Age (N/EBA) monuments first began to be noticed archaeologically by antiquarians, other early travellers and excavators; to look at what forms this interest might have taken; and the barriers they encountered in the creation of a fully documented collection of monuments in the past. The sixteenth and seventeenth centuries were an age centred on hope, for the improvement of knowledge and the condition of human life (Hunter 1975, 17). By the 18th century, the presence of important Neolithic and Bronze Age monuments was widely

recognised. For the period 1500 to 1900, therefore, this analysis will look at where and how the monuments were documented, and if there were notable reasons why some regions were favoured over others. The study covers England, and where possible, will provide data on Scotland and Wales, looking firstly at antiquarians and their itineraries (Chapter 2); followed by other early travellers in Britain (Chapter 3); and will conclude with an analysis of subsequent regional research, mainly of England, by analysing the geographical focus of early excavations of N/EBA monuments, to further elucidate this issue (Chapter 4).

Chapter 2 will feature four prominent early antiquarians and their visits around England. Leland, Camden, Aubrey and Stukeley will be considered as examples of antiquarians, who were the first chorographers to formally visit both historic and prehistoric archaeological sites within England. John Leland was commissioned by King Henry VIII to look for and catalogue England's antiquities and to find information on secular and religious learning and books at all the major English libraries, completing his 'New Years Gift' for King Henry VIII, for the New Year of 1546. William Camden was driven to explore Britain, by an insatiable curiosity in the past. Over 30 successive summers, he completed the first ever complete chorographical visit around Britain to restore its antiquity and produced, among other works, *Britannia*, published in Latin in 1586. John Aubrey had been fascinated by antiquities since his visit to Stonehenge at the age of 8 and spent most of his life working on his *Monumenta Britannia*, which sadly was never published in full within his lifetime. William Stukeley was determined to demonstrate that a Grand Tour need not leave Britain, that there were great numbers of monuments worth seeing at home. *Itinerarium Curiosum* was completed in two publications, in 1724 and 1776, from nine journeys around Britain's antiquities.

By looking at the routes taken by the antiquarians, the regions they concentrated on will be demonstrated and how much they focussed on northern England. The chapter and subsequent discussion will show what was published by these antiquarians. The descriptions of the prehistoric monuments they explored would have been key to encourage later travellers to investigate the sites for themselves. This will give us an idea of whether some of these prehistoric monuments were shown to be significant within their researches at that time and if these places have the same importance today. These antiquarians were constrained in their abilities to visit all the sites and regions in which they

were interested. Other early travellers will therefore be included in Chapter 3. The mapmakers, Saxton, Speed, Ogilby and the Ordnance Surveyors were studied, due to the large distances and constancy of their travels for work. They provided extra and useful insights into the sorts of constraints that all travellers must have faced at that time: the modes of travel, the weather, the quality of the routes and the difficulties encountered. Early tourists were also studied. Celia Fiennes, Thomas Platter and the Duke of Wirtemberg's accounts of their travels to England, provided in the form of diaries, were very personal, pertaining to everyday issues, such as where to sleep, with whom to travel and the daily journeys undertaken.

Chapter 4 will widen the discussion into early interest in Neolithic and Bronze Age monuments in Britain. The dates of Victoria County Histories and other early county publications and journals will show the variation in levels of interest of antiquarians and historians throughout Britain. Early excavations on Neolithic long and round mounds and stone circles will provide information on the first regional interest in prehistoric structures throughout Britain. It will demonstrate excavation totals for each region, plus the levels of survival and loss of these structures, over the period 1600 to 1900. The discussions at the ends of Chapters 2, 3 and 4, will consider whether the differing histories of interest and research have shaped the current situation, through a legacy of the antiquarian travels, as reflected in the current imbalance of subsequent research. They will also consider the different barriers to these first tours around England (and Britain).

In Chapter 5, the study will move to the present day, to show the imbalance in research within and between different regions of Britain. It will consider current-day funding, with an analytical quantification of interest in these Neolithic and Early Bronze Age monuments, through an assessment of recent developer-funded and research-based archaeological work. A quantitative analysis will also be completed on the current state of these monuments throughout England. This will include a comparison between the current state of preservation of northern England's extant megalithic and non-megalithic monuments and those within other regions of Britain. It will explore the distinctiveness and individual importance of these Neolithic and Bronze Age monuments and the associated wider landscapes of this region.

Chapter 6 will provide a short literature review. This will focus on general introductory accounts of Neolithic and Bronze Age barrows in England or Britain, to assess levels of interest over the last 60 years, from an Index assessment of the syntheses by Childe, Daniel, Grinsell, Ashbee, Lynch and Woodward. A close and critical assessment, in the form of a case study, of the Neolithic and Bronze Age structures of East Yorkshire will then be made in Chapter 7, to ascertain their unique qualities and value within a global perspective. The discussion will consider how further attention to these monuments might rebalance our overall understanding of British prehistory. The final chapter (8) will review the principal conclusions from this study and will offer future research opportunities, to further widen our knowledge of this region.

This study of the past, present and future of the Neolithic and Bronze Age monuments of northern England will demonstrate both the limitations and potential of the region. It will explain the issues faced in the past by researchers and will highlight the opportunities available for the future. In an era of uncertainty, with the threats of Brexit, the coronavirus pandemic and climate change, this thesis offers the chance 'to restore Britain to Antiquity, and Antiquity to Britain' (Camden 1722, Part 5). Local and national tourism will benefit Britain during these times of uncertainty and hopefully, this work can be used as an example of what can be achieved through a dedicated focus on an archaeologically neglected region.

2 ANTIQUARIANS

This chapter will address the broader research question of northern England's past, through a consideration of the interest of antiquarians in Neolithic and Early Bronze Age monuments within England during the period 1500 to 1800. Leland, Camden, Aubrey and Stukeley completed chorographical visits around England, visiting both prehistoric and historic sites, monuments and landscapes. They logged their findings in their journals, which were later published. These give us a fascinating insight into their interest and focus; what they saw and missed en route; and how they interpreted what they saw, without any formal understanding of what they were seeing. This research helps to identify which regions were visited and missed, any areas of particular focus for each antiquarian and begins to provide reasons why some areas were concentrated on over others.

2.1 INTRODUCTION

It seemed appropriate to begin this research by looking at the early antiquarians, to see which prehistoric structures they visited, why they were considered important, as well as to get a picture of the locations of these monuments around Britain. Were these structures chosen because they were well known at the time or because they were within reasonable distance from the home or workplace of the antiquarians? Perhaps they were simply passed *en route*? Which factors determined the routes they chose? Did their means of travel, the weather, the ground conditions or their potential accommodation opportunities sway their judgements? Did they visit widely around Britain or were they constrained by time or money, only able to visit structures within their local area?

For the purpose of the wider thesis, it will be interesting to establish if the monuments they visited are still extant today and what state they are now in. Have they subsequently been destroyed by farmers and developers for their building materials or for the land itself? For this chapter, however, the following questions will be addressed. How did the antiquarians record prehistoric structures? Did they simply write or sketch what they saw, or did they note the wider position and magnificence of the monuments within the landscape? Were instruments used to improve accuracy or was the monument studied only by eye?

These early travellers had status and influence within their spheres. They frequented coffee houses and were members of learned societies, such as the Royal Academy. They worked for kings and others with huge influence. They had the opportunity to protect the monuments they saw, to preserve them for future generations.

For this study, I have selected four antiquarians, whose travels span the earlier sixteenth to the later eighteenth centuries. These antiquaries aimed to provide details about Britain's past. They combined their travels with information on artefactual finds, ancient sites and monuments, the topography of the land and information on local gentry within each region. The four antiquarians chosen are John Leland, William Camden, John Aubrey and William Stukeley. Each set out with the intention to visit Britain's monuments. However, as will be shown below, some managed this task more completely than others.

There has been much written about the lives of the early antiquarians. This chapter therefore intends to focus on their travels. It is appealing to consider their underlying personal interests; contacts throughout the countryside, or lack thereof; how they travelled, and with whom; and the fundamental basis for their reasoning and motivations. I will look at both their travels and the decisions made *en route*, that is, their choice to record, in written and/or sketched form (or not), references for each location or site they saw. Given time constraints, only four antiquarians were chosen for this study although, as discussed below, others also had notable itineraries.

Other travellers and antiquarians were not chosen for this chapter, for a variety of reasons. Daniel Defoe, for example, published a *Tour through the Whole Island of Great Britain* but deliberately avoided antiquities (Haycock 2002, 110), so he was not included. Robert Plot (1640-1696) focussed mainly on historical sources, 'inscriptions, ancient texts' but only published antiquarian texts on Oxfordshire and Staffordshire (Hunter 1975, 199). Edward Lhwyd (1660-1709) had published *Archaeologia Britannica* in 1707, covering the topics of botany, palaeontology, megaliths and dialects (ibid.). Yet, John Aubrey was chosen over Plot and Lhwyd, due to his remarkable and pioneering efforts, with which Piggott concurred (1985, 152). Francis Grose had gained experience of travel in England through a military role. He compiled a book of phrases in local, regional dialects in England, called *Antiquities of England and Wales*, between 1773 and 1789. Nevertheless, the more famous

antiquarian, William Stukeley, was chosen over Grose, as Stukeley's interest was in prehistory, whereas Grose had a passion for medieval remains.

Leland, Camden, Aubrey and Stukeley also all exuded huge energy and interest in the places they visited. They embarked on these journeys, to uncover what England or Britain had to offer, in terms of its ancient structures and evidence of its former inhabitants. As Edmund Gibson, translator of Camden's *Britannica*, from Latin, stated, 'no Diversion can be more innocent or laudable, than the History and Antiquities of our Native Country' (1722, I, Preface). John Leland and William Camden 'are together recognized as the fathers of British antiquarianism' (Haycock 2002, 5). However, Aubrey's *Monumenta Britannica* was the first English book that can be called 'archaeological' in the modern sense (Hunter 1975, 13, 159). With Stukeley, these four antiquarians are considered early chorographers, through their observations and remarks on both the natural and artificial (Haycock 2002, 110). They were active observers, trying to piece together the vast array of structures they saw, into a more comprehensive, time-ordered set of events. They drew on historical literature for these reflections, whether Classical, Early English or British. They noted artefacts and their ages, as well as structural details, to try to make sense of this vast wealth of information.

This chapter will provide the methodology undertaken for this study, followed by a section on each of the four antiquarians. This will include an overview of their lives and known work, hobbies and interests; the known time taken for their travels; and the results and analysis of these travels. All four antiquarians will then be compared and contrasted with each other and the chapter's discussion and conclusion will assess the uncovered data.

2.2 METHODOLOGY

With regards to the journeys of the antiquarians, the plan was to read their journal entries or books of their travels, noting all places mentioned, within each book. This was intended to provide evidence of their travels, the places they favoured, the routes they took and the monuments they considered important enough to log within their notes. Only sites in Britain (England, Scotland and Wales) were referenced within the spreadsheet. The resulting data was then converted to a GIS format, for mapping. Occasionally, sites could not be located within the time available.

This study, although seemingly straightforward and simple, proved vastly more difficult than could have been anticipated. Each antiquarian set about on their travels and noted their finds differently. Yet, this needed to be incorporated into an overall, uniform system within Excel. Therefore, to make compilation easier, all towns, villages, hamlets or cities are listed as towns, as otherwise, Birmingham would have been listed as a hamlet at that time and Newark as a very large town. Finding the exact location of towns, houses and 'camps', named by the four antiquarians, was extremely challenging. Often, the only useful resources were Google or Wikipedia, and their related pages (see Online References). Any omissions or mistakes are entirely mine, and for which I take full responsibility.

I completed Aubrey's references first, and to some extent, learnt from his entries. I then completed Leland, Stukeley and finally Camden. Whilst reading, I noted all towns, houses and monuments mentioned by the antiquarians, which was a feat in itself. Some places were poorly spelt, for example, Camden spelt Molesey in Surrey as Moseley (which made it surprisingly difficult to find); whereas other places have just changed their spelling over the last few hundred years, such as Yarum to Yarm, in North Yorkshire, or Paynswick to Painswick, in Gloucestershire. If a place could not be identified with an Ordnance Survey co-ordinate, it was not referenced within this study. However, a site was mentioned if a probable OS co-ordinate was provided. If three locations were provided for one monument, for example, a ditch, within one reference, only the first reference was logged. However, if separate references were provided for each county, such as Hadrian's Wall's western and eastern terminals in Cumbria and Northumberland, respectively, these were both logged as entries into Excel.

On numerous occasions, I had to omit references to fields, ditches, wells, springs, quarries, pools, waterfalls or caverns, as well as random groups of barrows, if I could not find a clear reference to them on maps or on the internet. It was difficult to pinpoint a location for some referenced Roman roads, dykes and ridges. Smaller landmarks could be referenced but I needed to omit references to cliffs, such as the Cleveland cliffs; woods or forests, such as Windsor Forest; heaths, such as Hampstead Heath; or hills, such as the Cotswolds; also, if they were too broad or large, or the reference too vague to locate the exact location visited. Sometimes, it is clear from their route and their references to these larger landmarks that they were seen *en passant* and not necessarily visited. When Camden was

in Lancashire, for example, he referenced mountains seen *en route*, such as Pen-y-Ghent. There is no information, however, to say that he actually climbed it, or deliberately left the beaten track to see it up close.

There are several towns along the east coast of England, which have been lost to the sea since the travellers' visits. I did not include the 'lost' towns in this study, as they now cannot be precisely located. Gibson annotated Camden's work and quoted that certain towns had been lost between Camden's time and his, 'In these parts of Holderness, there have been several towns swallow'd up by the *Humber* and the Sea...In the 16th of Edward the third, among other Towns in *Holderness* bordering on the Sea and Humber, mention is made of *Tharlthorp*, *Redmayr*, and *Penysthorp*; but now not one of them is to be heard of...about the 30th of Edward the third, the tides...flow'd higher by four foot than isial; it is likely, therefore, that they might then be overflow'd...The Inhabitants hereabouts talk of two other towns, *Upsall* and *Potterfleet*, which are quite destroy'd' (1722, I, East Riding).

As will be seen, the travels of each antiquarian provide a huge amount of fascinating data, to be used as a basis for this thesis.

2.3 JOHN LELAND

John Leland was born around 1503 and died in 1552. He is known as 'the father of English topography'; 'he travelled to and fro over England and Wales for six years' (Smith 1907, xiii). He was a 'medieval but methodical Tudor' (Ashbee 1960, 17). He used his 'famous notes of travel' to create a written itinerary of his journeys (Smith 1907, v), although it was originally prepared as a 'New Years Gift' for King Henry VIII in 1546.

Within this New Year's Gift, edited by John Bale, Leland explained his motivation,

'In fo muchhe that all my other occupacyons intermytted, I haue fo traueled in your domynions both by the lee coaftes and the myddle partes, fparynge neyther labour nor coftes by the fpace of thefe vi yeares pafte...I haue leane them, and noted in fo doynge a whole worlde of thynges verye memorable...euery waye, both by lee, and by lande, by the fpace of vi. yeares that he might knowe the coftes thereof, as wele by practyfe as by fpeculacyon' (Bale in Chandler 1993, 9-10).

Bale added, 'he toke vpon hym a verye laboryoufe iourney, ouer all the realme...Though the ftody and labour were Leylandes, in collectynge thefe noble Antiquitees, yet was the firft prouocacyon thereunto Kynge Henryes, wyth the payment of all hys charges.' (Ibid., 9, 15).

John Leland was an orphan, educated at St. Paul's humanist school, London, thanks to his patron, Thomas Myles, who raised him after the death of his parents. Leland went on to Christ's College, Cambridge and afterwards, he travelled abroad and worked in south-east England, mainly as a tutor, scholar and librarian. He was then commissioned by King Henry VIII to look for England's antiquities and peruse all major English libraries, both secular and religious, for information. Leland concentrated on confiscated works from monastic libraries first and then from 1538/9 to 1545, during the spring and summer of each year, he focussed on his itineraries around England and Wales, making notes on each county, which he compiled into the five main itineraries (Chandler 1993, xi-xviii). According to Chandler, Leland had an 'interest in travel for travel's sake' (Ibid., xiv).

Gibson said of Leland's work, 'To describe the course of a River, and the distance of one Town from another; or to tell whether a Bridge was of wood or of stone, or how many arches it had; was reckoned an useful instruction at that time when travelling was little in fashion...They would not be at the pains to View, and they had no Maps to let them see at a distance; so, everything that inform'd, was kindly receiv'd, and a Work look'd upon as a mighty Performance...' (1722, Preface).

2.3.1 LELAND'S RESULTS

For the discussion on Leland, I used both Lucy Toulmin Smith's itinerary manuscript, published between 1906 and 1910 and John Chandler's 1993 version, who had used Smith's volumes to divide Leland's journeys into counties, rather than Smith's five itineraries. After a career of editing and translating many documents, she completed Leland's Itinerary of England towards the end of her long life. Smith's compilation was constructed from Leland's notes which he took between 1535 and 1543. I chose not to study Thomas Hearne's 'exact copy of the manuscript, published in nine volumes at Oxford and Eton, 1710-1712 (in an edition of 120 copies)', due to the rarity of those originals. John Stow, a London antiquary, was hugely praised by Smith. In 1576, he had preserved all surviving

work by Leland. Many of Leland's written folios had been badly stored and were water-damaged and mouldy. Smith wrote that Leland's itinerary 'was a thing of magnitude demanding learning, months of laborious travel, and much expense; it was a mark of the increasing desire for information and of the growing pride of Englishmen in their country' (Ibid., xiv). Yet as she also added, there was 'difficulty and uncertainty' in truly tracing the exact routes of these antiquarians and can only ever, therefore, serve as a 'tentative sketch'. 'Full coherence is wanting' and the 'possible lines of travel' can only be 'pieced together' (Ibid., vi, ix). Some of the counties Leland visited and logged have little or no surviving itinerary information, perhaps through lost documents (such as, for East Anglia) or because Leland did not direct his itineraries through the county (such as, the majority of Derbyshire). This led to a partial dataset. In other cases, despite a lack of journeying data, there were many interesting notes written about a county, such as Kent (Chandler 1993, 245).

My results demonstrate that Leland made the most references to sites in Cornwall (Figure 2), followed by North Yorkshire and Somerset (Table 1). Devon, Leicestershire, Northamptonshire and Oxfordshire were all well-documented, followed by a good level of interest in Cumbria, Dorset, East Yorkshire, Gloucestershire and Wiltshire (Figure 1). Yet, from Chandler's perspective, the clearest written record was Leland's itinerary through Gloucestershire (1993, 165). The map of Leland's sites demonstrates the linear progression he made around the northern and western counties of England, where he appears to have remained on the main route, rarely deviating from it to visit monuments or locations (Figure 3).

Leland had an 'eagerness to omit nothing that might be useful to his purposes' (Smith 1907, Introduction). My results demonstrate that Leland noticed the condition of old and new buildings (Ibid., 53, 58); land use, including agriculture, arable and enclosed land, meadows, woodland and parks (Ibid., 3, 168, 302); towns, villages and hamlets, especially their prosperity or lack of it (Ibid., 30-1, 74); bridges and stream/river courses (Ibid., 42); and road routes. I noted that Leland provided an excellent account of the agricultural terrain over which he travelled, referring to woods (for fuel supply) and land usage (Chandler 1993, 88). He noted travel conditions on certain roads at particular times of year (Smith, Volume II, 57) and was particularly impressed by grand houses, and their owners or former owners.

He had the opportunity to stay at many of them and wrote freely about their architecture and the designs of their parks and gardens. Leland rarely mentioned ordinary houses, apart from those in Chester-le-Street (Chandler 1993, 152), or the majority of other structures, unless the owner was of importance to him, such as Leland's comment about a vicar, 'living in Sturminster with an annual revenue amounting to £80' (Ibid., 141).

Leland County References	Total References per County
Bedfordshire	5
Berkshire	7
Buckinghamshire	6
Cambridgeshire	3
Cheshire	8
Cornwall	54
Cumbria	22
Devon	30
Dorset	21
Durham	12
East Yorkshire	25
Gloucestershire	28
Greater London	12
Greater Manchester	2
Hampshire	15
Herefordshire	4
Hertfordshire	2
Lancashire	9
Leicestershire	17
Lincolnshire	30
North Yorkshire	52
Northamptonshire	30
Northumberland	12
Nottinghamshire	19
Oxfordshire	30
Rutland	1
Shropshire	13
Somerset	44
South Yorkshire	15
Staffordshire	2
Surrey	1
Tyne and Wear	5
Warwickshire	10
West Midlands	3
West Yorkshire	14
Wiltshire	22
Worcestershire	13
Grand Total	598

Table 1 - Leland's total references per English county

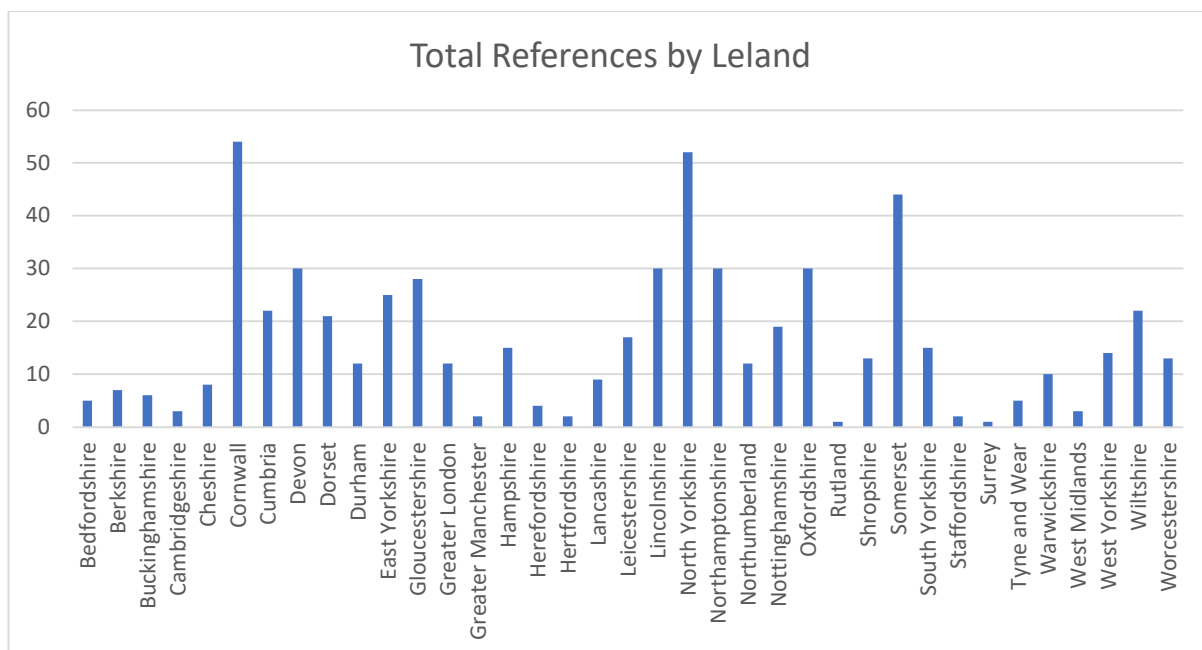


Figure 1 – Total references per English county by John Leland

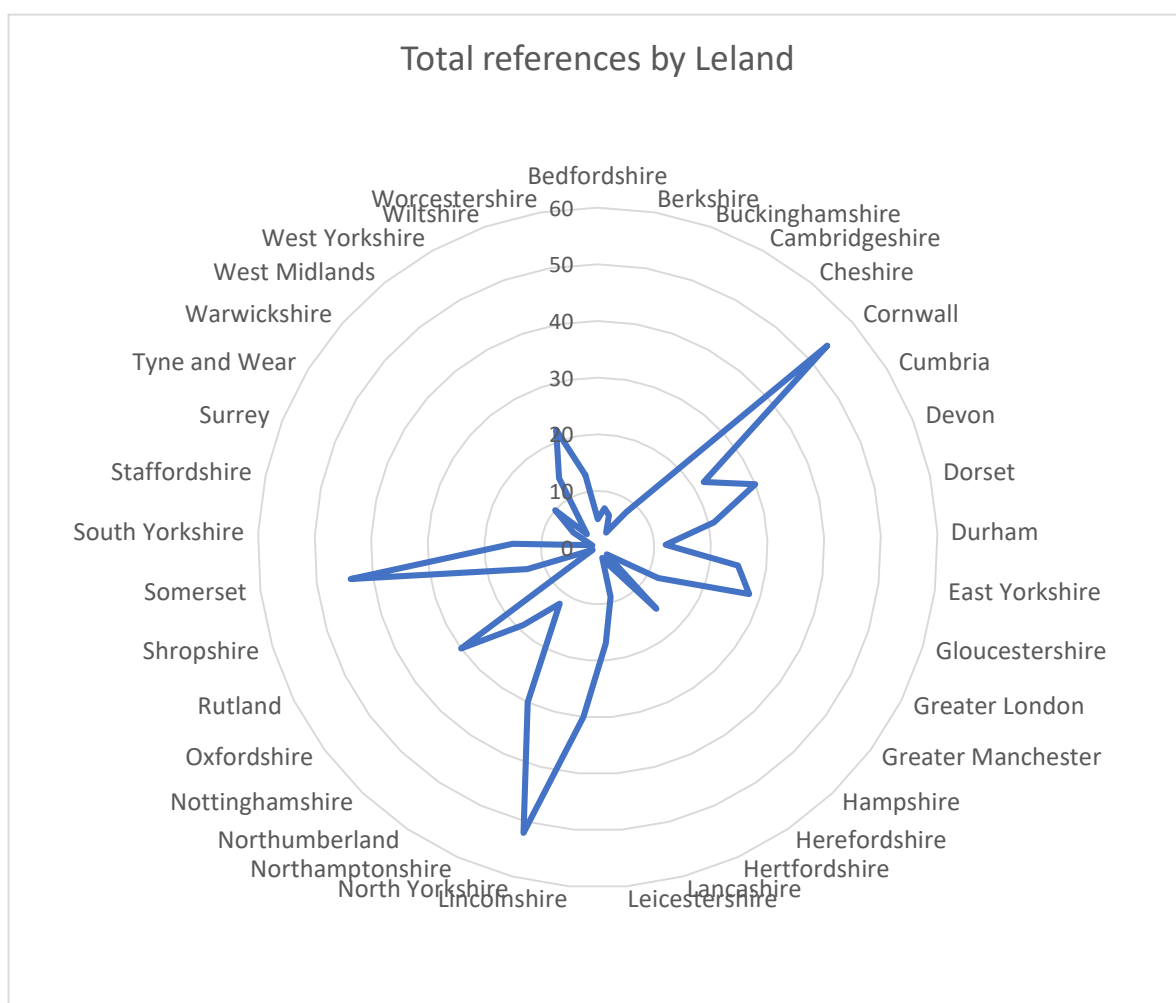


Figure 2 – Radar chart of the total number of sites per English county by Leland

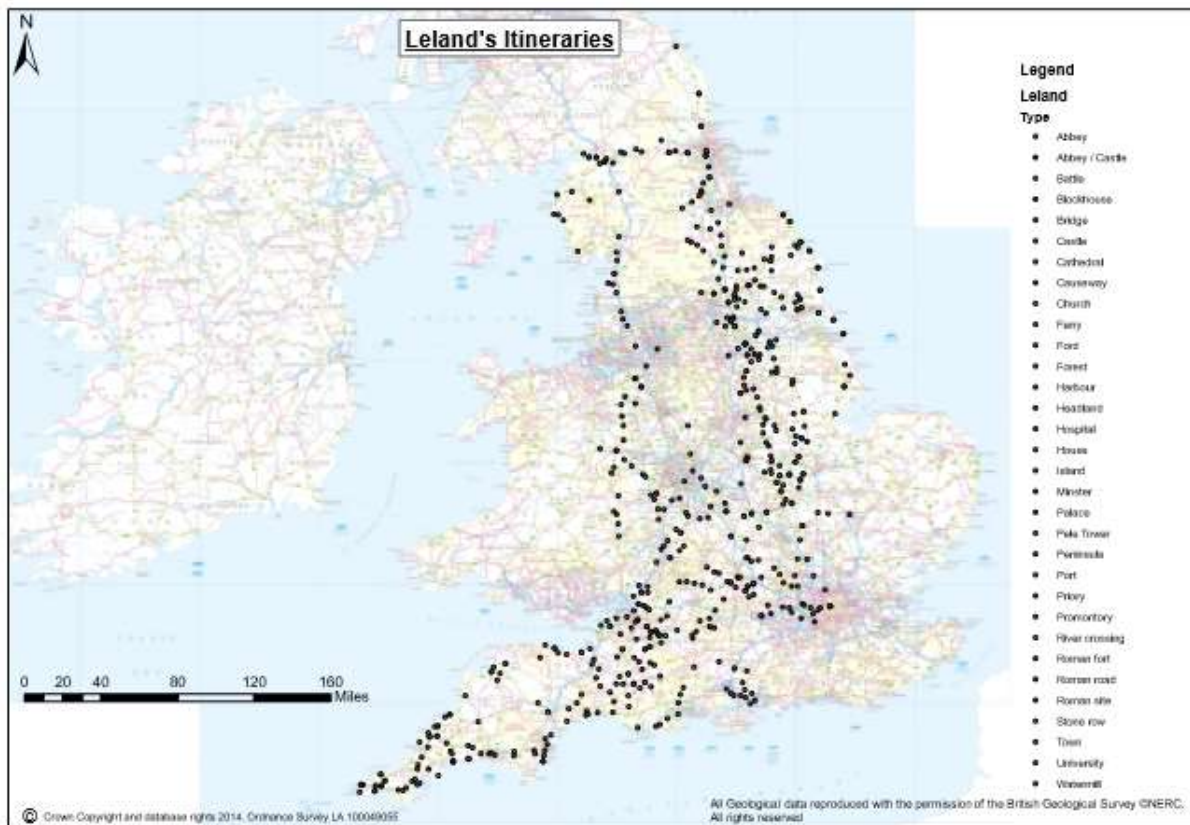


Figure 3 – Map of the locations of Leland's site visits within England

2.3.2 LELAND'S ANALYSIS

Chandler wrote that Leland 'was fascinated by archaeological sites such as hillforts...and standing stones. He was also very good at recognizing and interpreting earthworks' (1993, xxi). Yet, this is misleading, as the only standing stones Leland refers to are Boroughbridge's stone row (Smith 1907, I, 84). He did reference the name of the 'Rollerliche stones' yet failed to discuss their origin or meaning (1909, IV, 81). He noted boundary stones and earthen mounds, as markers for the counties of Oxfordshire; and Somerset and Devonshire (Ibid.; 1907, I, 168, respectively), but missed all the Cornish quoits. This is extremely strange, as he would surely have made other notes of upstanding stone and earthen structures, especially those as obviously artificially created as a dolmen. Is this, therefore, an example of information which had been sent to him, rather than data he took from a direct visit to a monument? If so, how many other archaeological sites were missed, if Leland did not actually travel each route himself?

Nevertheless, Leland did have an archaeologist's ability to spot earthworks and to critically assess contemporary understandings of the sites he visited. In Lichfield, he noted earthworks at a place known locally as Castle Field. Yet, he disputed this, and stated that

he considered the palace enclosure site as a better original site for the castle, due to its superior position (1908, II, 99). He was also the first to excavate a site archaeologically at Burrough Hill, in Leicestershire, where he excavated lime between the stones of the fort, to better understand its construction (1909, IV, 20).

2.4 WILLIAM CAMDEN

William Camden was born in 1551 and died in 1623. According to Edmund Gibson (1722), Camden was invited to study at Broad-gate Hall at age 17, where he made acquaintance with two brothers, the Carews, who were 'both addicted to the Study of Antiquities...And it is very probable, that Mr. Camden's more settl'd inclination to Antiquities, is to be dated from this lucky familiarity and correspondence'. He was educated at Oxford but did not complete his degree. However, he was made Usher at Westminster School, which meant that he could visit England's monuments during the school's holidays. Camden's original work, in Latin, 'was chiefly intended for the Instruction of Foreigners' (Gibson 1722, I, Preface).

'The debt of modern antiquaries to Camden was that of the poets of ancient Greece to Homer' (Sweet 2004, 36). He was a 'magistral [magisterial?] topographer-antiquary' (Ashbee 1960, 17). Over a time period of 30 years, he completed the first ever chorographical visit around Britain, for which he can be commended. His greatest work, and the one studied for this thesis, is *Britannia: or a Chorographical Description of Great Britain and Ireland, Together with the Adjacent Ijlands*, of which a First Edition was published in Latin in 1586. This was dedicated to Lord Burghley, Treasurer to Queen Elizabeth. Camden's intention was 'to restore Britain to Antiquity, and Antiquity to Britain; to renew what was old, illustrate what was obscure, and settle what was doubtful...A great attempt, not to say impossible! to which undertaking, as none know the Pains that is requisite, so none believe it, but they who have made the Experiment...However, depending upon the blessing of God, and my own Industry, I set about the Work, and gave all my spare hours, with the utmost attention and resolution, wholly to it' (Gibson 1722, Part 5). He 'survey'd the greatest part of *England* in person', completing all work on it in 1607 (Ibid., Preface). He had seen the Itinerary of Mr. Leland and had 'made use of it' within his *Britannia* (Ibid.).

Camden kept adding to and improving the work, within his lifetime. In 1594, for example, Camden visited Salisbury and Wells, returning via Oxford and in 1600, he travelled to Carlisle. His 'influence over antiquarianism and history throughout the seventeenth and eighteenth centuries cannot be overestimated' (Sweet 2004, 124). 'All his powers of scholarship are exercised in giving an accurate county history and survey (Williams 1937, 36-7). Piggott described Camden as the 'great pioneer' for his linking of past texts to the countryside around him (1985, 17) and Stukeley himself described Camden's *Britannia* as excellent (1724, Preface, Image 3).

2.4.1 CAMDEN'S RESULTS

William Camden was the last of the four antiquarians to be studied, and therefore the analysis should have benefitted from the previous knowledge gained but Camden's was by far the most laborious and time-consuming itinerary to follow. Due to time constraints, I studied the text regarding sites in England, omitting the separate chapters on Scotland, Wales and Ireland but did follow the route along current national borders. Camden's references were particularly hard to track down, for two main reasons. Firstly, his itinerary was formatted county by county. This meant that it was sometimes difficult to ascertain where he started or ended his travels within a county, as one could not use previous or subsequent references as a guide to his location. Secondly, Camden tended to find a river, track it to its source and then follow it downstream to a confluence of other rivers or to the sea. This helped to locate houses or places within a particular county but was very confusing if the river spanned more than one county, as the description was cut short and picked up elsewhere. He commented on his reasoning for tracking rivers several times. In Surrey, he wrote, 'all the places of any note for antiquity, lie upon the rivers'. In Cheshire, he commented, 'And in describing this County, I know no better method, than to follow the course of these rivers; for all the places of greatest note, are situate upon them' and in Yorkshire, he noted, 'From the Western mountains...many rivers break forth; which are, everyone, at last receiv'd by the Ouse, and so in one chanel flow into the Humber. And I do not see any better method in describing this part, than to follow the course of the Dane, Calder, Are, Wherfe, Nid, and Ouse, which issue out of these mountains, and are not only the most considerable rivers, but flow by the most considerable places.' His travel progress

in this regard must have been exceptionally slow if he did indeed visit all the towns and sites he mentioned. Nevertheless, three thousand points tracked Camden around England.

Camden's total number of references for England alone were more than double those mentioned by the other antiquarians and the results are remarkable. They have been divided into two categories, those recorded by Camden himself and those added to later by Edmund Gibson, another antiquarian and translator of Camden's work. Gibson personally re-visited each of Camden's locations, noting even more sites *en route*. As can be seen, certain monuments were only later identified by antiquarians; the earlier travellers did not recognise them for their antiquity (Table 2).

Camden seemed particularly interested in the monuments of the counties of northern England. He visited the most sites in Northumberland, followed by Yorkshire (Figure 4). Essex, Kent, Suffolk, Cumberland and Lincolnshire were all well-documented and he placed a good interest in Warwickshire, Devon, Lancashire, Cheshire, Norfolk, Cornwall and Somerset (Figure 5). As can be seen in Figure 4, Gibson made many new additions to Camden's already comprehensive study. This is also clear on Camden's map of site references (Figure 6), as well as that of Camden's and Gibson's references together (Figure 7). These both demonstrate amazingly thorough coverage of England.

English County	Total References by Camden	Count of Gibson's Additions	Overall Total
Bedfordshire	33	8	41
Berkshire	43	8	51
Buckinghamshire	64	20	84
Cambridgeshire	47	6	53
Cheshire	66	1	67
City of Bristol	1		1
City of London	44	7	51
Cornwall	68	7	75
Cumberland	84	13	97
Derbyshire	43	5	48
Devon	94	27	121
Dorset	53	6	59
Durham	85	42	127
East Yorkshire	59	10	69
Essex	106	22	128
Gloucestershire	82	31	113

English County	Total References by Camden	Count of Gibson's Additions	Overall Total
Hampshire	67	15	82
Hertfordshire	53	7	60
Huntingdonshire	27	1	28
Isle of Purbeck	2		2
Isle of Wight	21	1	22
Kent	102	20	122
Lancashire	94	29	123
Leicestershire	46	13	59
Lincolnshire	106	35	141
Middlesex	44	10	54
Norfolk	95	31	126
North Yorkshire	54	8	62
Northamptonshire	88	22	110
Northumberland	118	9	127
Nottinghamshire	47	14	61
Oxfordshire	51	16	67
Pict's Wall	4		4
Pict's Wall 1708	19	19	38
Pict's Wall 1709	7	7	14
Richmondshire	42	6	48
Rutlandshire	13	6	19
Shropshire	63	7	70
Somerset	94	34	128
Staffordshire	52	16	68
Suffolk	85	12	97
Surrey	71	27	98
Sussex	62	14	76
Warwickshire	81	13	94
Westmoreland	74	45	119
Wiltshire	93	48	141
Worcestershire	48	21	69
Yorkshire	163	71	234
Grand Total	3000	798	3798

Table 2 – Camden's total references per English county, with the later additions by Gibson

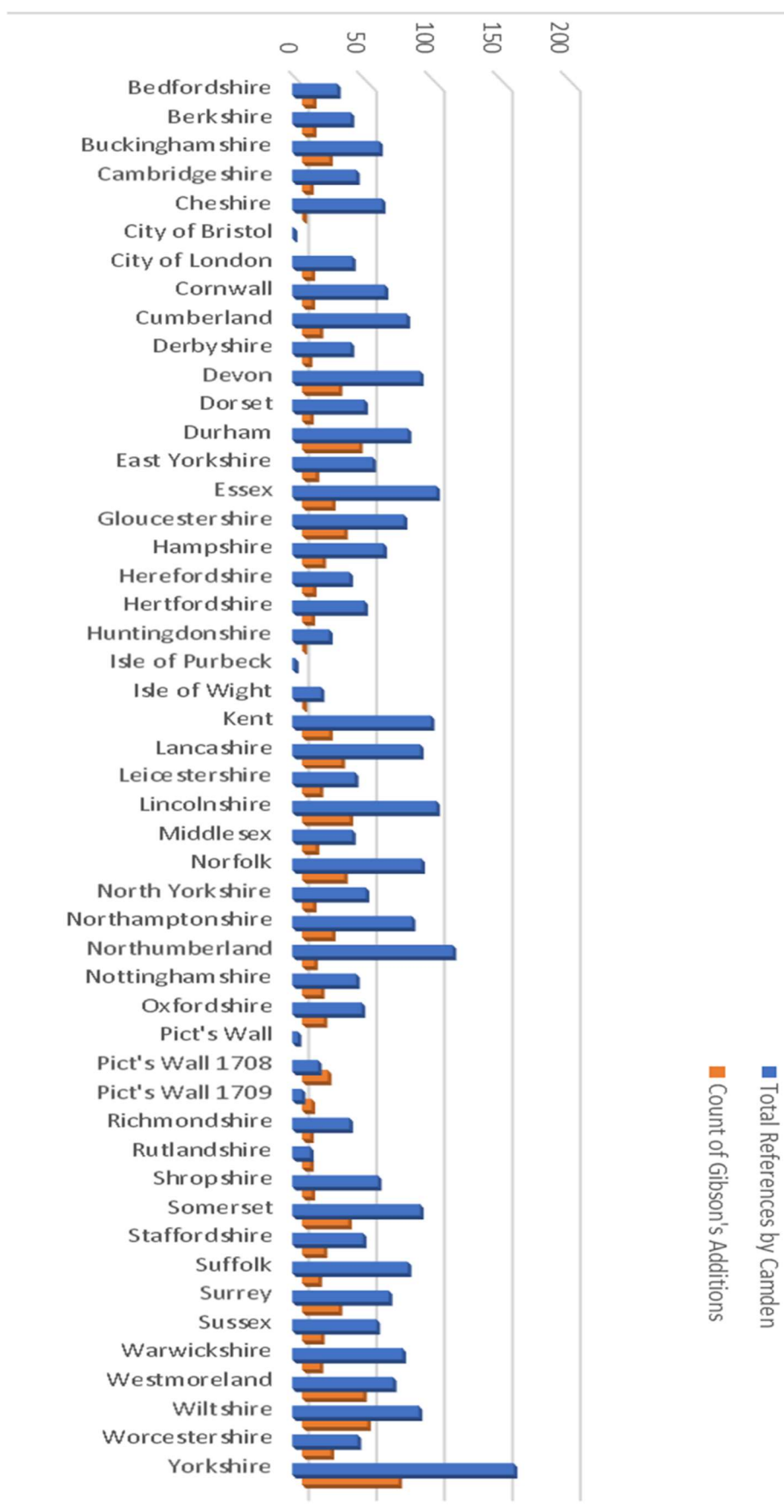


Figure 4 -Total references per English county by both William Camden and later Edmund Gibson

Total References by Camden (without Gibson's additions)

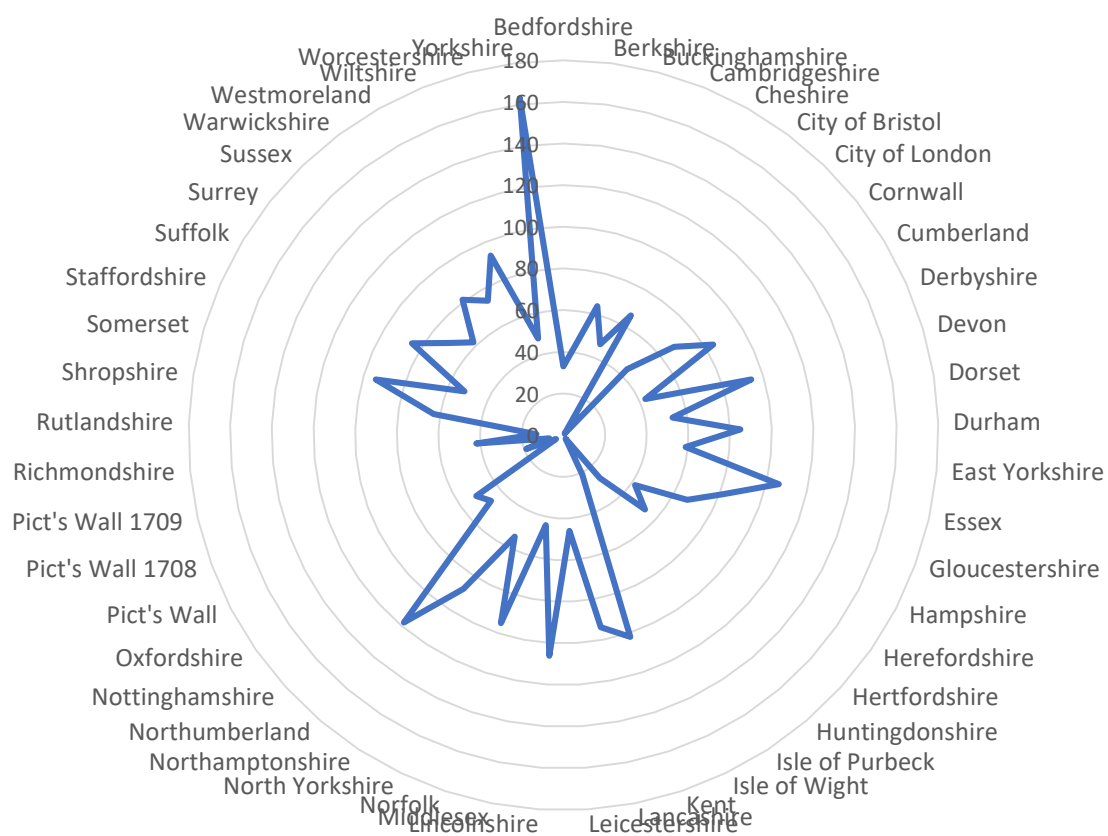


Figure 5 – Radar chart of the total number of sites per English county by Chandler (without Gibson's additions)

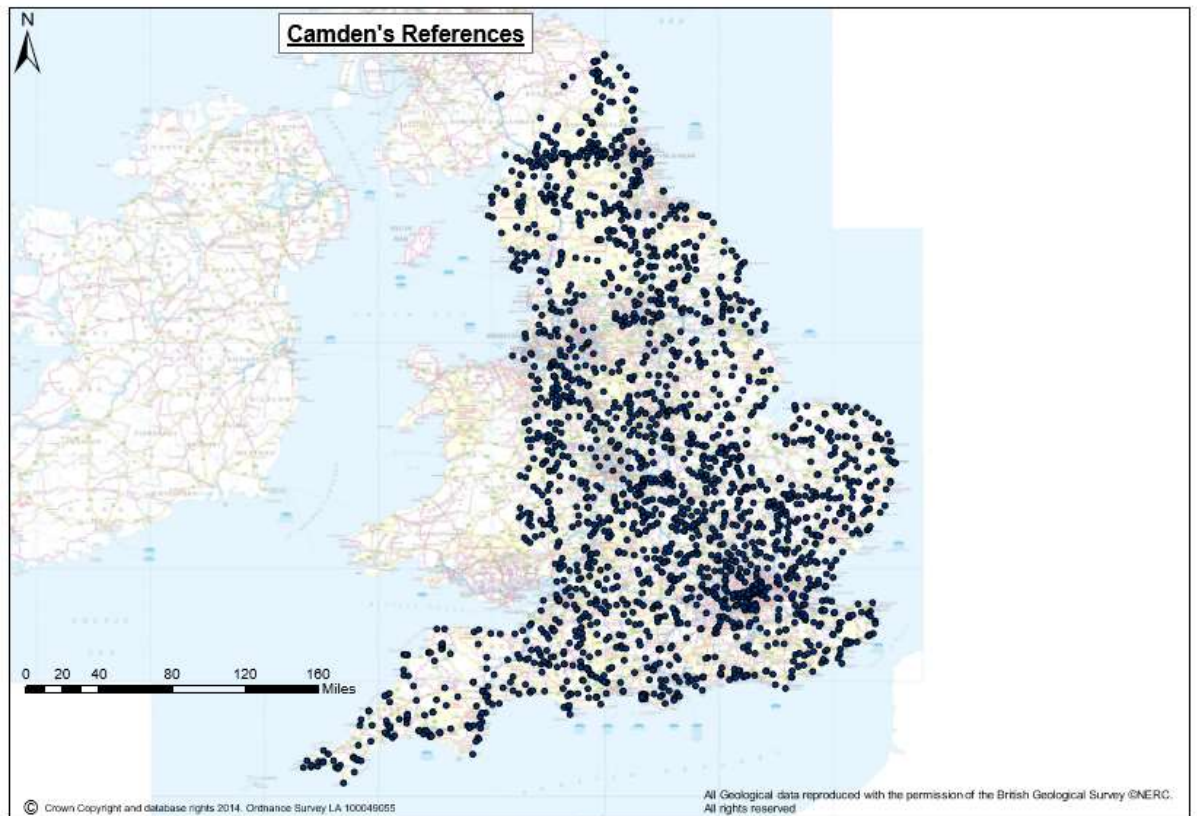


Figure 6 - Map of the locations of Camden's site visits within England (without Gibson's additions)

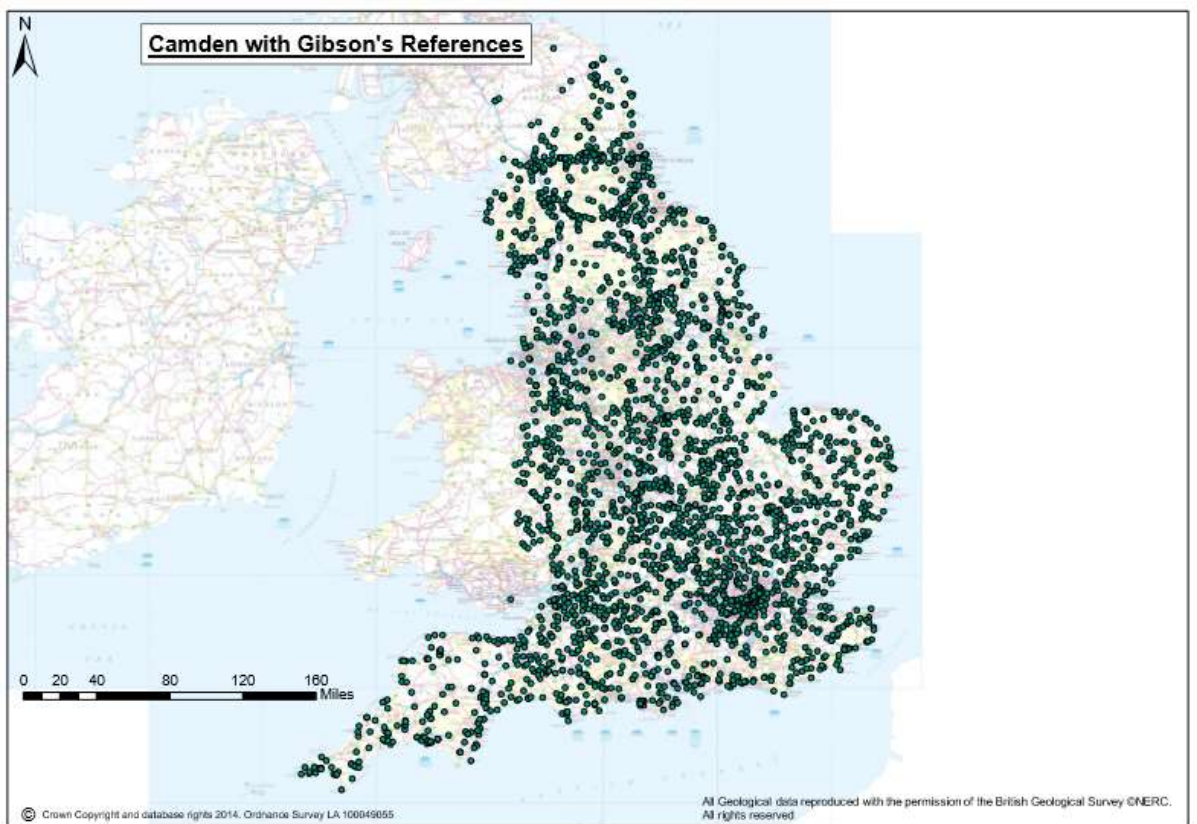


Figure 7 - Map of the locations of Camden's site visits within England, with Gibson's additions

2.4.2 CAMDEN'S ANALYSIS

Camden was extremely good at recognising humanly-constructed earthworks on the ground, for example, at Caistor, where he commented, 'formerly stood *Venta Icenorum*...broken walls...with the marks where the buildings have stood' (Gibson 1722, Norfolk). He also criticised other contemporary authors' viewpoints of monuments. Regarding Norwich, he stated, 'So far is it from having been built either by *Caesar* or *Guteline* the Britain, as some fabulous Authors tell you, who swallow everything that is offer'd, without consideration or judgement.' Viewpoints altered over time, so that Gibson's later opinions often differed from Camden's and he sometimes deconstructed and disagreed with Camden's findings, even if his assessment was also incorrect. Camden wrote about a hillfort on Salisbury Plain, Wiltshire, 'there is a very large Camp fortify'd with a deep double ditch, and called by the neighbouring inhabitants *Yanesbury-Castle*. From it's figure, it has been thought by some, to be a Roman Camp.' However, Gibson added, 'But, on the other hand, it is alledged, that the Roman Camps were for the most part square, and had only a single *vallum*, whereas this has a double ditch. It's being so very like *Bratton-castle*, only something bigger, and of an oval form, induces one to think it Danish.'

Camden was very diligent in his travels. He discussed the Roman road (Watling Street) which runs northwards through the western side of the county of Leicestershire. He commented, 'You may perhaps laugh at my expensive diligence and curiosity; but I have follow'd the track of this way very intently from the *Thames* into *Wales*, for the discovery of places of Antiquity' (Gibson 1722, I, Leicestershire). He made use of waterways, wherever possible. His referencing in Northumberland is evidence of this. He may have travelled by sea from Dunstanburgh Castle to Bamburgh Castle and Holy Island. Camden may also have stayed at or near to Dunstanburgh Castle. He referenced Alnwick, followed by Dunstanburgh and Bamburgh but then referenced the two interior villages of Embleton and Dunston, before referencing Holy Island. The route would be too convoluted if passage by sea were not used twice (Figure 8). If Camden followed such complex routes elsewhere in England, it is no surprise that his itineraries were the most difficult to follow.

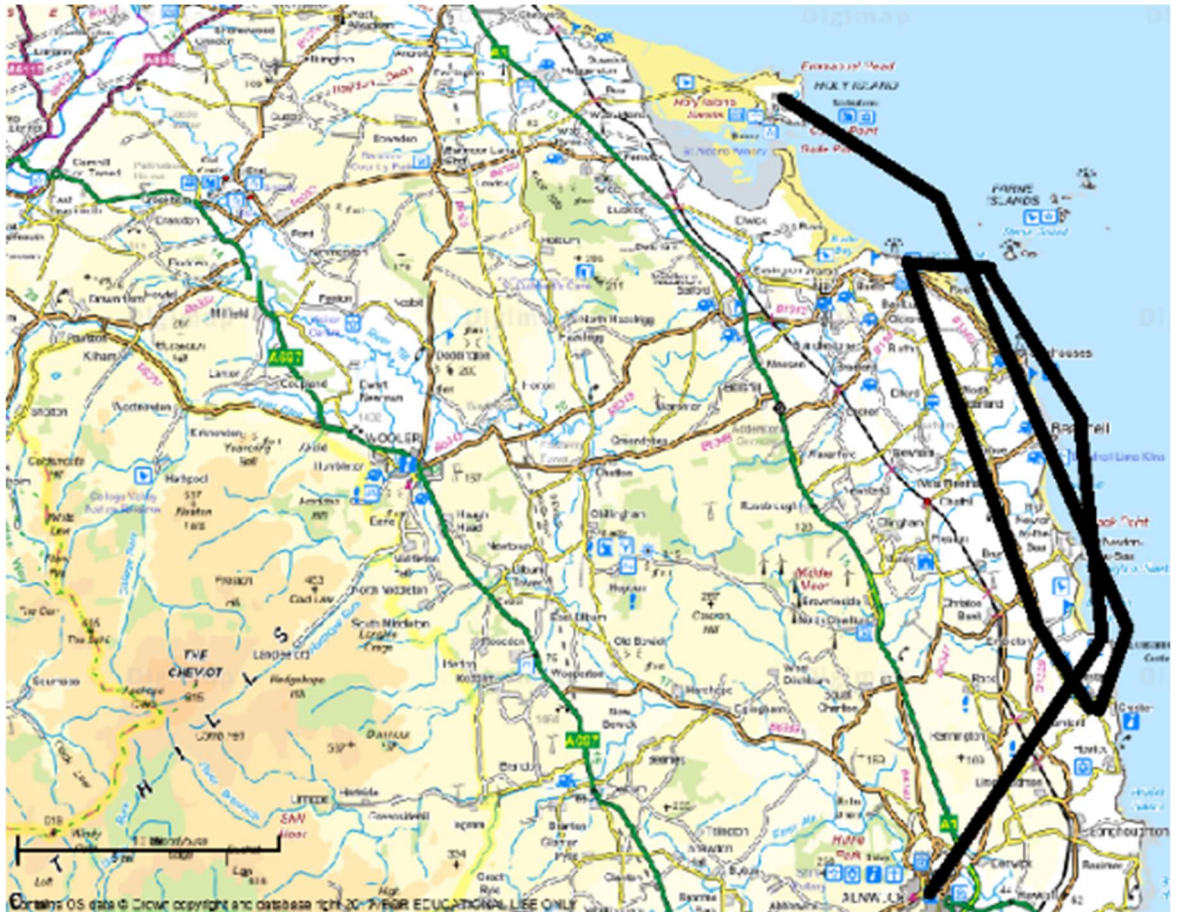


Figure 8 – Route taken by Camden, whilst visiting sites in Northumberland

Camden often explained ancient structures through references to war. An example of this is The Hurlers stone circle. He explained that the locals had interpreted them as men turned to stone; as ‘a trophy, in memory of some battle’; as boundary markers. Gibson again held a different view of their origin. He commented, ‘They seem neither to be trophies, nor land-marks, but burying-places of the ancient Britains’ (Ibid., I, Cornwall).

Camden sometimes referred to classical authors as a means of working out the age of a structure. Of Hambledon Hill hillfort, he stated, ‘we may...safely conclude it to have been a work of the Danes, than of the Romans, both because of it’s irregularity, and it’s being omitted by *Antoninus*’ (Ibid., Dorset). Camden and Gibson both tried to estimate the precise location of any place mentioned by Antonius or other early writers. Both considered Bede, William of Malmesbury, as well as Saxon and/or Roman/Latin names of each place, which they used to ascertain the common name at their time of writing, with Gibson adding extra information gleaned since Camden’s death. Camden compared the size of any place to that referenced within the Domesday Book and Gibson provided data about how the

size or importance of a place had changed between the 1600s and 1700s, due to fire or to the changes in fortune of a place or its inhabitants.

2.5 JOHN AUBREY

John Aubrey was born at Easton-Piers in North Wiltshire in 1626 and died in 1697. He first visited Salisbury Plain and Stonehenge at the age of eight (Hunter 1975, 158), which must have fired his interest. He was educated in 'Grammar Learning, and other preparatory Studies at *Malmesbury*' (Aubrey 1718, Image 17) and from there, he continued his education at Trinity College, Oxford. He became a Fellow of the newly founded Royal Society in 1662.

Aubrey has been described as both a 'prolific scholar', with a 'vigorous intellectual life' (Hunter 1975, 13, 15) and as 'egregious' and 'whimsical' (Ashbee 1960, 17). His work has been considered 'seminal' (Balme 2001, 156) and the 'most pioneering' of its time (Mortimer 2003, 2). Aubrey was interested, not only in archaeology but also in the natural world, art, education, architecture and scientific endeavours, as well as astrology, magic and occult phenomena (Hunter 1975, 13-4). He was 'genial, tolerant, amusing' (Olland in Balme 2001, vii); a rich man who squandered his inheritance through his 'exuberant, wide-ranging curiosity' and was therefore frequently pre-occupied with hiding from his creditors (Ibid.; Balme 2001, 28). He has been considered as the father of field archaeology (Ashbee 1960, 19), having completed a topographical description of Surrey for John Ogilby in 1673. Aubrey enjoyed fieldwork, finding it much more preferable to a search for the past through historical documentation. He spent much time gathering data on his own county of Wiltshire's antiquities, composing many architectural drawings of what he saw (Hunter 1975, 150, 155). He had almost completed his account of the antiquities of North Wiltshire, before his untimely death (Aubrey 1718, Image 22). At that time, people were aware of Aubrey's *Monumenta Britannica*, which he stated had been written 'at the Command of King *Charles II*'. The King had met Aubrey at Stonehenge and delighted in their discussion (Ibid., Image 27). Hunter stated that, 'the best of his antiquarian work reached an inductive excellence worthy of the most accomplished of his scientific peers' (Hunter 1975, 24). In fact, there had been a plan, by John Locke, a London printer, to print parts of *Monumenta Britannica* in 1673, that is, the *Templa Druidum* and *Chorographia Antiquaria* sections, at

Locke's own expense. However, Aubrey procrastinated and missed the opportunity (Balme 2001, 44-5). In 1690, he later stated in a letter to Mr Anthony à Wood, 'I would willingly print my *Templa Druidum* in my lifetime; for that is finished' (Ibid., 128). Aubrey himself tried to get his work printed between 1691 and 1693 but struggled to find a publisher. The *Templa Druidum* was, in my opinion, Aubrey's best writing. It set new standards in archaeological survey, due to the careful records he had made at each site and to the comparisons he made to other, similar monuments (Ibid., 135-136). It is a shame, therefore, that he could not get his work published before his death, especially as Aubrey had more interest in field antiquities than his predecessors and studied each monument type individually, as well as within a region. His premise that stone circles and similar monuments could not be Roman or Saxon, as they existed in regions where neither the Romans nor Saxons had established themselves, although sensible, was not universally accepted at the time (Sweet 2004, 124-5). In fact, John Britton has cited him as the first English archaeologist, as before him, there were only chroniclers, historians and topographers (in Hunter 1975, 207). Aubrey was proud to have uncovered hillforts from the Rivers Severn to the Dee, and attempted to gain information on antiquities from elsewhere, 'for the sake of completeness and lucidity', through writing to acquaintances around Britain (Ibid., 159). During his collections of antiquities, especially of those within his local county of Wiltshire, he was 'intrigued by the local customs and superstitions' and he recorded these beliefs (Sweet 2004, 335).

2.5.1 AUBREY'S RESULTS

For Aubrey's two journals of *Monumenta Britannica*, the only publication I could get hold of was not published by Fowles and Legg until 1982. As Fowles and Legg had published Aubrey's vast collection of notes as a list, it was not clear in all cases how these had been acquired. Many seemed to be letters from local gentry for each region, detailing the monuments in their area. Others were ambiguous in the provenance of their details. For the purposes of this study, and due to a lack of in-text explanations, I queried whether Aubrey had actually visited all the monuments of northern England, from my knowledge about their location, size and the materials used to construct them (Watson 2014). While his description of Papcastle Roman fort in Cumbria, the Devil's Arrows in Boroughbridge, North Yorkshire and the Rudston monolith in East Yorkshire, all concurred with my own

observation of each site (Fowles & Legg 1982, 848, 108-12, 852), Long Meg and her Daughters stone circle, Cumbria and Widdrington Castle, Northumberland may not have been personally visited by Aubrey (Ibid., 115-6, 121). Another example is the Rollright Stones stone circle in Oxfordshire. Aubrey had sketched the circle himself, so he may have visited, but neglected to note the key, precise details he later needed (Ibid., 70-3) as he wrote a letter to Anthony à Wood in February 1675, asking him for data on the diameter of the circle, as well as the height and number of stones (Balme 2001, 65).

Aubrey had compiled sections on castles, military architecture, horns, highways, Roman pavements, coins, 'urnes' and 'Of embanking, draining and currents', Roman cities and towns. These were not studied, as they did not reference any Neolithic or Early Bronze Age site, but the reference to Silbury Hill Neolithic mound, Wiltshire, was noted (Fowles & Legg 1982, 438). The sections on camps and pits were studied, as many of the references referred to possible Iron Age sites, which may have had Neolithic or Early Bronze Age origins. This included references to Bronze Age barrows, henges and 'camp' references, where an Ordnance Survey co-ordinate was provided (Ibid., 522, 524, 532, 550). Within the Barrows section, there were many references to tombs and towers, either within Britain or further afield which, again, were not referenced.

Aubrey added in many diagrams which were re-used from other antiquarian travels, such as, the drawing of King Arthur's Round Table, 'Out of Sir William Dugdale's 'Visitation of Cumberland,' in the Heralds' Office' (Ibid., 113). Nevertheless, he did create many architectural drawings of his own, such as that of Avebury, within his *Templa Druidum* section (Ibid., 44-5).

Aubrey, from compilations of both his data and that sent to him by friends and supporters, referenced 528 locations in Britain. The majority of those were in England, that is, 493 out of 528 (Table 3). Of those, 165 were in Wiltshire, 32 in Dorset, 26 each in both Somerset and Surrey, 24 in Hampshire and 23 in Gloucestershire. There were only 19 references for Scotland in total, with 13 from the Grampians, and 16 for the whole of Wales (). As can be seen on (Figure 9), the references for Wiltshire overshadowed all other counties in Britain. On the map of Britain, Aubrey's references seem to be dotted around the extremities of Britain, with the only clear concentration within the wider region of Wessex (Figure 11).

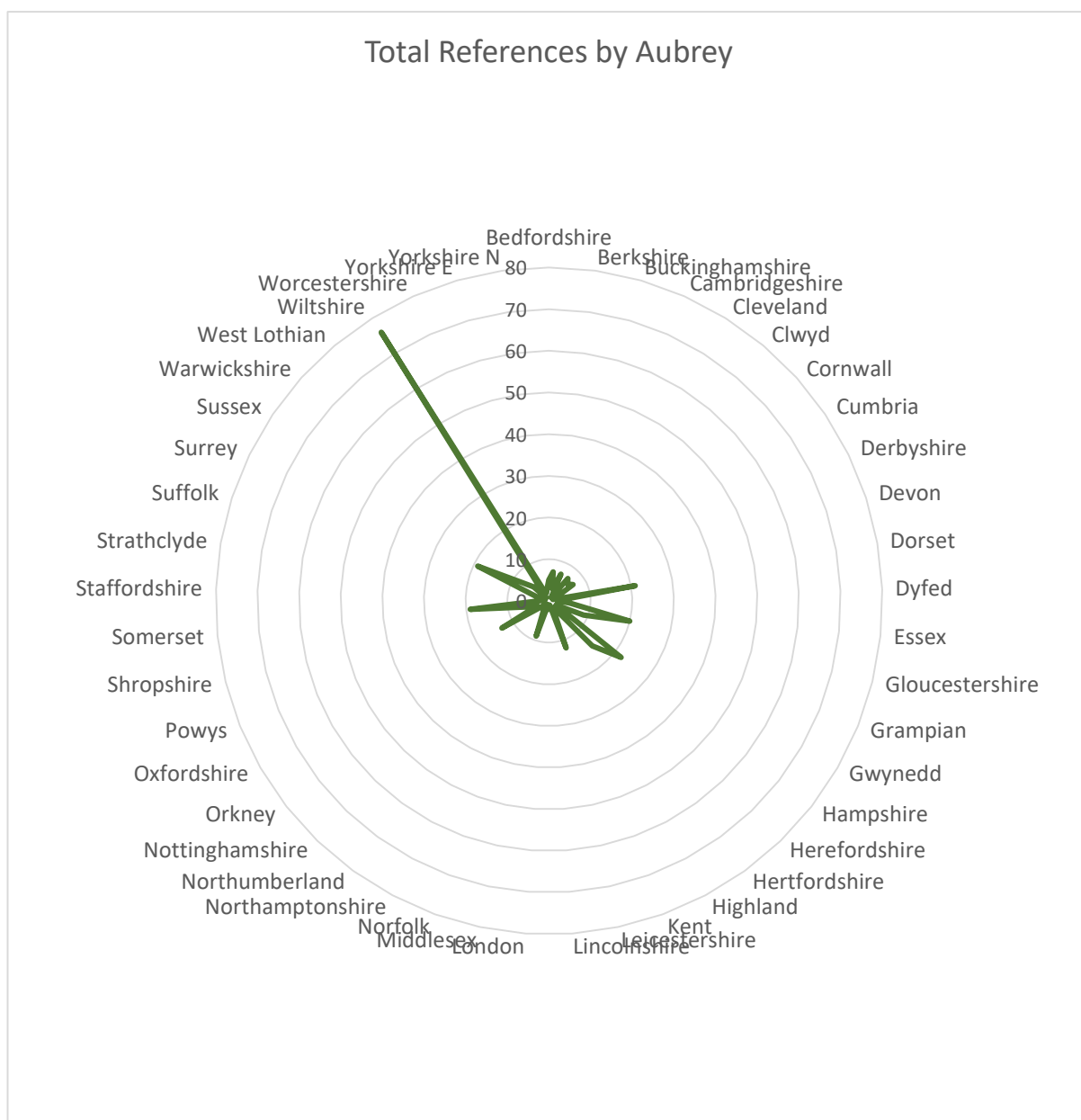


Figure 9 – Radar chart of the total number of sites per British county by Aubrey

British County	Total references by Aubrey
Bedfordshire	5

Berkshire	7
Buckinghamshire	3
Cambridgeshire	7
Cleveland	1
Clwyd	7
Cornwall	6
Cumbria	7
Derbyshire	2
Devon	1
Dorset	21
Dyfed	2
Essex	5
Gloucestershire	20
Grampian	9
Gwynedd	2
Hampshire	22
Herefordshire	15
Hertfordshire	2
Highland	2
Kent	12
Leicestershire	1
Lincolnshire	1
London	2
Middlesex	1
Norfolk	9
Northamptonshire	3
Northumberland	2
Nottinghamshire	1
Orkney	2
Oxfordshire	13
Powys	3
Shropshire	6
Somerset	19
Staffordshire	2
Strathclyde	1
Suffolk	3
Surrey	19
Sussex	8
Warwickshire	5
West Lothian	1
Wiltshire	6
Worcestershire	2
Yorkshire E	2
Yorkshire N	3
Grand Total	343

Table 3 – Aubrey's total references per English county

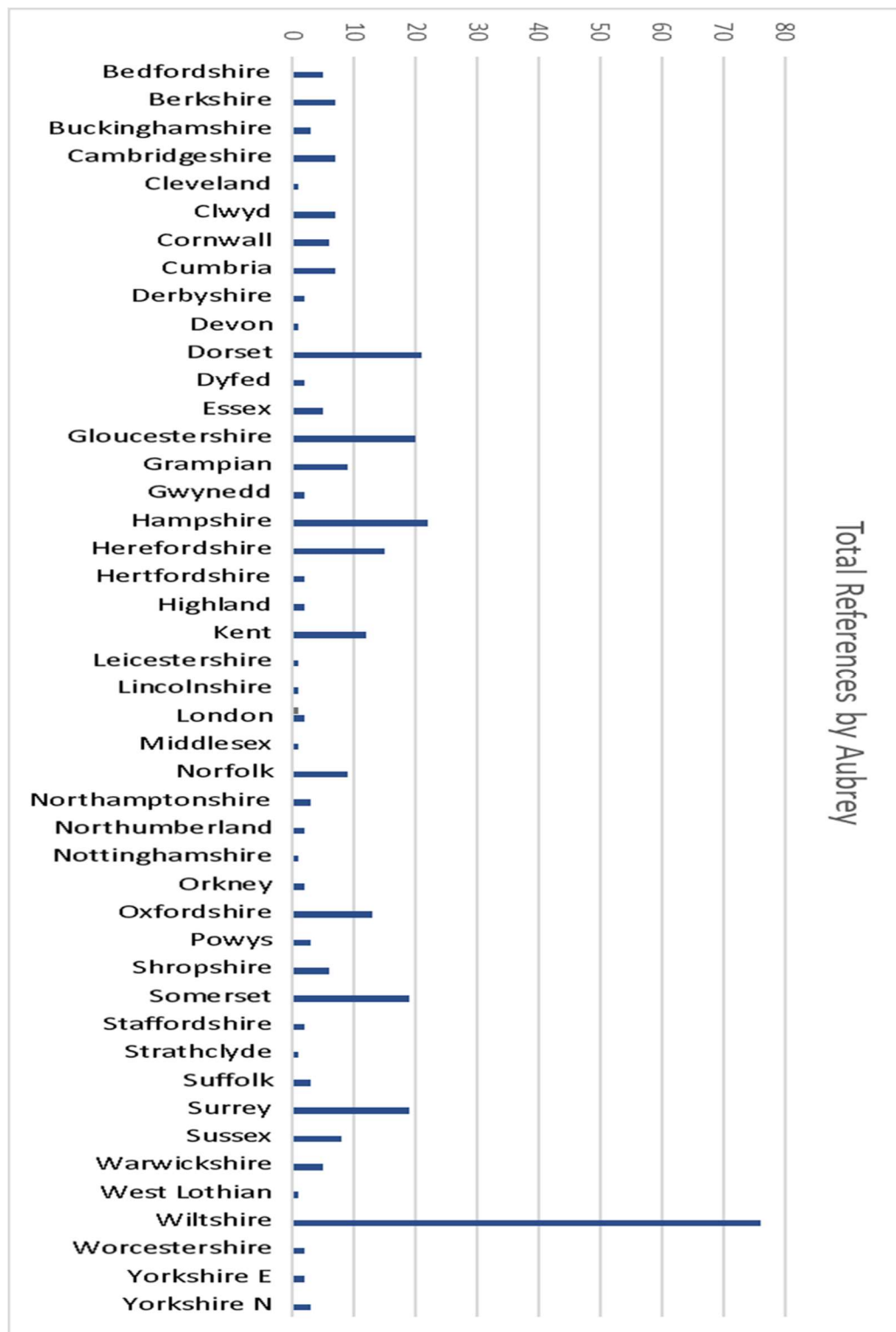


Figure 10 – Total references per British county by John Aubrey

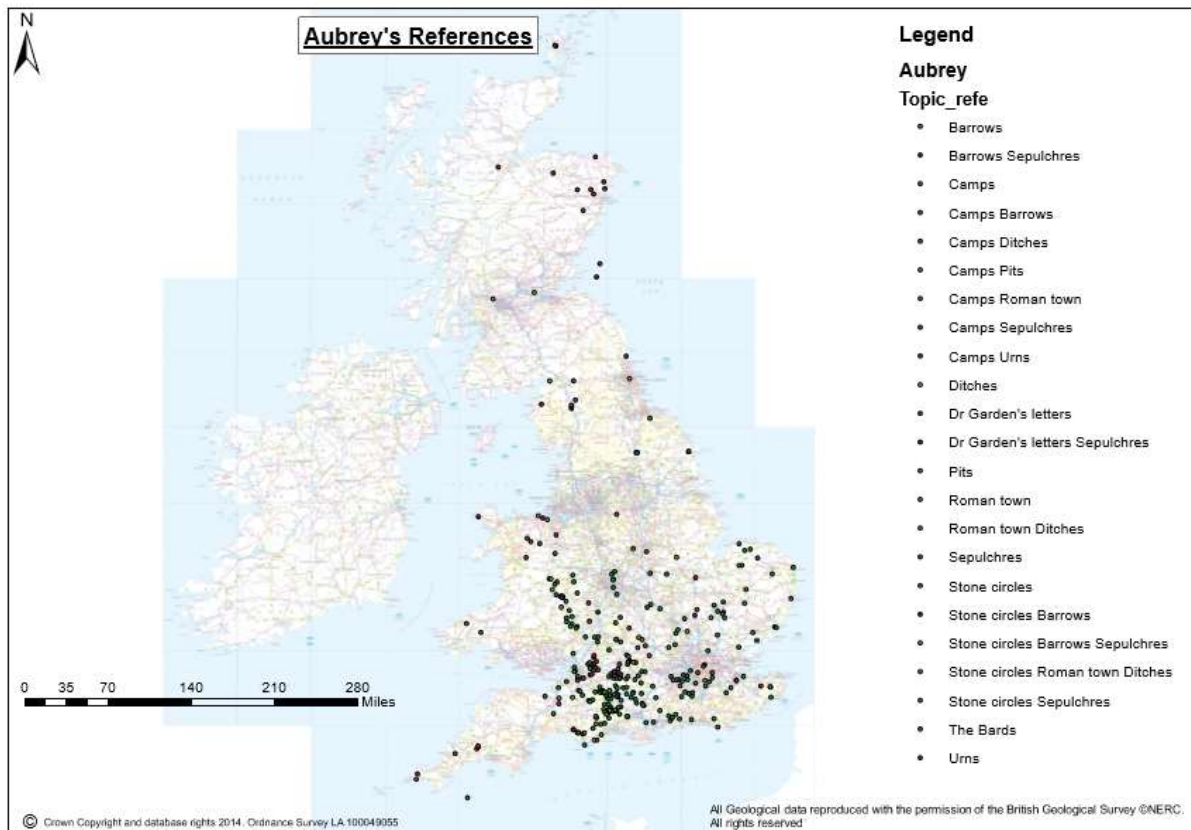


Figure 11 – Map of the locations of Aubrey's references within Britain

2.5.2 AUBREY'S ANALYSIS

Aubrey's work, although ordered into specific sections in his *Monumenta Britannica*, does not provide a representative sample of the total number of prehistoric monuments around England and his references were very partial, with many sites in Wiltshire, central and south-western England and few elsewhere (). As mentioned above, and in the Discussion below, Aubrey was frequently pre-occupied with other issues, which affected his ability to travel widely. The work was more piecemeal than methodical, inspired by interest, with no systematic rules to ensure wide-spread data-gathering. Aubrey had to frequently journey, to pursue his claims to land in Brecon, Monmouthshire, Herefordshire and Wiltshire and felt that he was 'never off horseback' (Balme 2001, 10). This travelling provided him with opportunities to make notes on the antiquities seen *en route*, 'My head was always working; never idle; and even travelling did gleane some observations' (Ibid.). Despite this proclamation, Aubrey only referenced 16 Welsh examples out of 528 references for the prehistory sections studied. His comparative dating of megaliths, according to Hunter, was exemplary, yet his work showed many inconsistencies (1975, 188-9). Fleeing from debtors

and worries about his own future abodes and the wealth and success of his own family seems to have overly pre-occupied him. He was clearly taken seriously by his friends at the Royal Society in London, such as Sir Christopher Wren, who recommended him to John Ogilby (Balme 2001, 40). Aubrey had planned to survey Sussex and then Berkshire or Oxfordshire, after having completed his perambulation of Surrey, whilst his contract as deputy surveyor to Ogilby was still valid (Ibid., 50). As it turned out, Ogilby did not plan to use Aubrey's data on Surrey (or, indeed, his *Templa Druidum*, which Aubrey also offered him), at all, despite Aubrey's great efforts (Ibid., 51). These inconsistencies are best shown in . Nevertheless, on the map (Figure 11)**Error! Reference source not found.**, it is clear he had written to many acquaintances around Britain, requesting information. An example of this is found in the return letter from Dr James Garden of Aberdeenshire, who wrote, 'I have been using my best endeavours for obtaining a satisfactory answer to your queries...I...went and visited...those antiquities...concerning which you desire to be informed; but also employed the assistance of my friends' (Fowles & Legg 1982, 176).

Aubrey made many interesting observations as he travelled around England. He was able to assess, not only the structures themselves, but their possible use as materials within the local region. In a discussion about the Devil's Arrows stone row in Boroughbridge, North Yorkshire, Aubrey suggested that their numbers (he imagined more than five, in a stone circle) must have diminished as the Christian crosses 'in the villages thereabout' were very high and also constructed of 'the same sort of stone with these Arrows'. He added that locals must have used those stones 'to save themselves the trouble of drawing huge stones out of the Quarries to make their Crosses' (Fowles & Legg 1982, 111). As a matter of course, I visited every single village within a five-mile radius (or more) of the standing stones at Boroughbridge, to ascertain if I could still see these Christian crosses. There was only one, of a similar size and proportion to the standing stones, in the same millstone gritstone, in Aldborough's village centre. It had originally been the cross in Boroughbridge's marketplace (Figure 12; Figure 13).

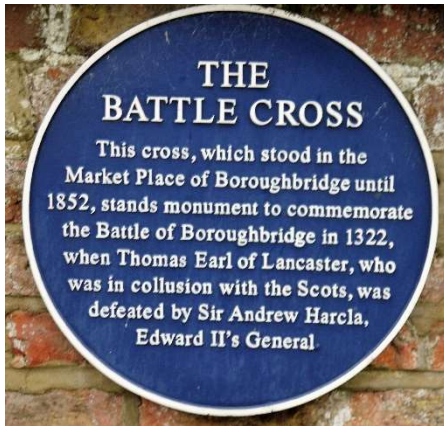


Figure 12 - Inscription at Aldborough Cross



Figure 13 - Aldborough Cross, North Yorkshire

Aubrey was hugely inspiring. Fascinated by stone circles and other upstanding prehistoric monuments, he considered the time-ordering of hillforts as he travelled and made superb architectural sketches of monuments in his *Monumenta Britannica*. He was keen to include information gained from others, and happily referred to them within his work. One example is his inclusion of data about the stone circle, Long Meg and her Daughters, in Cumbria. He wrote that William Dugdale had visited Long Meg, but that his 'servant' forgot to include it in his work, *Visitation of Cumberland* (Aubrey in Fowles & Legg 1982, 115) and so Aubrey had added it to his own compilation of data.

2.6 WILLIAM STUKELEY

William Stukeley is 'possibly the most famous of English antiquaries both today and in his own time' and is 'revered as the founder of landscape archaeology' (Mortimer 2003, 21, 2). He was born in 1687 in Holbeach, Lincolnshire. His family was long-established in East Anglia, being both protestant and anti-Pope (Haycock 2002, 30). After schooling, at the age of 13, Stukeley started work in his father's legal business but did not enjoy it. He instead began the study of Medicine at Cambridge University, three years later and despite the loss of the four senior members of his family, Stukeley graduated in 1708 (Piggott 1985, 28-30). He practised, first in St. Thomas' Hospital, London, and then in Lincolnshire (Ibid. 32, 15). He married in about 1726 but did not have children and in 1729, he was ordained into the

Church of England, a role he kept for the rest of his life, working in both Lincolnshire and London (Ibid., 78, 124).

Stukeley made an outstanding contribution to British prehistory. He was 'an honest and reliable recorder of the remarkable prehistoric monuments he visited' and 'one of the earliest archaeological fieldworkers' (Mortimer 2003, 1). Yet, according to John Michell, his genius 'has never been justly acknowledged' (2007, 10). Between 1710 and 1725, he conducted tours, of various lengths and durations, to visit monuments around Britain, noting 'everything remarkable or unusual' (Ibid., 32, 37) and 'thinking archaeologically' (Burl & Mortimer 2005, 4). This was to 'fuel his love of prehistoric antiquities' (Mortimer 2003, 3). He wrote up his findings in a series of nine journeys, seven published in 1724, and the final two after his death, in 1776. At the time of his death, his manuscripts had actually been dispersed (Burl & Mortimer 2005, 1). Stukeley 'amassed...accurate sketches and notes frequently upon prehistoric monuments'. He wrote, 'probably the first objective account of a barrow's structure on record' and illustrated the first archaeological section known in Britain (Ashbee 1960, 18-19). His Stonehenge manuscript was an 'excellent account of Stukeley's dispassionate fieldwork', noting structural elements that no-one had noticed before, such as the deliberate shaping of the stones (Burl & Mortimer 2005, 5). Yet, Stukeley's first travels failed to notice prehistoric sites as, at that time, he was only interested in Roman and later remains. He missed, for example, all of Derbyshire's stone circles and burial places on his 1712 tour. In fact, he rode by the High Bridestones chambered tomb near Stafford without a word. It was not until 1721-1725 that his real passion for prehistoric monuments emerged and he visited many structures, some of which are lost today (Ibid., 7).

Stukeley had a copy of Aubrey's *Monumenta Britannica*, which provided him with 'unique information about a multitude of obscure sites from Land's End to the Orkneys and from eastern England to Ireland' (Ibid., 8). Despite this, he failed to acknowledge Aubrey's 'enormously important achievements within his work' (Mortimer 2003, 4).

Stukeley was very passionate about life and must have had a confident demeanour. Despite his upbringing and misfortune, his education and later position allowed him to mix with a wide variety of influential people. He was a Fellow of the Royal Society, whose

contemporary members included Sir Isaac Newton, Edmund Halley and Sir Christopher Wren and he was Treasurer of the Society of Antiquaries, founded in 1717. He was keen to uncover Britain's antiquities, 'to the glory and benefit of our country' (1724, Preface, Image 3, Images 13-4) and he thought that Britain's history, independence and antiquity needed to be proven and defended. To his mind, Britain deserved a Grand Tour of its own. Yet, his 'picture of ancient Britain was...more hopeful than historic' (Burl & Mortimer 2005, 4). He considered Britain 'God's own country' and believed, with others, that God had deliberately sent the Romans to literally pave the way for the later Christian Apostles, 'so that the Gospel could be propagated to the world' (Haycock 2002, 114-5, 119-20). However, Stukeley's *Itinerarium Curiosum* provided a political message too. In a time of increasing imperialism, the success of the Romans, through the study of their remains, provided inspiration for such an aspirational nation (Ibid. 119).

Stukeley's interests were wide. Apart from Archaeology, he also deeply valued Science and Architecture. He recorded a passionate and, from my own experience, extremely accurate account of a total solar eclipse, in a letter to Doctor Edmund Halley, which he included within his seventh itinerary, generally addressed to Roger Gale Esquire, his friend. At the time, as he recorded, he was in Wiltshire and had just met the Roman way, Icening Street, at Haradon Hill, after having visited Bury Hill Roman Camp and before a visit to Old Sarum (1724, VII, Images 183-5). He also created a series of topographical and architectural drawings of numerous monuments and wrote essays on construction (Piggott 1985, 10). These 'wonderfully illustrated...engraved drawings' portrayed the monument's locations within their local countryside. This ability to draw direct from nature created factual records, which have never been surpassed, especially as many of the monuments have now vanished (Michell 2007, 10). Stukeley was extremely loyal to Britain and its ancient monuments and had a 'towering...reputation' for observation and fieldwork (Sweet 2004, 346). Yet, he had a diminished status in his later years and since, due to his 'Druid-propaganda theories' (Michell 2007, 12). He made 'splendid contributions by fieldwork and survey to our knowledge of the great monuments of Stonehenge and Avebury' (Piggott 1985, 9, 79, 152), which were 'unsurpassed for years' (Sweet 2004, xvi). Stukeley's two works, *Stonehenge* (1740) (which was completed to prove the monument was a temple of

the Celtic Druids (Haycock 2002, 205)); and *Abury* (1743) are not part of this study but have been hugely influential within the field of archaeology, since their publications.

Piggott was concerned that Stukeley's description of the stones at Avebury's Beckhampton Avenue was 'problematical' (Haycock 2002, 104), questioning his sanity. However, geophysical survey and excavation in 1999 vindicated Stukeley (Gillings & Pollard 2004, 19). In fact, recent geophysical resistance and Ground Penetrating Radar surveys are further altering this picture (<https://www.nationaltrust.org.uk/avebury>), by revealing further stones also referenced by Stukeley. In my opinion, however, his greatest achievement was his bird's eye, topographical view of Avebury, the image of which can be seen in Haycock (2002, 122). Stukeley stated about his own work, 'tis an account of places and things from inspection, not compil'd from others labors, or travels in ones study' (1724, Preface, Image 3). He then later added, in a letter to Mr John Hardy, for whom he addressed his second itinerary, 'As when first with you so since it has been my method, to put into writing what little remarks I made in travelling: at length I had collected so much...it was judg'd not unworthy of publication'.

2.6.1 STUKELEY'S RESULTS

Stukeley's *Itinerarium Curiosum* is perhaps less well known than his publications on Avebury and Stonehenge. The two publications (1724 and 1776) were chosen as they document the extensive travels Stukeley made around the countryside. My intention was to log any sites of prehistoric interest, whilst also tracking Stukeley's itinerary, with a primary interest in data pertaining to sites in England. However, in his fifth tour, entitled 'an entirely Roman-based journey', it was difficult to ascertain exactly which places he actually visited, as he kept digressing into explanations of Roman road routes and descriptions of Roman finds (*Iter Romanum V*). An example is his discussion of '*Hermenstreet*' (1724, 73), where he discussed the origin of the route in Newhaven and the places it passed through, before admitting never to have travelled the route. Due to a page-numbering issue in the British Library online version of this book, the sixth section entitled *Iter Dumnoniense VI*, penned to Lord Pembroke, and all sections thereafter, had to be completed using image reference numbers, rather than page references.

From the results, it can be seen that Stukeley travelled widely in England, with 866 references, the majority of which are within nine counties. He referenced Lincolnshire the most (Figure 14), followed by Hampshire, Wiltshire, Cumbria and Kent (Figure 15). He also made a good number of references to Somerset, Leicestershire, Derbyshire and Oxfordshire. Yet, he barely ventured out of England, with only one reference for Wrexham, Wales (Table 4). In fact, as can be seen on the map, Stukeley mainly journeyed within the central counties of England (Figure 16).

Stukeley 1724 & 1776 counties referenced	Total number of references per county
Bedfordshire	5
Berkshire	11
Buckinghamshire	6
Cambridgeshire	20
Central London	1
Cheshire	20
City of London	7
Cumbria	61
Derbyshire	30
Devon	16
Dorset	24
Durham	13
East Midlands	1
East Staffordshire	1
Essex	3
Gloucestershire	8
Greater London	6
Greater Manchester	10
Hampshire	70
Herefordshire	13
Hertfordshire	11
Kent	56
Lancashire	10
Leicestershire	31
Lincolnshire	119
Merseyside	2
North Yorkshire	22
Northamptonshire	28
Northumberland	14
Nottinghamshire	22
Oxfordshire	30
Rutland	1
Shropshire	9
Somerset	34
South Yorkshire	5
Staffordshire	24
Surrey	4
Sussex	2
Tyne and Wear	15
Warwickshire	15
West Midlands	9
Wiltshire	63
Worcestershire	14
Grand Total	866

Table 4 – Stukeley's total references per county

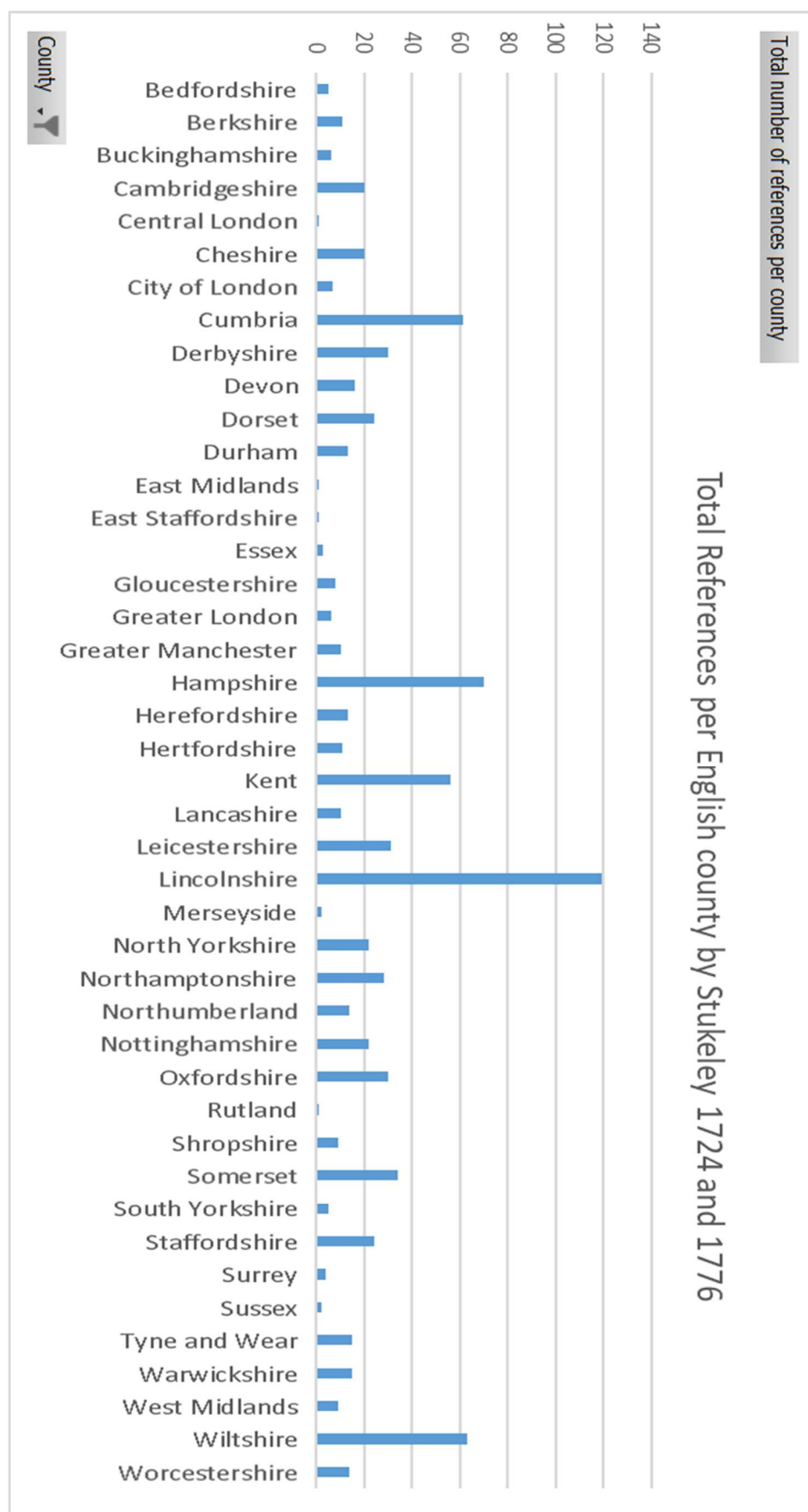


Figure 14 – Total references per English county by William Stukeley

Total References by Stukeley 1724 and 1776

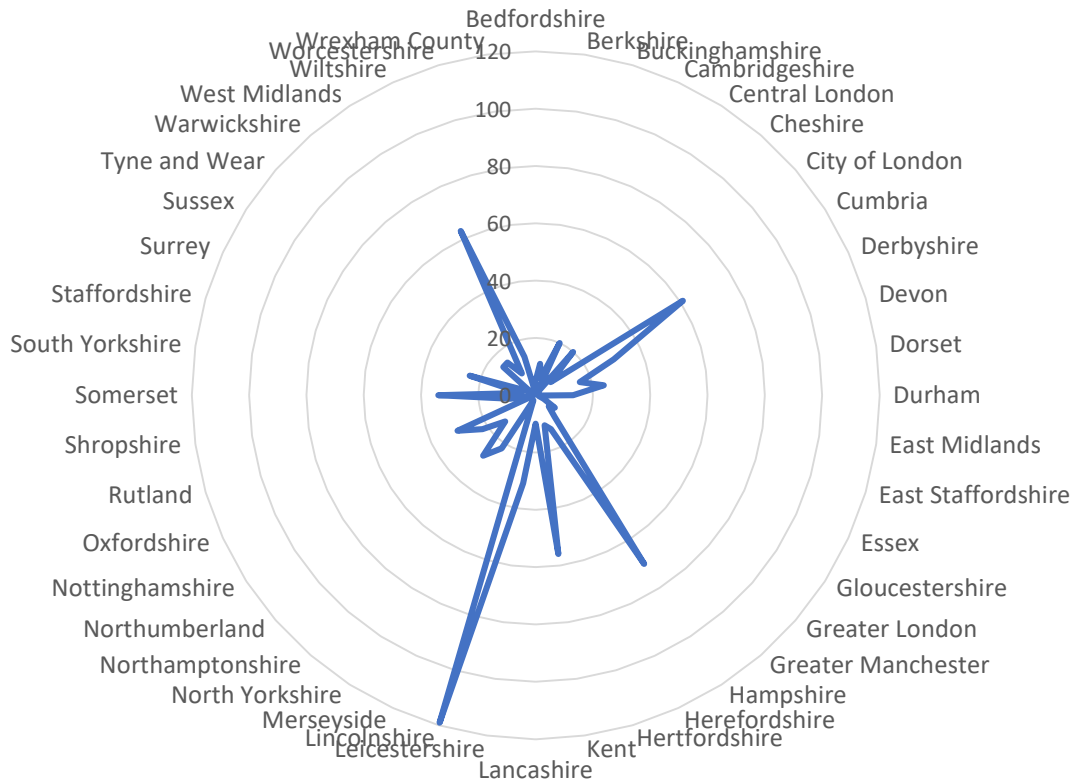


Figure 15 – Radar chart of the total number of sites per British county by Stukeley

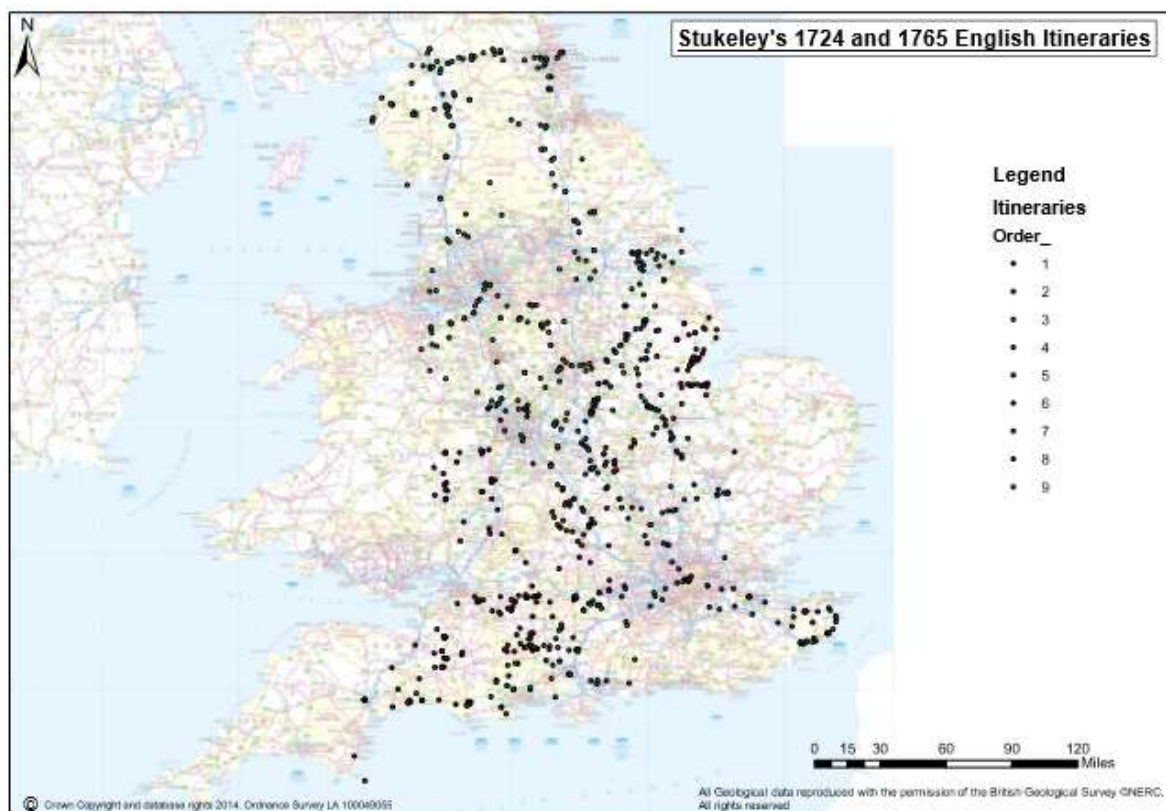


Figure 16 – Map of the locations of Stukeley's site visits within Britain

2.6.2 STUKELEY'S ANALYSIS

Stukeley was a fascinating antiquarian. He commented widely about his observations and thoughts on what he could see around him as he travelled. In one of several examples, he noted crop-marks on the ground at Castle Hill, between Wandlebury and Souldern, on the Northamptonshire-Oxfordshire border, 'the edg of the *area* is very diftinct upon the meadow by the difference in the color of the grafs, the one gray the other green' (1724, II, 40). Stukeley was very perceptive and, although sometimes noting monuments, such as barrows, already identified by early travellers, whether antiquarian or not, he added his own opinions as to their location. A good example of this is in Lincolnshire, 'the remains of great men whofe habitations were in the marfhy grounds, who chofe to be bury'd upon higher ground than where they liv'd, as if the cafe all over *England*, for the *tumuli* are commonly plac'd upon the brink of hills hanging over a valley, where doubtlefs their dwellings were.' (Ibid., I, 6).

Stukeley was the first antiquarian to begin to place prehistoric monuments within a correct chronological order. An example of this is the group of tumuli at St. Margaret's, near Dover, which he believed to be 'celtic', as they were so similar to those found on Salisbury Plain

(Ibid., 120). His observational skills were exceptional for the time and they were certainly beyond the *on-the-spot* remarks of his predecessors. His assessment of other prehistoric monuments, such as the stone avenue at Shap, Cumbria, as pre-Roman, demonstrated amazing insight (1776, 42). Stukeley, and Camden's English translator, Edmund Gibson, in particular, frequently commented about other authors and their findings. An example of this is Stukeley's reference to John Leland, who had included the finding of many Roman antiquities on a hill at Rauceby, near Sleaford, Lincolnshire (Stukeley 1724, I, 10-11).

In fact, Stukeley was undoubtedly a Romanist and this fascination sometimes overshadowed the evidence on the ground. Fergusson, another much later antiquarian, wrote of Stukeley and others as 'speculative dreamers' with 'a baseless theory' who drew 'inferences' from 'very obscure or slender hints' (1872, vii). He considered Stukeley 'one of the most imaginative of men and one of the wildest of theorists' (Ibid., 3), with a 'very fertile imagination' (Ibid., 21). He added, 'Stukeley...cut the vessel adrift from the moorings of common sense, and she has been a derelict tossed about by the winds and waves of every passing fancy, till recently, when an attempt has been made to tow the wreck into the misty have of prehistoric antiquity' (Ibid., 15). However, as Fergusson then went on to assert that all megalithic structures were post-Roman, his word might not hold much weight. In fact, despite Fergusson's less than favourable comments about Stukeley, his main discussions about English dolmens are those which were drawn by Stukeley, such as Kits Coty House, Kent. This is an example of the might of an image, over a written discussion. In fact, Fergusson had much faith in Stukeley's drawings, stating, 'his pencil is always more to be trusted than his pen' (Ibid., 117).

Stukeley strived to learn as he travelled. In the Dorchester region, at and around its Roman Amphitheatre and Maiden Castle hillfort, Stukeley commented about a Celtic tumulus, 'for here they call a circle of stones round a *tumulus*, a pound.' (1776, Image 166). Yet, one wonders how much of his itinerary was pre-designed, according to the Peutinger Table, or whether due to his guide, his upcoming accommodation, or for another unknown reason. In *Iter Romanum V*, he wrote, '*Towcester* is a considerable town...but what its *roman* name, time has envy'd us, the *Itinerary* passing it by.' (1724, 108).

2.7 THE FOUR ANTIQUARIANS – RESULTS AND ANALYSIS

English geographical area	Count of counties per region visited by Leland	Number of counties per region visited by Camden	Number of counties per region visited by Aubrey	Number of counties per region visited by Stukeley	Total for each geographical area
M	14	17	13	16	60
NE	6	5	5	5	21
NE/NW		1			1
NW	3	3	1	4	11
SE	4	9	9	7	29
SW	8	10	8	7	33
Grand Total	35	45	36	39	155

Table 5 – Number of counties visited by the 4 antiquarians, within each region in England

It is clear from the above table that the four antiquarians chosen visited roughly the same number of counties within each region as one another (Table 5), although Camden visited more counties in the midlands and the south-west of England than the other antiquarians. He also referenced the most counties, in total. Stukeley visited the second-most total number of counties. Leland and Aubrey both referenced roughly the same number of counties, except that Aubrey referenced only one county in north-west England, that is Cumbria, whilst Leland and the others referenced at least three. Leland referenced only four south-eastern counties, whereas the other antiquarians referenced at least seven (and Aubrey nine) counties.

These antiquarians travelled through England widely, in their search for prehistoric monuments. Obviously, this study is partial, as I did not look at the sections within Aubrey's files, which pertained to purely historical or artefactual evidence. Also, for Camden and Leland, I only had the time to follow their journeys around England. Nevertheless, Table 6 shows the concentrations of their travels. In total, fifty-three counties in England were referenced. Of these, nine are in the north-east; four in the north-west; nine in the south-east; eleven in the south-west; and twenty in the midlands. Twenty-three of these counties were visited by all four antiquarians. Of these, eleven are in the midlands (55%); seven in the south-west (64%); four in the south-east (44%); two in the north-east (which includes Lincolnshire) (22%); and one in the north-west (25%).

County/Area	Location within England	Leland	Camden	Aubrey	Stukeley
Bath & NE Somerset	SW				
Bedfordshire	M	1	1	1	1
Berkshire	M	1	1	1	1
Bristol	SW		1		
Buckinghamshire	M	1	1	1	1
Cambridgeshire	M	1	1	1	1
Cheshire	NW	1	1		1
Cleveland	NE			1	
Cornwall	SW	1	1	1	
Cumbria	NW	1	1	1	1
Derbyshire	M		1	1	1
Devon	SW	1	1	1	1
Dorset	SW	1	1	1	1
Durham	NE	1	1		1
Essex	SE		1	1	1
East Midlands	M				1
West Midlands	M				1
Gloucestershire	SW	1	1	1	1
Greater Manchester	M	1			1
Hampshire	SE	1	1	1	1
Herefordshire	SW	1		1	1
Hertfordshire	SE	1	1	1	1
Humberside	NE		1		
Huntingdonshire	M		1		
Kent	SE		1	1	1
Lancashire	NW	1	1		1
Leicestershire	M	1	1	1	1
Lincolnshire	NE	1	1	1	1
London	SE	1	1	1	1
Merseyside	NW				1
Middlesex	M		1	1	
Norfolk	SE		1	1	
Northamptonshire	M	1	1	1	1
Northumberland	NE	1	1	1	1
Nottinghamshire	M	1	1	1	1
Oxfordshire	M	1	1	1	1
Pict's Wall	NE/NW		1		
Richmondshire	NE		1		
Rutlandshire	M		1		
Shropshire	M	1	1	1	1
Somerset	SW	1	1	1	1
Staffordshire	M	1	1	1	1
Suffolk	SE		1	1	
Surrey	SE	1	1	1	1
Sussex	SE		1	1	1
Tyne and Wear	NE	1			1
Warwickshire	M	1	1	1	1
Wiltshire	SW	1	1	1	1
Windsor/Maidenhead	SE				
Worcestershire	SW	1	1	1	1
Yorkshire East	NE	1		1	
Yorkshire North	NE	1		1	1
Yorkshire South	M	1	1		1
Yorkshire West	M	1	1		
Isle of Man	NW				
Isle of Purbeck	SW		1		
Isle of Wight	SW		1		

Table 6 – English counties referenced by each of the 4 antiquarians

2.8 DISCUSSION

This study has provided many exciting new details about the four antiquarians and their travels around England and Britain. It is remarkable to consider that, without the aid of modern archaeological techniques, and with Ussher's theory of the age of the world, which was the current thinking of the time, these antiquarians could assess different upstanding monuments within the landscape and assign them to a particular period in time, based on their observations. They used classical sources and comparative data from the rest of the world, to work out the age of certain monuments. Stonehenge and other prehistoric monuments were lost in an a 'chronological wilderness' at that time (Burl & Mortimer 2005, 12, 10). Whether Saxon, Danish, Roman, Celtic, British or Civil War, camps, barrows, standing stones and other remains were allocated a time period, based on their shape and their proximity to known historical data. Many of their observations were insightful. An example of this is the Rollright Stones stone circle, 'Hence we rode to Jee *Rowldrich* ftones, a very noble monument, the firft antiquity of this firt that I had feen, and from which I concluded thefe works to be temples of the antient *Britons*' (Stukeley 1724, Iter Oxoniense II, 45). In fact, confidence in their own observations was often clear, such as, Gibson, who wrote later of Walsingham, Norfolk, 'Towards the Sea-side, are cast-up all along little Hills, which were doubtless the burying-places of the Danes and Saxons'. Yet, on occasion, their observations were out by millennia, such as, Stukeley's assessment of an Early Neolithic long barrow,

'At *Coffington*...is a vaft barrow, 350 foot long, 120 broad, 40 high or near it, 'tis very hanfomely work'd up on the fides and very fteep. it feems to have loft fome of its length at both ends, efpecially the northern, a torrent running clofe by. it fstands exactly north and fouth, upon the very edg of the ings, and in wet times it muft be almoft encompafs'd with water. they call it *Shipley hill*, and Jay, a great captain call'd *Shipley* was bury'd there' (Iter Romanum V 1724, 102). Despite describing it in excellent detail, he totally misunderstood its origin.

Before the travels of these antiquarians, the importance of prehistoric monuments was not understood. It is known from literary sources that Anglo-Saxons feared and demonised prehistoric barrows, due to superstitions about supernatural beings (Semple 1998, 115,

121). The Christian church appears to have encouraged the association of barrows with evil in the later Anglo-Saxon period. In the tenth and eleventh centuries, there were strong associations with pagan ceremonies and barrows, such as at Abbots Bromley, Staffordshire (Ibid., 121). Standing stones were also toppled and buried in the medieval period. How many other, undocumented standing stones were buried at this time? A possible example is provided by the skeleton of the barber-surgeon at Avebury, dated to circa 1320 from the coins found in his possession, under the toppled Stone 9 of the main stone circle (Gillings & Pollard 2004, 126-7). In fact, forty-three of over a hundred standing stones at Avebury were buried during this period (Smith 1965, 176-8).

By the sixteenth century, from an antiquarian perspective at least, the origin of these monuments was thought to be because of war. Camden wrote about four 'great' barrows in Barklow, Essex, 'such as our ancestors us'd to raise to the memory of the Soldiers who were kill'd in battel...The Country-people have a tradition, that they were rais'd after a battle with the Danes in that place.' Yet, from the mid-seventeenth century, there was another concerted campaign of standing stone destruction, whether in Wiltshire, at Avebury (Gillings & Pollard 2004, 134) or at the Shap stone avenue or at other stone circle sites in Cumbria (Stukeley 1776, II, Image 48; Burl 2000, 406). Even in the mid-nineteenth century, the inhabitants of Avebury did not understand the origins of the stone circle. They were convinced that the sarsens grew out of the ground, 'a view "to which they adhere most perniciously"' (Long 1859, 29, in Gillings & Pollard 2004, 132). Folklore dominated thought processes and affected judgements of the origins of monuments. Edmund Gibson, during his trail around Britain to observe Camden's monuments, wrote of Dragon Hill in Berkshire, it is 'a barrow...but whether from hence one may conclude this to be the *tumulus* of *Uther Pendragon*...I leave others to determine.' (1722, I, Berkshire). Yet, Camden was not so easily taken in by the local's name of a site. He commented about a mountain known as '*Camalet*...on the top whereof are the plain footsteps of an old decay'd Camp, and a triple rampire of earth cast up, including 20 acres. The inhabitants call it *Arthur's palace*; but that it was really a work of the Romans, is plain from the Roman Coins daily dug-up there' (Ibid., Somerset).

During the eighteenth century, the destruction of ancient monuments seems to have become a commonplace occurrence. In his *Miscellanies*, Aubrey quoted Francis Bacon, the

Lord Chancellor, as saying, 'It is a reverend thing to see an Ancient Castle or Building not in decay' (1696, 27). According to Balme, Aubrey considered that, 'one of his most important functions in life was to preserve the past from being swallowed up in oblivion' (2001, 100). Gibson spoke of two great stones in the fields of Stanton Harcourt, called the Devil's Coits. They were sixty-five paces apart until one was 'taken down, several years since, to make a bridge' (1722, I, Oxfordshire).

Stukeley regretted 'the oblivion of Jo many famous antiquitys.' (1724, 100). He visited Long Meg and her Daughters stone circle, Cumbria, in 1725. 'It is a great Celtic temple...confisting of 100 ftones....: many are fstanding, but more fallen, and fveral carried away; but lately they have been defstroyed fome by blafting...; others they have fawed for mill-ftones' (1776, Image 53). Another account discussed the destruction of standing stones within *Mayburgh Henge*, also in Cumbria, and relatively close to *Long Meg*, 'Within this fine plain, which is now ploughed up, have been two circles of huge ftones; four remaining of the inner circle till a year or two ago, that they were blown to pieces with gunpowder...One ftone, at leaft, of the outer circle remains, by the edge of the corn; and fome more lie at the entrance within fide, others without, and fragments all about...There are many more fuch-like hereabouts, but ruinous; for the ftones are carried away for building the adjacent moor-houfes and walls' (Ibid., 50-1). Later in the same journey, Stukeley discussed the Shap avenue, and 'the occafion of its ruin; for many of the ftones are put under the foundations of houfes and walls, being pufhed by machines they call a *betty*, or blown up with gunpowder' (Ibid., 48). Nicholson and Burn also reported the loss of many of the Shap Avenue's stones during the later eighteenth century (1777, 477). It is regrettable that so many monuments were destroyed around this time and we are very grateful to the antiquarians who recorded them before they were damaged or lost. In my view, Stukeley, and to a lesser extent, Aubrey, provided us with the most amazing record of monuments. Their architectural drawings of archaeological sites are superb assets.

By the twentieth century, later antiquarians and farmers/landowners had also destroyed vast numbers of prehistoric monuments, for farming and mining activities, as well as through excavation. William Copeland Borlase, who dug in and around Cornish monuments in the nineteenth century, noted that structures were disappearing on a daily basis by farmers reclaiming land and through mining operations. Yet, he himself 'assisted in the

destruction of monuments which he deplored when it was done by other people' (Michell 2007, 116). In the early nineteenth century, another similar situation had occurred on Salisbury Plain, with Sir Richard Colt Hoare and his excavator William Cunnington. Despite the poor recording of their excavations, they were responsible for opening many barrows in that region. Lieutenant-General Lane Fox Pitt-Rivers then went on to level many previously untouched ancient sites in Wiltshire, later that century (Ibid., 123-124), in his search for 'history', not 'treasure' (Gray in Lucas 2001, 19). Having schooled under William Greenwell who had excavated trenches and sections through barrows, Pitt-Rivers carefully conducted open-plan, systematic, detailed and complete excavation and recording (Ibid.) which, nevertheless, led to the destruction of numerous barrows and other monuments in south-west England.

Of the four antiquarians studied, Camden was by far the most diligent and thorough. His results show a keen interest in the outer reaches of England: Northumberland and Yorkshire, followed by Essex and Kent (Figure 6). Leland too focussed his efforts on visiting the furthest regions within England. His most referenced county is Cornwall, followed by North Yorkshire and Somerset (Figure 3). However, in the 1600s and 1700s, the focus of the antiquarian's observations changed. During this period, the antiquarians developed a passionate interest in their county of birth. Aubrey referenced Wiltshire's monuments the most, with Dorset's and Somerset's second and third, respectively. Stukeley focussed more references on his home county of Lincolnshire rather than anywhere else, with Hampshire and Wiltshire taking second and third places. This might well have had to do with the difficulty of travel and cost further afield and also of time constraints.

These antiquarians often used the same few routes for their travels, the reasons for which will be discussed below. Being based in central and southern England, each journey westwards or northwards would have passed through the towns and villages of the midlands and southern England. This seems to have led to an unintended bias towards the ancient structures of central, southern England.

As documented above, the four antiquarians referenced fifty-three English counties, as part of their research into antiquities. Thirty of these were mentioned by all four antiquarians. This demonstrates that, in many ways, the four antiquarians in this study were very

thorough in their efforts to log data about the past. They documented everything which they deemed important to the further understanding of the new discipline of archaeology. They had read and absorbed the visits around Britain by previous travellers and Aubrey, Stukeley and Gibson are all commended by Piggott for their observations and objective assessments of what they saw (1985, 17-8). Piggott also referenced Camden and Aubrey's contributions to our prehistoric knowledge yet failed to mention Leland (possibly due to the difficulty in getting hold of the manuscript, at that time). In my opinion, Leland's eye for landscape and site details made his journeys remarkable, especially as they were made so early in the sequence.

2.9 DIFFICULTIES FACED BY THESE FOUR ANTIQUARIANS

2.9.1 TRAVELS AROUND ENGLAND

Leland was very thorough and dedicated as he rode around England. He was very observant, noticing deserted, or shrunken, medieval villages, 'Ther be evident tokens that of old tyme ther hath beene much building betwixt the toun of Dertmouth now inhabitid and Stoke Fleming, wherapon it must follow that old Dertmouth stode that way, or els that Stoke Fleming was larger then it is now' (Smith 1907, 220). Yet, he noted more than the structures he saw, making many comments about the quality of the routes, as he travelled. An example was his journey from Aylesbury to Wendover, 'There is a causey made almoste thrwghly to passe betwixt Aillesbery and it, els the way in wet tyme as in a lowe stiffe claye grownde were very tedious and ille to passe by.' (Ibid. 1908, II, 112). We can come to certain conclusions about Leland's travel. Crossing the River Trent at Hoveringham, he stated that he took the ferry but that his horse had to wade across at the ford (Chandler 1993, xviii). In my view, this implies that someone rode or led the horse. A lack of explanation regarding the guide implies that this was the habitual means of travel. Yet, Leland only once mentioned travelling with a guide. This was in south Lancashire (Ibid.). Either he often travelled alone, or else, as stated above, felt that this was commonplace and understood, due to both his standing in society and his work status.

Leland seemed to have taken ferries and boats whenever possible. He visited Cumberland by sea, rather than on land, and therefore only reported coastal towns. As Leland had intended to draw a map showing where he had travelled, he included information on river

courses, bridges and distances, such as Rolster and Bow Bridges, the River Avon and the Dart Estuary (Smith 1907, 218-9). He also added in good anecdotal passages, such as those concerning the town of Modbury in Devon (Ibid. 216-7).

Nevertheless, his descriptions of distance were of their time. Regarding Nantwich, Cheshire, Leland referred to a brine pit which was close to the bank of the River Dane, less than a 'bow-shot' above its confluence with the River Weaver (Chandler 1993, 52).

Camden, as stated above, commented widely on everything he saw. Included in this was his view of roadways and flooding, which occurred frequently. The 'fenny', waterlogged ground was 'troublesome' to him throughout Cambridgeshire, Norfolk, Huntingdonshire and Somerset. The land around the Isle of Ely was of interest to him, 'The upper and north-part of this Shire is all-over divided into river-isles...which all the summer-long afford a most delightful green prospect; but in winter are almost all laid under water, further every way than one can see, and in some sort resembling the sea itself' (Gibson 1722, Cambridgeshire, Norfolk, Huntingdonshire, Somerset). At Ramsey Abbey, Camden discussed quagmires in the region and the need for a causeway through the marshland, almost two miles long, but not very broad. He was grateful for a 'pav'd causey with great labour and charge' between Ramsey and Peterborough, 'because that way was well-nigh impassable by reason of brooks and sloughs.' He was clearly concerned by these issues, 'these parts lye so low...they are much infested with the noisome smells of Lakes, and a thick foggy air' (Ibid., Huntingdonshire). In Lincolnshire, he talked about the boats used to transverse the ground, which was so wet, that numerous causeways and bridges were needed to travel around the region.

As Camden followed river courses in his search for antiquities, he was often surprised by the number of times he had to cross rivers, such as along the River Aire, 'The river *Are* issuing from the root of the Mountain *Pennigent*...is so winding and crooked, that in travelling this way, I had it to pass over seven times in half an hour, upon a strait road' (Ibid., Lancashire).

Aubrey too was very vigilant as he travelled. In 1670, he wrote that he had completed a survey of three-quarters of Wiltshire, feeling that he had a 'divine impulse to have it donne'.

He had filled in a map with hillforts, highways, dykes and barrows, from the Rivers Severn to the Dee and Offa's Dyke (Balme 2001, 28-9). Aubrey was also keen for there to be an improvement of certain roads and when noting the course of Stane Street across the Weald in Sussex, he observed that the King should grant a law to insist that the old Roman road was improved. He added that 'this would be of extraordinary use to the Travellers, who are faine to hire Oxen to drive their coaches out of this miry tract of land' (Hunter 1975, 153). Nevertheless, on a number of occasions, Aubrey, who had squandered much of his family wealth through his own generosity and due to the payment of family debts, could not travel as he had no transport. One can see the great difficulties in moving about the country at that time, although it is difficult to consider such trials in the modern era. In his letter to Anthony à Wood, in 1673, Aubrey twice complained that he could not travel, as he had no horse to ride, the debtors having taken them (Balme 2001, 51-2).

Aubrey visited the ancient monuments of Wales in the 1650s (Hunter 1975, 158) and in 1660, according to Evelyn, Aubrey travelled to Ireland, narrowly escaping a shipwreck on his return via Holyhead (Ibid., Image 20). He added, 'Mr. *Aubrey* in his private Notes before me mentions, several Escapes from imminent Danger during the Course of his Life at Sea and Land...I shall omit to specify them particularly'. 'Several Misfortunes upon the Heels of each other at Length reduced this *Virtuoso* and excellent *Naturalist* to very low and mean Circumstances' (Ibid., Images 25-6).

Between 1710 and 1725, Stukeley made yearly summer expeditions across the English countryside on horseback (Piggott 1985, 32), starting his travels from his residence in London (1724, 1). He travelled either alone or with 'convivial parties of fellow antiquarians' (Michell 2007, 10). Gerard Vandergucht and John Pine, both from the Order of Royal Knights, rode with him on several antiquarian tours. They were skilled at converting Stukeley's quick sketches and notes into finished, detailed drawings (Ibid., 48).

At the beginning of his first ever journey, Stukeley provided a long description of the lands around Lincolnshire, an area through which he must have frequently travelled as a child and then later as a parson. In 1722, when Stukeley travelled from East Anglia to Kent, he made an interesting observation. He travelled the whole journey on Roman roads had to cross the River Trent by ferry between Littleborough Roman town and Broughton between

Nottinghamshire and Lincolnshire (Stukeley 1724, 88). However, his guide had, 'little time for antiquities...or for curiosities by the wayside' (Piggott 1985, 64). This will have affected Stukeley. As we will uncover below, Stukeley was interested in his acquaintances, as well as his travels.

2.9.2 ACQUAINTANCES AND ACCOMMODATION

To be able to travel freely around Britain, in the sixteenth to eighteenth centuries, one needed connections and assistance, whether through work contacts or one's personal social standing in society. 'Engaging in the study of domestic antiquities was in itself a mark of social status' (Sweet 2004, 31). While Leland was at work for King Henry VIII, other antiquarians were able to find the time and resources to indulge their personal interests. It must not be forgotten, though, that some antiquarians came from lower social classes, rather than from the aristocracy (Ibid., 44, 57) and needed to forge links with local gentry. Stukeley was clearly mindful of this as he greatly complemented each of his accommodation providers. Antiquarians depended on the support of local landowners, to help them to better understand the antiquities of each region and to buy the volumes they produced. This could have led to a certain conflict of interests. Leland, for example, included information on important men and their family heraldry for each county. Did he do this to ensure their interest in his work and lodgings in certain regions? He often stated data provided for him from verbal information given to him by local gentry (Smith 1907, v), mentioning a discussion with an Ancaster man, in his first itinerary (Ibid., 28). He also used informants to improve his knowledge of a county or region. One known example is Richard Peynell of Grantham, who provided Leland with data about Lincolnshire (Ibid., 287).

Leland did use the homes of acquaintances, as the base from which to make excursions within a region. For example, he stayed at Sir William Leyland's house, Morleys Hall, near Leigh, between Manchester and Byland Abbey, while he completed part of his itinerary (Chandler 1993, xx, 263). He also stayed at Bradgate Hall, Leicestershire and in 1544, he was a guest at the home of the Marquis of Dorset. Lady Jane Grey was living there at that time and would have been 7 years old (Ibid., 279). Sir George Carew provided hospitality for him near Honiton, Devon (Ibid., 105) and in Cornwall, Chandler noted that on Leland's second visit, he received 'hospitality' from Mr Arundel of Gwarnick near Truro, Mr Godolphin of Breage, near Helston, and Thomas Treffry of Fowey (Ibid., 61). In 1542, he

was granted a living at Haseley, Oxfordshire in 1542 and from this very central location, he was able to travel freely around central southern England.

His itinerary to the north-east of England was included to visit friends in the region (Ibid., xx). 'County Durham seems to have been the goal of Leland's north-eastern itinerary...He seems to have been entertained by several Durham gentry', such as the Conyers family at Sockburn; the Earl of Westmorland at Brancepeth; and Lord Bergavenny at Raby. With these mentions, Leland provided big descriptions of family genealogies, such as, of the Conyers family (Ibid., 147). He might then have visited others on his return journey southwards, after one of his northern itineraries, such as, his potential visit to Sir John Gostwick of Willington, Bedfordshire (Ibid., 19).

Aubrey owned parcels of land and houses in Wiltshire, Herefordshire, Monmouthshire and Brecon. His father had inherited two estates in Herefordshire and the estate of Broad Chalke, eight miles west of Salisbury in Wiltshire. Aubrey frequently travelled between them, trying to consolidate his assets. He had to sell Easton Piers in 1671, to try to resolve his debts. He spent a number of autumns in the 1650s at Avebury in Wiltshire, with Colonel James Long (Gillings & Pollard 2004, 136) and had first noticed the great stone circle at Avebury during a hunting trip with friends, in 1649 (Fowles & Legg 1982, 18). In 1671, he stayed at Hoskyns house, Harewood, a few miles south of Hereford and in 1673, he stayed at Nicholas Tufton, Earl of Thanet's house, Hethfield, in Ashford, Kent.

At the end of July 1687, Aubrey wrote to Antony à Wood to let him know that a friend had invited him to stay in Ripon, Yorkshire, a journey which would have taken him several days from his home, 'a considerable undertaking'. While there, he visited many archaeological sites, adding notes to his *Monumenta Britannica* (Balme 2001, 112-113), such as his comments on the Devil's Arrows, mentioned above. In fact, two years later, over sixty years of age, in poor health, and with many other troubles, Aubrey was still attempting to complete this work (Ibid., 120). Aubrey wished to visit Anthony à Wood in Oxford in September 1691, but the coach was full of ill people and there was no room for his dog (Ibid., 130).

Stukeley generally stayed with friends or acquaintances on his travels. His friendships with Lord Hertford, of Marlborough, and the Duke of Montagu (Earl of Winchelsea) played an important part in Stukeley's later life (Piggott 1985, 56). We know that he stayed with Lord Pembroke at Wilton, Wiltshire, from whence he started his *Iter Dumnoniense VI* and the early part of this route suggests that he stayed at Wilton for the first few visits. This is demonstrated by the itinerary; he travelled to Chisenbury Camp (19 miles from Wilton); to Wardour Castle (28 miles from Chisenbury Camp, but only 10 miles from Wilton); then back to Wilton, before heading off to Old Sarum and beyond (Stukeley 1724, VI, Images 138-40). Lord Pembroke had apparently furnished Stukeley with some advisable places to visit in Dorset (Piggott 1985, 66) and later, whilst recording Stonehenge, Stukeley stayed at Wilton House, 'on a number of occasions whilst making his surveys of the monument' (Haycock 2002, 118). Stukeley had a well-established profile as both a scientist and an antiquary, as well as close connections with many leading scientists, antiquarians and natural historians of the day (Sweet 2004, 131-2). From the extract he saw of Aubrey's *Monumenta Britannica*, containing drawings and details of the prehistoric monument of Avebury in Wiltshire and, as it was 'an antiquity altogether unknown' (Piggott 1985, 45), this led to an eager desire to visit the site himself. In fact, his first visit to Avebury was in 1719 with his friends, the Gale brothers (Haycock 2002, 121).

Stukeley must have conversed widely with those around him. There is an instance when Stukeley was staying at an inn and discussed local antiquities with the landlady (1724, VII, Image 191). We can assume from this single mention that when he made references to 'the locals' in other journeys, he was gleaming facts and local information from the people he met *en route*.

2.9.3 WEATHER

We often consider poor weather to be an obstacle, when visiting exposed landscapes and their prehistoric monuments, in the modern era. There are certainly examples of this below. However, firstly, we should consider a hot summer's day. There must have been occasions when heat affected the traveller's concentration and interest and with few, if any, chilled drinks and no air conditioning, the occasional intense heat of summer must have been keenly felt by both travellers and researchers. Aubrey, who struggled with archival research, complained, 'I am tyred with transcribing, this hott weather' (Hunter

1975, 151). Nevertheless, it is likely that poor weather was a huge obstacle to both travel and, in some cases, the locating of monuments. Even today, with GPS and Satellite Navigation systems, it is occasionally difficult to locate upstanding monuments. It must have been much worse in the past. An example is from the late seventeenth century, where the imperfectly-drained Lincolnshire fens had left 'a land of marsh and heavy winter fogs' (Piggott 1985, 26).

The weather in the north of England certainly hampered Stukeley, who had hoped to survey the stone avenue of Shap in 1725. He considered that it greatly resembled that of Avebury, 'as far as I can judge at present; for the rainy weather, which in this country is almost perpetual, hindered me from making at this time a thorough disquisition into it.' (1776, II, 48). Nevertheless, he did manage a superbly detailed written account of the Shap Avenue, which is still of great use to present-day archaeologists.

Camden commented about winter weather and its difficulties, for example, the Parish of 'Okeley' in Surrey 'in winter is extremely wet' (Gibson 1722, Surrey), and, in Winter, Somerset was 'so wet moist, and marshy...for the most part; which makes it very troublesome to travellers.' He also noted that Cannington Marshes were '*extreme wet and fenny*' '(especially in the winter)' (Ibid., Somerset). And that Hockley in the Hole, Bedfordshire, was 'a dirty road, extreme troublesome to travellers in winter-time'. He also wrote about the town of Debenham, Suffolk, 'others will have to be more rightly call'd *Depenham*; because, the soil being moist and clayey, the roads all round it are *deep* and troublesome'.

Aubrey complained that he was struggling to travel due to the weather. He had wanted to travel in June 1673 and in a letter dated July 5th, he wrote the following to Anthony à Wood, 'I intend to sett forth, the wet weather hitherto hindering me' (Balme 2001, 49).

2.9.4 TOPONYMY

The antiquarians were concerned with the names of the places they were visiting. Leland made assumptions regarding placenames and provided clever explanations about the naming of places, such as about Kingston (Smith 1907, 256). Aubrey too had a keen interest in the origins of names; his book, *Interpretation of Villare Anglicanum*, was the first to really

consider English placenames, to try to understand the past. Certain names inspired his interest and 'sent him looking for antiquities like camps and barrows...almost obliterated by the ravages of time' (Hunter 1975, 13, 170).

Stukeley had noted the names that the locals used to describe sites, as well as the 'learned' people's placenames. Among his 1776 additions to his *Iter Romanum V*, Stukeley added, 'There are a great number of large barrows about Sandwich; one at Winfborough, with a tree upon it; so it is called by the vulgar, but the learned make it Wadnesborough: between that and Sandwich is another, called Marvil hill' (1776, 126). Stukeley wrote about a hill in Kent, known to him as Dungeon Hill or Dungil. It is now referred to as the Dane John Mound. Whether he had mis-heard the correct pronunciation of the hill, and therefore spelt it incorrectly (there is a hill called Dungeon Hill in Dorset), or whether the name has changed since the mid-1700s, is unclear. Stukeley wrote Upavon as Uphaven and this could be interpreted in two ways, either as part of the upper River Avon, or the name of a town above the harbour. In either case, he clearly guessed at the spelling, which must have been provided in a verbal rather than written form.

2.9.5 HOSTILITY

The antiquarians never wrote about any hostility or local conflicts they might have had, as they travelled through the countryside, unlike the early travellers (Chapter 3). Nevertheless, Camden made one single comment about struggles he had had with the locals in Cambridgeshire. He stated, '*Fen-men*; a sort of people (much like the place) of rugged unciviliz'd tempers...usually walking aloft upon a sort of stilts: they all keep to the business of grazing, fishing, and fowling' (Gibson 1722, Cambridgeshire). Aubrey, on the other hand, was very pleased with his reception by the strangers he met in Surrey. He wrote that he had found the country people there much more civil than those in Wiltshire (Balme 2001, 49).

2.9.6 INSTRUMENTS

Camden must have used a measuring system to determine the size of monuments. He wrote of Taiesborough Roman Camp, Norfolk: it 'is a square entrenchment...containing twenty-four Acres. It seems to be an Encampment of the Romans' (Gibson 1722, Norfolk).

Aubrey arranged monuments within each of his written sections into groups, 'for the neer resemblance they have to one another' (Hunter 1975, 180). A good example of this can be seen in his visual study of hills or mounds, when he placed Silbury Hill, Wiltshire; Castle Mounds, Berkshire; and Roseberry Topping, North Yorkshire, together, due to their shape (Fowles & Legg 1982, 682). He used 'accurately paced measurements and drawings of numerous examples of the antiquities that interested him' (Hunter 1975, 180) and employed a plane table for his survey of the Avebury monuments (Piggott 1985, 87). Yet, he found the clutter and presence of a working village in and among the stones as an impediment to his recording work (Gillings & Pollard 2004, 141). In the 1720s, Stukeley struggled further, as Avebury's stone circle was being dismantled in front of him. Fortunately, he noted this destruction in his plans (Ibid.). In fact, both Aubrey and Stukeley can be applauded for their commentary on the destruction of earthworks and other ancient structures. Stukeley used a theodolite for measurement of Stonehenge and possibly Gunter's chain, a standard sixty-foot chain for distances (Piggott 1985, 87). He used 'the latest surveying techniques to draw up an exact geometrical representation of the layout and the orientation of...monuments, calculating the original number of stones and the mathematical relationship of their arrangement, as well as establishing what he believed to be the basic unit of measurement, the Hebrew cubit' (Sweet 2004, 128-9).

2.9.7 OTHER FACTORS NOTICED *EN ROUTE*

In the 1500s to 1700s, ancient monuments were also being destroyed for the construction or repair of other buildings. Leland noted that buildings nearby were being constructed from the stone at Hadrian's Wall (Chandler 1993, 337, 341; Smith V, 60-1). He also referenced some carts which were removing stone from Elmsley Castle, to mend Pershore Bridge (Ibid., 19; Chandler 1993, 517). Aubrey, as mentioned above, thought that some of the stones from the Devil's Arrows in Boroughbridge, North Yorkshire, had been used to make local village crosses, 'to save themselves the trouble of drawing huge stones out of the Quarries' (1982, 111). When Camden referred to the Devil's Arrows, it was to comment that one of the two middle stones, which both seemed to almost touch one another, had been recently 'displaced in hopes of finding Money' (Gibson 1722, Yorkshire). Stukeley also referenced the Devil's Arrows. He had heard that one of the four stones had recently been removed to make a bridge over the beck to the east (1776, 74). He was continually

observant as he passed sites, such as one of Caesar's small camps on Watling Street, between Dover and Canterbury, which he noted had been partly levelled by ploughing. Further on the same route, he referred to a great barrow, with a cavity at the top (Ibid., 127). Another example is Knave's Castle barrow, also on Watling Street, south of Stafford (Ibid., Volume 2, Image 29). Whether these are both evidence of collapsed internal wooden chambers or of antiquarian or robber interference is not clear. However, the most important statement he made concerned the Shap stone avenue, Cumbria. He wrote that as the stone avenue reached the village of Shap, its procession halted. At this point, its stones had been removed from the avenue leaving it in ruins. Stukeley also discussed the destruction of the banks at King Arthur's Round Table, ten miles further north. He wrote that the inhabitants were removing the earth to mend the highways in the area (1776, 42-43).

2.10 CONCLUSION

This research has demonstrated that the dating of prehistoric monuments was, for the most part, beyond the abilities of the early antiquarians, although it was clearly attempted. The antiquarians sought primarily to document each structure, using their own personal view of its origin (often Danish, Celtic, Saxon, Viking, Roman or early British), based on the monument's shape and size, as well as their perceived view of the quality of construction. 'The eighteenth century had no concept of prehistory nor was there any meaningful anticipation of a three-age theory. The conceptual barrier to be overcome in arriving at an understanding of differentiated temporality in the pre-historic past was immense' (Sweet 2004, 151). While this is true, this study has demonstrated the huge effort made by the antiquarians to date sites, at a time when the world still accepted the deluge theory and antiquarians had to rely on historical sources. As time went on, each antiquarian traveller learned from those who ventured before them. Stukeley's assessment of prehistoric structures was therefore much more advanced than Leland's. Nevertheless, each antiquarian made both excellent and poor assessments *en route*. We underestimate the trials they went through, simply to journey around Britain, let alone the hazards they suffered. That they provided any written record of what they saw is amazing. The survival of written notes is nothing short of a miracle, considering the general travel experiences of the time. Yet, in many cases, they achieved even more. Both Aubrey and Stukeley created

many drawings, in romantic and architectural format, to demonstrate what they witnessed. The power of these images is still felt today. One cannot leaf through Mortimer's (2003) compilation of Stukeley's illustrations without being awed by the spectacle. Without the aids of flying or modern technologies, these early antiquarians drew house and monument landscapes from above, with great precision. They carried plane tables with them around the countryside to improve the accuracy of their work. The four antiquarians studied were pioneers, whose feats cannot be underestimated.

Studying the travels of these four antiquarians has been an enlightening endeavour. Their ability to visit locations around England was far more hazardous and fraught with difficulties than expected. Travel was the biggest barrier to each of these travellers. It is clear from their maps, in particular Leland's (Figure 3), that their itineraries rarely ventured off the main routes, remaining along waterways (such as, Camden), roads and the sea (such as, Leland). Aubrey travelled between his own properties and those of friends, in southern England and Wales. Stukeley journeyed from Lincolnshire to London, and often stayed with friends in Kent and Wiltshire. It is clear that wealth and contacts made huge differences to their abilities to get from one end of the country to the other. This framed the places they referenced the most. These four antiquarians had to rely on the generosity of others. They needed accommodation when travelling. They relied on word of mouth to know which places and monuments to visit. They depended upon good weather to see structures around them, and decent travel conditions, to enable them to visit an array of structures, whilst they were in a certain region. Money and time for long journeys were major constraints to their ability to see everything they heard about. Even with connections, such as those possessed by Leland, other issues were paramount. The difficulties of travel, due to road quality, groundwater and the weather, hugely hampered these antiquarians. Other factors, such as the co-operation of locals, must have added to the complex and daily struggles faced by these dedicated and able men, who lived within spheres of influence, each of which shaped what they could and could not achieve. Their connections to lawmakers and powerful men affected what they recorded and began a wider interest in certain monuments and places over others. To achieve these travels, these antiquarians needed vast amounts of time and money. It is clear from Aubrey's letters that once the money ran out, it was difficult, if not impossible, to be able to continue the quest to visit

all ancient structures within the landscape. This forced Aubrey to remain in his local area, rather than travel widely. When these men did manage to travel freely around the countryside, they were hampered by the road quality and the weather. Their accommodation and acquaintances directed their journeys and routes and they inevitably passed through some locations much more frequently than others on their journeys from their home to other places. Nevertheless, their journeys created itineraries, mainly of the south of England, which other interested parties could follow in the future, leading ultimately to this thesis and its necessary focus on northern England.

These early antiquarians shaped the focus of interest in prehistoric monuments within England. Their descriptions are still used today, either to add a depth of interest to an ancient monument (Frodsham, on Long Meg, forthcoming; Parker Pearson 2012, 2) or to demonstrate a total lack of interest (such as, Harding 2013, 1). Their interest, or lack thereof (based on geographical location, understanding, etc.), has influenced which areas of England are well-known; which areas have been studied by successive generations of archaeology students and their professors; which monuments are household names and which remain obscure. By the early nineteenth century, 'Stonehenge was rapidly becoming one of the most famous monuments on the English landscape, not least because it was sited at a convenient distance between London and Bath, near to Salisbury (where the cathedral was widely regarded as the finest specimen of Gothic architecture in the country) and Wilton House (with the earl of Pembroke's collection of Roman marbles), greatly facilitating its attractiveness as a site of interest to the travelling *beau monde*' (Sweet 2004, 134). Yet, it was also somewhat unintentional. The early antiquarians were dependent on where they could travel, on who they knew, where they themselves lived, how they promoted their findings, to whom they presented their data and how widely their work was published.

Antiquarians continue to fascinate modern-day archaeologists with their descriptions of prehistoric monuments. It is interesting to look at how they pieced together a timeline of prehistoric events without the archaeological techniques used today: noting different phases of construction and determining which monuments must precede others, to explain ancient structures and lumps and bumps in the landscape. Good examples include Leland's description of the Devil's Arrows stone row in Boroughbridge, North Yorkshire; Camden's

use of classical sources to determine the age of monuments; Aubrey's attempt to date hillforts by their shape and size; and Stukeley's time-ordering of barrows as prehistoric, despite the lack of Roman artefactual evidence. The names of the prehistoric structures they encountered are still used today, with several examples at Stonehenge. John Aubrey recognised the previous locations of the monument's bluestones, now known as the Aubrey holes. William Stukeley was fascinated by the Greater and Lesser Cursus, the larger of which he named, as well as the trilithons, although he misunderstood the Cursus' ages and original purposes.

The antiquarian itineraries can provide more than a fascination of past thought processes. Their journeys offer geographical information on which monuments were visited throughout Britain, demonstrating which sites were recognised and accessible, and when they became so, as well as which monuments were focussed upon and which were excluded from geographical journeys, and why. Bad weather and poor terrain, for example, meant that Leland missed the Yorkshire Dales' monuments. Although one cannot follow Leland, Camden, Aubrey and Stukeley around the countryside, one does get an insight into their geographical areas of interest, as well as the time periods they recognised and in which they showed awareness. 'Ridiculous' and 'futile' are words which, in the past, have been used to describe antiquarians and their pursuits (Sweet 2004, xiii). Yet, to consider them in this way, is to overlook their contribution to the understanding of Britain's monuments today and the focus of some regions over others. Antiquarians travelled around Britain, encouraged to record and preserve the knowledge of historical monuments, which were disappearing. Their actions were 'firmly grounded in a patriotic agenda because antiquities cast light upon history, and a nation's history was its identity' (Ibid., 36).

This chapter has begun to address the broader research question of how and why the N/EBA monuments of northern England have been marginalised in recent national discussions. It has demonstrated how prehistoric monuments began to be noticed by early antiquarians, the constraints and challenges they faced and their attempts to uncover knowledge. The following chapter will now consider other early travellers, from similar perspectives, to see if they too endeavoured to visit monuments through Britain, the issues they faced and how they dealt with them.

3 EARLY TRAVELLERS

This chapter further addresses the research question to try to understand how and why the Neolithic and Early Bronze Age monuments of northern England have been marginalised in recent, national discussions, through a focus on other early travellers during the later sixteenth to nineteenth centuries. Both map-makers and early tourists provided useful insights into the types of constraints that all travellers must have confronted in the post-medieval period, which included travel, accommodation, weather, route quality and other difficulties. This research highlighted the endeavours of these stalwart pioneers and emphasises which areas were more easily able to be visited than others, and why.

3.1 INTRODUCTION

In order to place the four antiquarians from Chapter 2 within a wider context, other sources needed to be examined. Many individuals and groups of people were travelling around England's roads during the 1500 to 1900 period. Much of their commentary has now been lost but some was fortunately recorded, either in diary or note form, providing evidence of the real-life situations faced by travellers: the poor quality of roads; the abysmal weather; and local hostility being just some of issues faced. The map-makers: Speed, Ogilby and, later, the surveyors involved in the production of the First Series Ordnance Survey maps of Britain were specifically studied, due to the large distances they travelled in their work, to look for data regarding prehistoric monuments, either in the form of imagery or written text. Other early recreational travellers' commentaries were also included, to add weight and more insight into voyages around Britain and the landscapes visited in the post-medieval period.

Christopher Saxton (1542/4-1610) was one of the first English cartographers. Before him, there was the 14th century Gough map, a symbol of Edward III's power and reach (Ereira 2016, 274-275), and Matthew Paris' early map of Britain, dating to 1480 (Williams 1937, 16). Saxton was apprenticed to the Yorkshire cleric, John Rudd (1498-1579), who in turn was paid by Elizabeth I for map-making services (Tyacke & Huddy 1980, 6-7). Saxton's mapping was probably financed, at least in part, by Thomas Seckford (1515-1587), as his coat of arms appeared on every sheet (Ibid., 25). Rudd had mapped England and Wales,

producing a survey of England in 1561. Certain places needed to be visited/re-visited to improve this mapping and it was Saxton who undertook these tasks (Ibid., 24). He produced an atlas of 34 maps of England and Wales, which were engraved and printed between 1574 and 1579. In 1685, his maps were engraved again, this time updated with the addition of Ogilby's road maps (Ibid., 38). Although Saxton was the first to illustrate and name 'The Stonadge' as Stonehenge (Figure 17), he has not been used for this study, as none of his working papers survive.

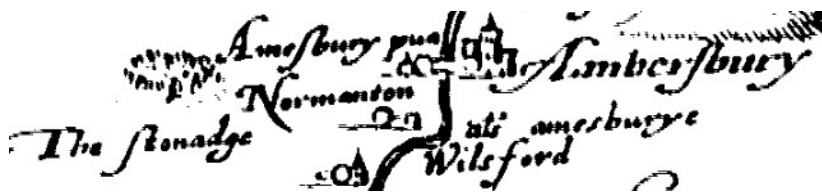


Figure 17 - Saxton 1590, Image 7, of the location of Stonehenge, Wiltshire

The Highways Act was introduced in 1555 to improve Britain's roads, through the filling of potholes and the re-laying of certain sections. 'Every parishioner was liable to perform six days' road maintenance work a year if called on by the parish's Surveyor of Highways' (Ereira 2016, 268). However, the quality of the work was unpredictable (Hewitt 2010, 18), though some main roads benefitted from the introduction of the stagecoach and the Turnpike Act in the seventeenth century. In the eighteenth century, roads were still very poor, muddy and full of ruts (Ibid.). Nevertheless, over the second half of the century, 1100 separate turnpike trusts were set up over 22,000 miles of road (Ibid., 183). Guideposts and milestones were used along main thoroughfares from 1773 (Ibid., 198) and from 1783 onwards, John Loudon McAdam started to improve road quality, first in Scotland and later in England. His roads were especially constructed with larger stones at the base and smaller stones above, with camber used to improve drainage, leading to easier travel, with faster and therefore cheaper stagecoach journeys (Ibid., 183). Despite this, when completing the Trigonometrical Survey of Scotland, the surveyors found the ground sodden and bumpy, throughout the 'five continuous days and nights of jolting, swaying, clattering, relentless motion' to travel from London to Edinburgh by mail-coach (Ibid., 222). Along stagecoach routes, however, local historians managed to exploit the curiosity of domestic travellers, by offering a diversion to the tedium of travel. They suggested the reading of church inscriptions, whilst the horses were fed; or to look out for barrows, stone circles, Roman camps or Medieval ruins *en route* (Sweet 2004, 311).

Before map-books, people travelled from place to place with printed itineraries, which were widely available (Ereira 2016, 268). Hired guides fell out of fashion in the eighteenth century and travellers began more and more to complete visits, aided only with these itineraries and reproduced county maps (Hewitt 2010, 209). Over the 100 years after the publication of John Ogilby's *Britannia Depicta* or *Ogilby Improv'd* in 1720, traveller's hand-books, such as *Ogilby and Morgan's Book of the Roads* (Ereira 2016, 411), Alexander Hogg's *The Complete English Traveller* (1771) and Gent's historical and antiquarian accounts of York, Hull and Ripon became available to aid travel around Britain (Hewitt 2010, 147). These were produced as reasonably-priced Pocket Companions (Sweet 2004, 323, 310) and this was the start of 'picturesque tourism', where engravings of ancient buildings and monuments, and travel books containing antiquarian scenes and data, 'provided information upon antiquities in an accessible...format'. 'Readers were promised that their minds would be improved and their eyes delighted' (Ibid., 309, 323). These travel itineraries were educating the interested antiquarian and the cultural traveller alike, forming a commercial interest in antiquities. For those seriously captivated by ancient monuments, volumes of detailed itineraries were produced listing ancient structures and with descriptions of each feature. It is important to note that these antiquarians and other early monument visitors were constrained by the times that they travelled. Beliefs and myths were rife among sixteenth and seventeenth century travellers. In the seventeenth century, Bishop Ussher had dated the post-deluge age of the world at 4004BC and this manifested itself into a huge issue, when antiquarians attempted to place monuments into a series or order in the past. The myth of Arthur also prevailed, which biased the viewpoints of visitors, many of whom tended to relate all associated monuments to that era.

Within this chapter, each of the early travellers, including both early mapmakers and tourists, will be studied. Their experiences will then be compared and contrasted within the Discussion and Conclusion.

3.2 JOHN SPEED

John Speed (?1551-1629) produced his first set of maps of Great Britain in 1610-2, using Saxton's original maps, with additions from John Norden. '*The theatre of the empire of Great Britaine: Presenting an exact geography of the kingdomes of England, Scotland,*

Ireland, and the Iles adjoining...’ contained 44 maps of English counties, with a later edition in 1676. Given the rarity of this map book, the 1676 version was accessed and each map was closely studied to look for prehistoric site references. The University of Cambridge Digital Library was later used, as the maps had been expertly scanned in colour and were of excellent quality for magnification, to make every word easily legible and to allow for some ‘snipping’ of key information (<https://cudl.lib.cam.ac.uk/view/PR-ATLAS-00002-00061-00001/1>). The British maps from Speed’s, *‘A Prospect of the most famous parts of the world’* (1668) were also closely examined, as this was printed after Speed’s death but, as no prehistoric archaeological sites were referenced, this has not been included in the following discussion.

Tyacke & Huddy commented that Speed had not re-surveyed the country but had relied on Saxton and Norden’s work (1980, 45). However, Speed is likely to have checked their maps, as he wrote, ‘by mine own travels through every Province of England and Wales, mine eyes have beheld’. He did, however, add that plans of the cities and shire-towns may have been completed by others (Speed 1676, Image 6). Speed, whose maps were created during Elizabeth I’s reign (Goffart 2003, 81), was desirous to raise Britain from ‘the pit of obscurity’ he felt it was in and in this endeavour, he had the support of Richard St. George, the Norray King at Arms at that time (Speed 1676, Image 7).

3.2.1 JOHN SPEED’S RESULTS

Speed’s 1676 version proved very useful for this study. He regularly noted the following details: Hundreds’ and Wapentake’s boundaries; river courses, dykes, meres and fens; bridges; villages, towns and cities (and the size of their churches); castles; vales, chases, parks, groves, woods and forests (and those enclosed); other non-descript enclosures; hills and camps; ships on the sea, fishes and sea monsters; occasional parts of a Roman road; windmills, coal pits, crosses and beacons; as well as people working the land, leaping deer, grazing animals and swimming ducks/geese/swans. Main cities and shire-towns had their own, beautifully-illustrated, detailed maps, which included houses, mills, wells, crosses, churches, roads and other key sites. Notable families from each county were also referenced, along with their coats of arms, as well as key local battles and Roman inscriptions. It is curious that no roads were drawn on any of these county maps. However, the only archaeological sites deliberately referenced by Speed in *‘The theatre’*, were

Stonehenge (Figure 18; Figure 19; Figure 20; Figure 21) and the Hurlers stone circle, Cornwall (Figure 22), although this drawing, in rigid linear form, is extremely unusual.



Figure 18 - Speed 1611/2, Image 62 of Stonehenge, Wiltshire



Figure 19 - Speed 1611/2, Image 62. Beautiful illustration of Stonehenge, Wiltshire



Figure 20 - Speed 1676, Image 35 of Stonehenge, Wiltshire

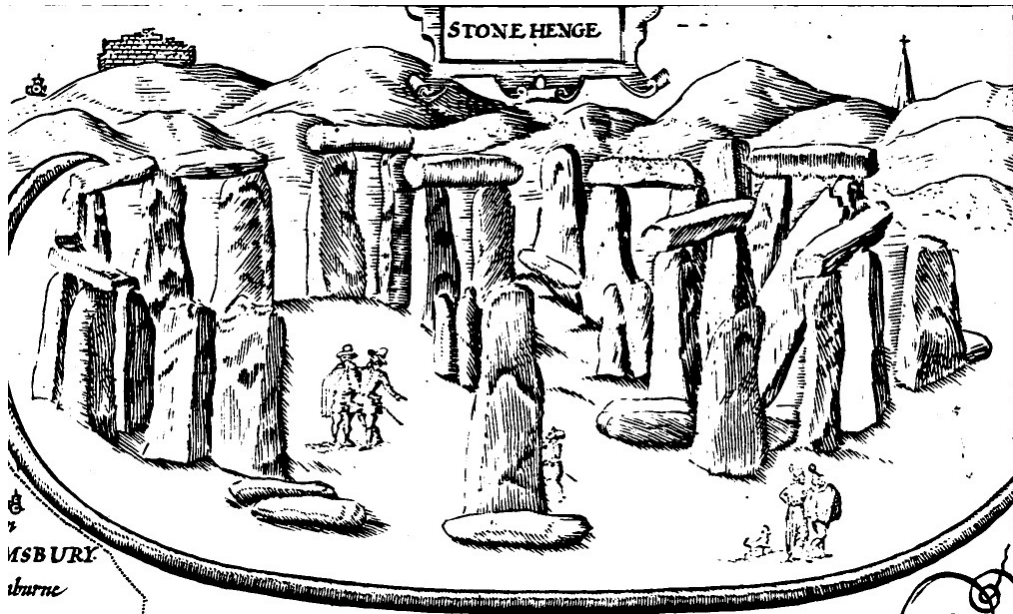


Figure 21 - Speed 1676, Image 35 Illustration of Stonehenge, Wiltshire



Figure 22 - Speed 1676, 21-2. Representation of The Hurlers stone circle, Cornwall

Speed did, however, refer to a few of the upstanding stone groupings which he passed en route and to one prominent set of trees (Figure 45; Figure 46). In all cases, these seem to have indicated hundred, wapentake or county boundaries, where no river, bridge or town could form a reference point. There are two examples from Cumberland, that is, the Dunmail Raise Cairn stones (Figure 23; Figure 24; Figure 25) and the Shire Stones on Wrynose Pass, one of the most extreme and steep routes in the Lake District (Figure 26; Figure 27) and one from the Gloucestershire border (Figure 28; Figure 29). The other references were for the Holme Stone in Kent (Figure 30; Figure 31; Figure 32); and for upstanding stones in Staffordshire, on Derbyshire's border (Figure 33; Figure 34; Figure 35);

Westmorland (Figure 36; Figure 37; Figure 38; Figure 39; Figure 40; Figure 41); Wiltshire (Figure 42; Figure 43; Figure 44) and Yorkshire (Figure 45; Figure 46). These latter Shire Stones were also referenced by Stukeley (1776, Image 148).

Cumberland



Figure 23 - Dunmail Raise Cairn, at the Hundred boundary, to south-east of Thirlmere, shown in location to Ambleside, Great Langdale and Patterdale (Speed 1611/2, Image 19)



Figure 24 - Speed 1676, Image 96. Dunmail Raise Cairn, at the Hundred boundary, to south-east of Thirlmere, shown in location to Ambleside, Great Langdale and Patterdale



Figure 25 - Speed 1676, 87-8. Dunmail Raise Cairn, shown in location to Helvellyn



Figure 26 - Speed 1611/2, Image 19. Three Shire Stones, noted on top of Wrynose Pass, Cumbria



Figure 27 - Speed 1676, Image 96. Three Shire Stones, noted on top of Wrynose Pass, Cumbria

Gloucestershire



Figure 28 - Speed 1611/2, Image 28. The Shire Stones, at the junction of 3 counties, namely, Gloucestershire, Warwickshire and Oxfordshire



Figure 29 - Speed 1676, Image 56. The Shire Stones, at the junction of 3 counties, namely, Gloucestershire, Warwickshire and Oxfordshire

Kent



Figure 30 - Speed 1611/2, Image 35. The Holme standing stone

This Holme Stone, Kent, was later used to house a Triangulation Point for the Ordnance Survey (Figure 32). Given the marshy ground, it was probably the only safe place to put it.

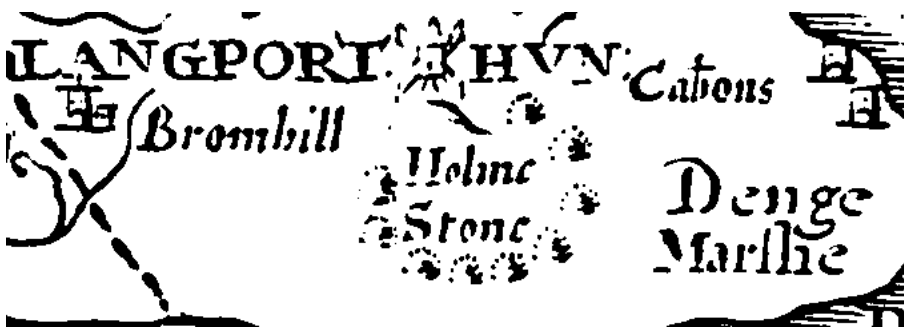


Figure 31 - Speed 1676, Image 17. The Holme standing stone



Figure 32 - The Holm Stone, now only referenced as a Triangulation Point, placed between 1870-1890 (<https://digimap.edina.ac.uk/roam/map/historic>)

Staffordshire



Figure 33 - Speed 1611/2, Image 55. The three Shires stones, at Staffordshire's northern boundary, no longer visible probably due to the later quarries and coal pits at this location



Figure 34 - Speed 1676, Image 76. The three Shire Stones



Figure 35 - Speed 1676, Image 78. The three Shire Stones

Westmorland



Figure 36 - Speed 1610, Image 66. County Stone, Westmorland – same stone as in Lancashire below

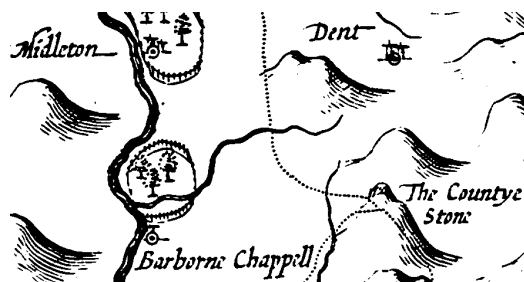


Figure 37 - Speed 1676, Image 94. County Stone, Westmorland – same stone as in Lancashire below



Figure 38 - Speed 1610, Image 36. County Stone, Lancashire - same stone as in Westmorland above



Figure 39 - Speed 1676, Image 84. County Stone, Lancashire - same stone as in Westmorland above

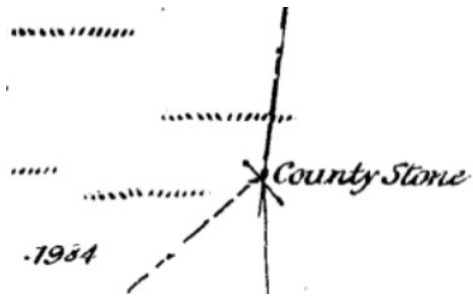


Figure 40 - (<https://digimap.edina.ac.uk/roam/map/historic/1850s>). The County Stone, Westmorland and Lancashire, still extant in 1850



Figure 41 - (<https://digimap.edina.ac.uk/roam/map/os/> accessed January 2019). The County Stone, Westmorland and Lancashire. Now known as the Cross-Stone

Wiltshire



Figure 42 - Speed 1611/2, Image 62. The Shyre Stones, north-west of Ditteridge



Figure 43 - Speed 1676, Image 35. The Shyre Stones, north-west of Ditteridge



Figure 44 - The Three Shire Stones, now a place name, rather than an archaeological site (<https://digimap.edina.ac.uk/roam/map/os/> accessed January 2019)

Yorkshire – West Riding



Figure 45 - Speed 1610, Image 66. The Shire Oaks, between the West Riding, Derbyshire and Nottinghamshire



Figure 46 - Speed 1676, Image 76. The Shire Oaks, between the West Riding, Derbyshire and Nottinghamshire

Speed did not reference roads on his maps. However, in the version used for this analysis, Mr. E Phillips boasted that, in this new edition, he had added 'The Principal Roads, and their Branches leading to the Cities and chief Towns in *England* and *Wales* with their computed distances' (E. Phillips, within Speed 1676, Image 2). Phillips included five additions,

- 1) London to Berwick
- 2) London to Holyhead
- 3) London to Bristol
- 4) London to Land's End
- 5) London to the South-East, South & South-West

An example of these, London to Berwick, can be seen in Figure 47. The main road, with its branches to other towns, is presented in a stilted, formulaic way which, although easy to understand, is strangely dry and devoid of all helpful data (such as, structures seen *en route*).

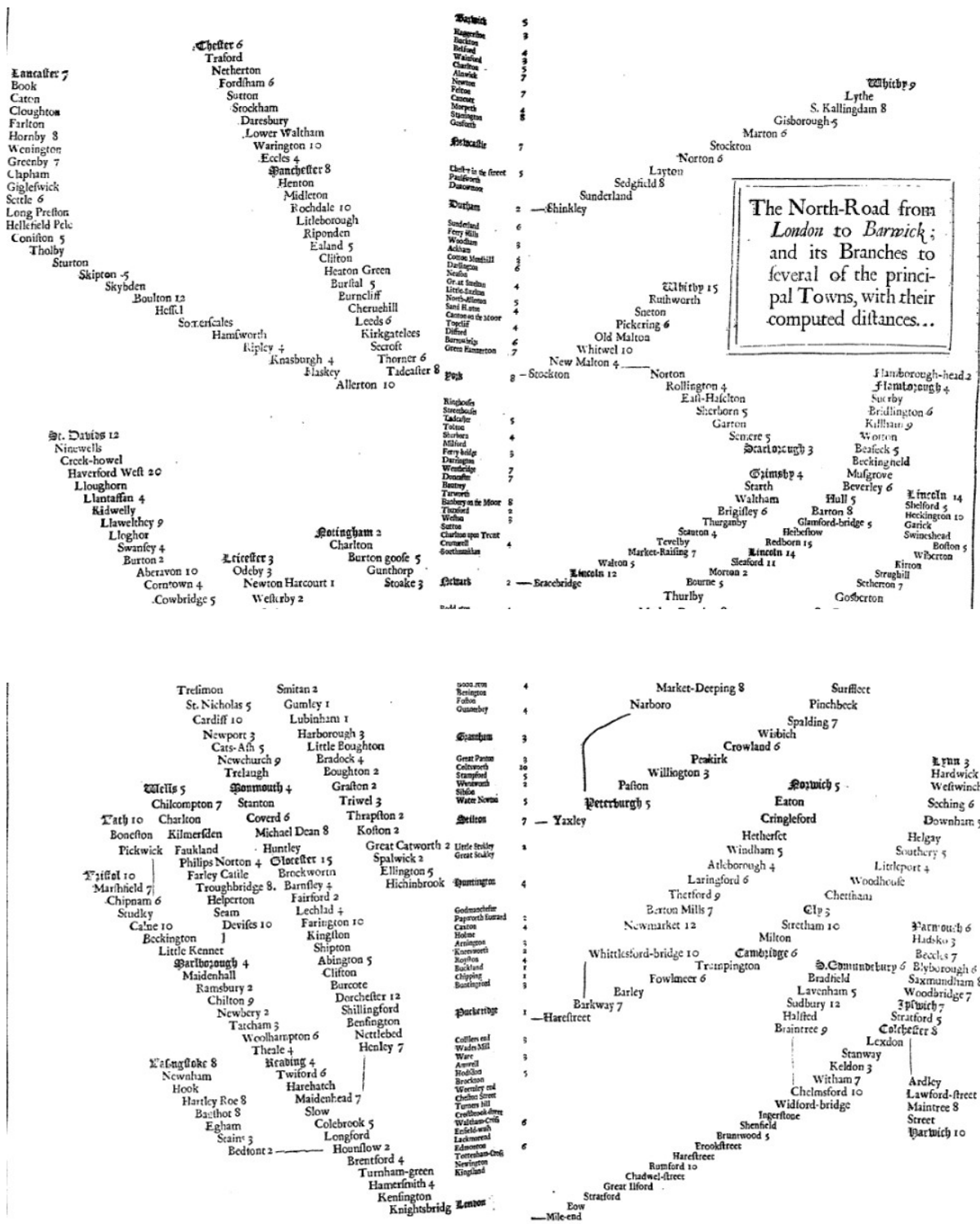


Figure 47 - Speed 1676, Image 139. The Principal Roads, and their Branches leading to the Cities and chief Towns in England and Wales with their computed distances

3.2.2 JOHN SPEED'S ANALYSIS

So, despite passing numerous prehistoric sites *en route*, Speed chose only to reference the Hurlers and Stonehenge. This is unusual, as he must have passed some monuments, such as the monolith at Rudston, East Yorkshire, as he included the Rudston church on his map.

An explanation for these lack of references may be found in his introductory section, *'To the well-affected and favourable reader'*, where he stated that, according to the title, he would focus on the location of towns and cities only, *'in this employment I am somewhat to excuse my self from wrongs conceived done unto more beautiful and richer Corporations, which in this survey are in silence over-passed...oftentimes it grieved me much to leave such beautiful places un-touched: which notwithstanding being well known so to be, giveth no little glory to the Land in general'* (1676, Image 6). Another main point to note is that Speed clearly did not intend this map to be used by road travellers, as no county roads were drawn on the map. This lack of roads serves to remind us that the primary means of travel in the past (if one was not a soldier) was probably not by road. The third point, which is clear from these maps, is that south-eastern and south-western England's counties were still in a period of flux and unrest. An example is an area known as 'No mans land' in Hertfordshire, just to the north of St. Alban's (Ibid., Image 49). Many of the Hundreds in other counties were broken up and disjointed, such as in Hampshire and Gloucestershire (Ibid., Images 23 & 56).

3.3 JOHN OGILBY

John Ogilby was born in 1600 and died in 1676. At age 65, he lost everything in the Great Fire of London, yet at his death, Ogilby was Charles II's cosmographer (Piggott 1985, 21), having received *'exprefs Orders...for Surveying the Principal Roads of the Kingdom of England and Dominion of Wales'* (Ogilby 1698, Image 2). Using *'industry and prudence'*, he completely changed his career, regaining his estate and honour (Anthony à Wood in Ereira 2016, 245-246). In 1675, Ogilby published his transverse map book, *Britannia, volume the first, or, An illustration of the Kingdom of England and dominion of Wales*. Just as the Peutinger Table was a schematic diagram of the road network of the Roman Empire from Ireland to India and a Chinese Table had been drawn of *'The Roads, and Distances of the great Cities of China one from another'* (Ereira 2016, 274, 290), so Charles II wanted to also be the absolute master of his lands. After a broadsheet advertisement, Ogilby took the role as Royal Cosmographer in 1671, being upgraded to his majesty's cosmographer and *'deponent'* in 1674 (Ibid., 308-309, 374). Ogilby had obviously read both Camden and Leland's works, as he referred to them within his county surveys (1675, Images 126 & 150, respectively). Aubrey was also involved in Ogilby's work, providing him with assistance, by

acting as his deputy during the survey of Surrey in 1673 (Balme 2001, 48), as were hundreds of law-makers and clergy throughout England and Wales, who were expected to supply detailed answers to a set of questions about their region, firstly on a voluntary, later on a compulsory basis (Ereira 2016, 308). Added to this, Ogilby himself, with his workers, had surveyed 25,000 miles of road (Ibid., 52), although Ogilby stated at the time that he had surveyed above 40,000 miles (1675, Image 9), recording journeys at one inch to one mile. Each of these was measured using a 'way-wiser' or 'dimensurator'. The machinery required at least 2 caretakers to keep the machine clean and moving (Ereira 2016 272, 326). Ogilby added that gentlemen would be pleased to note that this was not only a road-book, but he had also included his *Britannia*, which comprised of descriptions of, among others, 'Remarkable Places' and 'Ancient Monuments' (Ogilby 1698, Image 2). 'Subscribers' were encouraged to pay to have their 'Achievements Residences and Titles of Honor' inscribed onto the maps (Ereira 2016, 319). In fact, the Earl of Denbigh complained that his family had not been well enough represented within *Britannia* (Ibid., 311).

Using Ogilby's maps, *An actual survey of all the principal roads of England and Wales: described by one hundred maps from copper plates* was also produced. This was an amended version of Ogilby's works, published after his death by John Senex in 1719, 'First perform'd and publish'd by JOHN OGILBY, Esq.; And now improved, very much corrected, and made portable by JOHN SENEX.' and as can be seen below, the Senex version includes a number of additions. These were probably added by Senex himself, using the prehistoric sites referenced in the *Britannia* commentary, even though they were not specifically inked onto the original 1675 transverse maps.

Given time constraints, it was not possible to fully analyse every map by Speed or Ogilby against today's Ordnance Survey maps. I therefore scanned each map, looking for any references to prehistoric structures, or the specific names of those structures, such as Stonehenge.

3.3.1 JOHN OGILBY'S RESULTS

Ogilby's transverse maps detailed a general survey of England, from each road travelled and regularly included numerous features, which could be seen from the road. These were beautifully illustrated and consisted of: shire and county boundaries; seas, hills, mountain

ranges and valleys (vales); villages (vill), market-, post-towns and cities (and a representation of their numbers of houses & their linearity, scattered, nucleated or discontinued forms); ports, havens, harbours, cliffs and piers; town gates; half-way, watch-and alms-houses; farms; churches, chapels, priories; some crosses; hospitals; stately homes and castles (even those demolished); pasture (including sheep downs) and arable fields (with occasional reference to cornfields); parks, commons, warrens, greens, furs, fens, sands, marshes (moorish, fenny, boggy), heaths, pounds and moors; open and enclosed landscapes; public houses, smithys and windmills, including on occasion a reference to the type of mill (flour, paper, iron, silver, tin, sword & powder); ferries; rivers, (flu/fluv), drains, dykes, rills, brooks, rivulets, ponds, conduits and wells, including one sweep-well; roads, by-ways, foot-bridges, draw-bridges, horse-bridges, fords and bridges (plus their construction material and number of arches); steep banks; causeways; stone heaps; rocks; forests, woods, orchards and occasionally, individual bushes, hedges and trees (and occasionally, their type, ash, beech, oak, hawthorn, sycamore and willow); quarries, kilns, mines (e.g. lead, alum, silver); coal, gravel, lime, marl, tin and brine pits; a lead furnace; a bowling green; a maypole and multiple sets of gallows.

Occasionally, Ogilby would reference a stone as part of his description. This may have been a county boundary stone (Figure 48) or a prominent stone within the landscape, which may have been identified due to its colour (Figure 49; Figure 62). One was noted in Cornwall and one on the route between York and Lancaster (1675, Images 103 & 284).



Figure 48 - Ogilby 1698, Image 29. The Shire Stone, Warwickshire

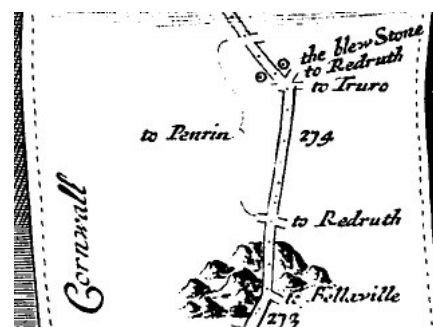


Figure 49 - Ogilby 1675, Image 103. The 'blew' (blue) stone, Cornwall

However, sometimes, Ogilby noted a group of stones, such as the Dunmail Raise Stones, a Bronze Age round cairn on a stone platform, in Cumberland (Figure 50). In this case, he stated that they were ‘(as fuppos’d) caft up by *Dunmaile* King of *Cumberland* for the Bounds of his Kingdom’ (Ibid., Image 310).



Figure 50 - Ogilby 1675, Image 308. Dunmail Raise Stones, Cumberland

In his London to Montgomery route, Ogilby labelled the 4 Shire Stones, just at the entrance to Gloucestershire (Figure 51) and the 3 Shire Stones on the border of Oxfordshire (Figure 52). He noted the Robin Hood’s Stone to the north of Papplewick, on his route extension from Oakham to Richmond in Yorkshire (Figure 53) and referenced two stones that he saw *en route* from St. David’s to Holywell (Ibid., 219) (Figure 54). He noted the Merres Pill and the Rundle standing stones (Rundlestone) in Devonshire (Figure 55; Figure 56), describing them as ‘Direction’ stones (Ibid., Image 228). He also passed two great Stones, one after leaving Norwich, *en route* to Cromer (Ibid., Images 242-3) (Figure 57); another between Thetford and Barnham in Suffolk (Figure 58); one near Wisby (Figure 59); a further stone and two posts, all on the right-hand side of the Nottingham-Lincoln road, just outside Lincoln (Figure 60); and a stone on the Salisbury-Campden, Gloucestershire road, past Burford (Figure 61).



Figure 51 - Ogilby 1675, Image 151. The 4 Shire Stones, Gloucestershire

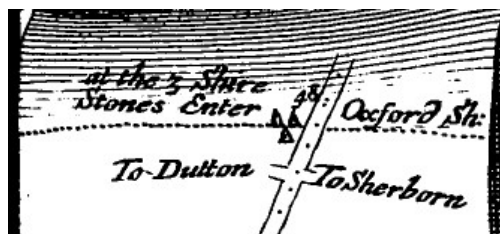


Figure 52 - Ogilby 1675, Image 185. 3 Shire Stones, Oxfordshire

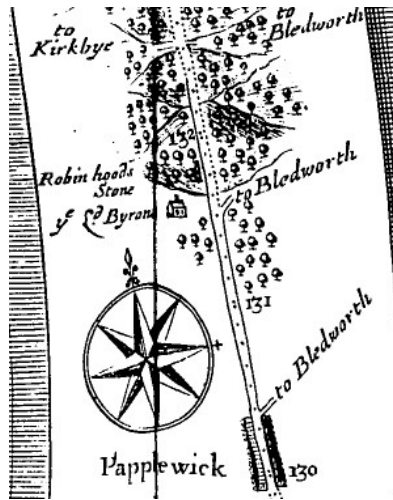


Figure 53 - Ogilby 1675, Image 164. Robin Hood's Stone, Yorkshire



Figure 54 - Ogilby 1675, Image 217. Standing stones between St David's and Holywell

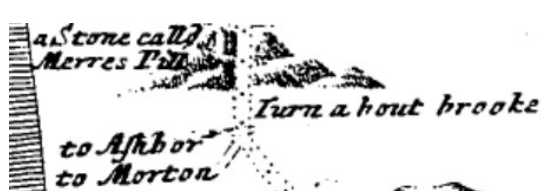


Figure 55 - Ogilby 1675, Image 226. Merres Pill standing Stone, Devon



Figure 56 - Ogilby 1675, Image 226. Roundle standing stone, Devon

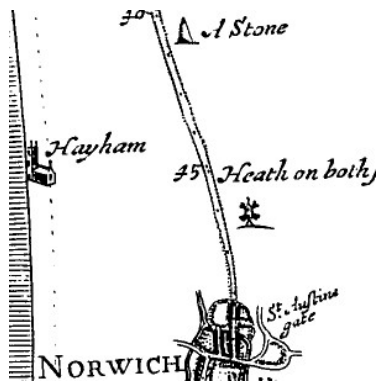


Figure 57 - Ogilby 1675, Image 242. Standing stone outside Norwich

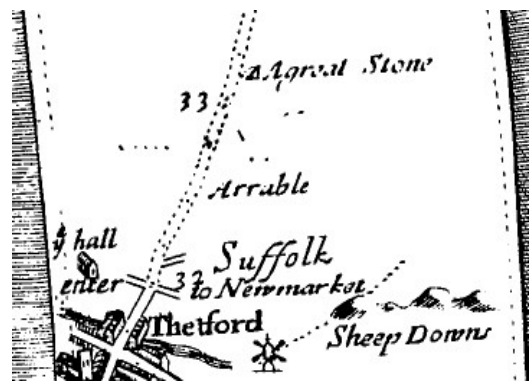


Figure 58 - Ogilby 1675, Image 244. Standing stone, Suffolk

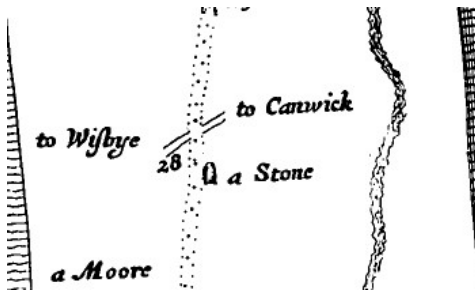


Figure 59 - Ogilby 1675, Image 253. A standing stone near Wisby, Lincolnshire



Figure 60 - Ogilby 1675, Image 253. A standing stone and 2 upstanding posts, Lincoln



Figure 61 - Ogilby 1675, Image 275. Standing stone, Burford.



Figure 62 - Ogilby 1675, Image 284. A 'blew' (blue) stone, between York and Lancaster.

Ogilby was extremely observant and consistent in his illustrations. He added a Notes section for each route, to explain aspects of the wider landscape which might aid a traveller. He discussed numbers of houses in each location, markets and fairs, inns for entertainment, as well as the occasional quality of the houses he passed. Yet, surprisingly, he missed obvious way-markers, such as the long Shap stone avenue and stone circles, which consisted of numerous huge, upstanding, pink granite stones. He must have passed these on his right and then left-hand sides as he rode into Shap, as they were still extant in the 17th century, but he made no reference to them (Ogilby 1675, Image 135).

Ogilby did note some prehistoric structures *en route*, but few in comparison to the upstanding numbers in the countryside at that time. One of these was the Wansdyke, or Devil's Ditch, for which he used both local and antiquarian explanations, 'fabled...to be caft up by the Devil on a *Wednsfday*, but by *Campden* faid to be the Bounds betwixt the *Weft Saxons* and the *Mercians*' (Ibid., Image 126). Ogilby referenced Long Meg and her Daughters stone circle, Cumbria, in his London to Carlisle *Britannia* discussion, as a 'great Monument of Victory' with 77 great stones (Ibid., Image 135). He explained that it was

about a mile from the main road in the village of Salkelds but did not follow the road to visit it.

Ogilby's maps, however, were heavily weighted towards locations in southern England. As can be seen in Table 7, 67 out of 85 transverse maps related solely to southern England and Wales. 7 covered locations in northern and southern England; and 11 pertained only to northern England.

<u>J.OGILBY - TRANSVERSE MAP NUMBERS (1675, Images 16-18)</u>			
1675	Numbers dealing with southern England & Wales only	Numbers dealing with southern England & northern England	Numbers dealing with northern England only
Image numbers	1-2, 4-17, 20-32, 34, 36-39, 42-63, 66-74, 79-81	3, 18-19, 22, 35, 41, 82	40, 62, 64-65, 75-78, 83-85
Total Images /85	67	7	11

Table 7 – Ogilby's transverse maps of England

John Senex, as stated above, inked further commentary onto Ogilby's maps after his death. In the accompanying text to *Britannia, Vol.1*, Ogilby wrote of the Rollright Stones, 'that circular Monument of great Stones, laid to be Erected in Memory of a Battel there fought by *Rollo the Dane*' (1675, Image 24). Later, in Senex' 1719 version, a comment has been scrawled onto the map, between Little and Great Rollright, 'Here see Rolwright Stones, a place of Antiquity' (1719, Image 11) (Figure 63; Figure 64).

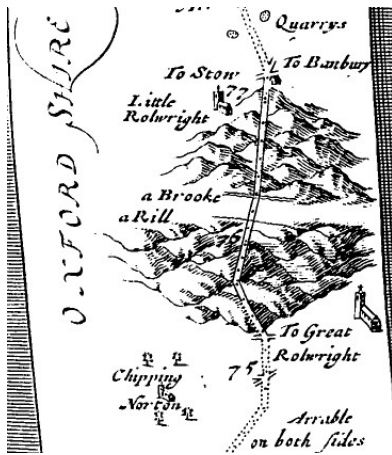


Figure 63 - Ogilby 1675, Image 23. Location of the Rollright Stones stone circle, Oxfordshire

Figure 64 - Ogilby (Senex version) 1719, Image 11.
Rollright Stones stone circle reference

On the Great North Road at Boroughbridge, Senex annotated the map with the words, 'near Aldborough are to be seen those Pyramidal Stones called the Devils Bolts' (1719, Image 16) (Figure 67). Ogilby offered no annotation on his map (Figure 66) but his *Britannia* entry added the following text (Figure 65),

ration by *YORK* enlarges his journey : Half a Mile to the East of this Town appears in the Valley *Aldburgh* or *Aldbrough* a small Village, in *Antonine Itinerary*, an eminent City in the time of the *Romans*, and near it certain Piramidal Stones supposed to be Erected by the *Romans* as a signal of Victory, by the Countrey People call'd the Devils Bolts.

Figure 65 - Ogilby 1675, Image 43. Text regarding Devil's Arrows standing stones, North Yorkshire

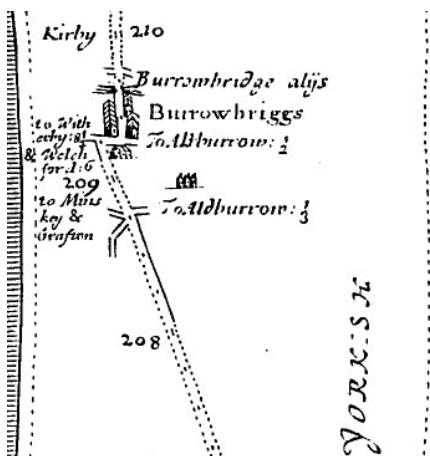


Figure 66 - Ogilby 1675, Image 42. Map of Boroughbridge area

Figure 67 - Ogilby (Senex version) 1719, Image 16.
Senex' annotated map of Boroughbridge area

Whereas Ogilby only referenced Stonehenge on his map by name (Figure 68) and in his *Britannia* text by the expression, ‘that Wonder of the Ifle’ (1675, Image 117), Senex

provided his own explanation of Stonehenge, with an encouragement to travellers to visit 'the most remarkable remains of Antiquity' (Figure 69).

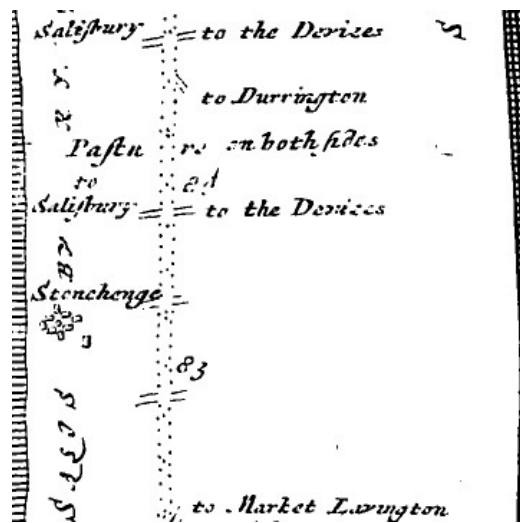


Figure 68 - Ogilby 1675, Image 115. Location of Stonehenge, Wiltshire

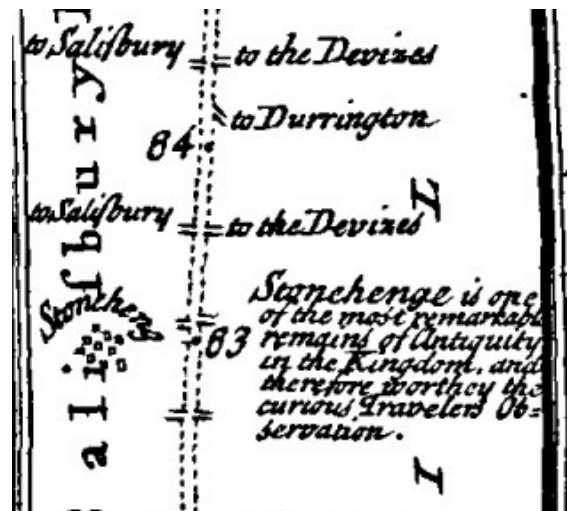


Figure 69 - Ogilby 1719, Image 41. Senex' annotated map of Stonehenge

3.3.2 JOHN OGILBY'S ANALYSIS

Ogilby referenced only three prehistoric sites on his transverse maps, contra his own commentary (Ogilby 1698, Image 2), as well as a few standing stones he passed *en route*. According to Ereira, any depiction or drawing exists on the strip maps as an aid to understand or follow the road (2016, 372-373). Why then did Ogilby miss off many prehistoric structures, such as the Shap stone avenue, within the areas he passed? He was working in a period when prehistoric monuments had been identified and named, yet he chose not to reference them, even as waymarkers. He would have ridden alongside the paralleled-stoned Shap avenue for over a kilometre and although he failed to add them to the map, he did add boundary stones within the same county.

In fact, *Britannia* was supposedly created to promote commerce but was actually completed as a conspiracy plot by the king as a military and administrative survey of England and Wales, a 'handbook to be used in an anticipated new kingdom under a Catholic king' (Ibid., 268, 290, 374, 361). The king used Ogilby to assess harbours and landing places for French troops to come ashore to assist Charles II in weakening opposition, suppressing puritanical communities, like that of Liverpool, which was deliberately removed from the maps, and to take absolute control of his kingdom by Divine Right, which he eventually did,

by 1770, just five years after its publication. The map was, in places, a fanciful and imagined construction, ‘a weapon in the royal armoury’, a powerful tool for governmental control and never intended as a travel book (Ibid., 362, 406, 386, 410).

3.4 EDMUND GIBSON

Edmund Gibson has been included as another early traveller, as it is clear that he tracked Camden’s itinerary around the countryside himself (see Chapter 2). He noted road conditions and the state of monuments and altered Camden’s work, where he felt that it had either been misinterpreted or the situation had changed in the almost 140 years since the original publication in 1586. Gibson was born in 1669 and died in 1748. He was made Bishop of Lincoln in 1716 and Bishop of London in 1723 (<http://www.bodley.ox.ac.uk>). He wrote the English translation, from Latin, of Camden’s *Britannia* in 1695. He added further information before the second edition, published in 1722 and used for this study.

As I was studying Camden (Chapter 2), I noted all separate statements, amendments and additions made by Edmund Gibson who, following Camden’s route around Britain, added over 700 new entries to *Britannia* himself.

3.4.1 EDMUND GIBSON’S RESULTS

As can be seen from Table 8 and Table 9, Gibson’s extra references to Camden’s original *Britannia*, covered much of England. He travelled to the Pict’s Wall (Hadrian’s Wall) in both 1708 and 1709, to follow Camden’s route. This led to 31 new references along the Wall, as well as 96 new data entries for Yorkshire (including North and East Yorkshire, and Richmondshire), 43 for Durham, 59 for Cumbria (Cumberland and Westmorland), and 31 for Lancashire: all places he must have passed through *en route* to and from Hadrian’s Wall.

English County	Total Gibson additions
M	262
NE	138
NW	101
SE	171
SW	199
Grand total	871

Table 8 – Total additions per English region, to Camden’s itineraries, by Gibson

English County	Total Gibson additions
Bedfordshire	9
Berkshire	9
Buckinghamshire	20
Cambridgeshire	6
Cheshire	2
City of London	7
Cornwall	9
Cumberland	13
Derbyshire	6
Devon	29
Dorset	7
Durham	43
East Yorkshire	12
Essex	22
Gloucestershire	34
Hampshire	17
Herefordshire	9
Hertfordshire	8
Huntingdonshire	1
Isle of Wight	1
Kent	20
Lancashire	31
Leicestershire	14
Lincolnshire	36
Middlesex	11
Norfolk	32
North Yorkshire	10
Northamptonshire	24
Northumberland	9
Nottinghamshire	15
Oxfordshire	16
Pict's Wall 1708	21
Pict's Wall 1709	10
Richmondshire	6
Rutlandshire	6
Shropshire	14
Somerset	36
Staffordshire	24
Suffolk	12
Surrey	30
Sussex	14
Warwickshire	13
Westmoreland	46
Wiltshire	52
Worcestershire	31
Yorkshire	74
Grand Total	871

Table 9 – Total additional references per English county, by Edmund Gibson

3.4.2 EDMUND GIBSON'S ANALYSIS

Gibson was extremely observant and noticed key details about structures, not mentioned by other travellers in the same way. An example of this was his description of Avebury (1722, I, Wiltshire). Might Gibson have been the first to explicitly explain the design of a pre-Iron Age monument, with its internal ditch? Certainly, others were very keen to point out potential monuments of war, but this aspect may have gone unnoticed. Gibson was clearly well-read. He included a variety of opinions about monuments within his descriptions. He wrote about the origins of Stonehenge, for example, providing seven different opinions for its appearance (Ibid.). He must have read texts by other antiquarians *en route* to a new place. For example, regarding Wallingford Castle's earthworks, Berkshire, he pointed out that the descriptions by Leland and Camden differed: Camden had noted that it was 'double-wall'd' with two ditches; whereas Leland found it triple-ditched (1722, I, Berkshire). In addition, Gibson did not always accept the locals' opinion of a monument. In relation to the ancient camp at Findon, Sussex, for example, he stated, 'It is call'd *Caesar's-hill*, because the people imagine it was *Caesar's* Camp...the form of it shows that opinion to be ill grounded; for, being *roundish*, it seems rather to have been a British work' (1722, I, Sussex).

Gibson was amazed by the Devil's Arrows, Boroughbridge, although he did not know whether they were Roman trophies or a British work (1722, Yorkshire). He wrote about the provenance of the stones, through comparison with those at Stonehenge, 'against the imagined impossibility of bringing Stones of that bigness from any considerable distance, they alledge, the vast pile at *Stonehenge*, supposed to have been brought from *Rockley*, twenty miles from the place; whereas above *ilkley*, a Roman Station within sixteen miles of *Burrowbridge*, is a solid bed of Stone, that would yield Obelisks thirty foot long.' It is so interesting that arguments used to explain the provenance of the Devils' Arrows, are still being put forward today, for example, Thorpe & Williams-Thorpe (1991).

3.5 FOREIGN TRAVELLERS TO ENGLAND

After Camden and Leland had toured Britain during the sixteenth century, and Christopher Saxton had produced his atlas of England and Wales in 1579, it became fashionable to journey around Britain (and abroad), whilst keeping a diary of one's pursuits. The tourists,

with their diaries, could add much to our knowledge of roads, weather and accommodation, through the annotation of their visits.

In England as seen by foreigners, published in 1865, William Brenchley Rye wrote about the foreigners who travelled to England between 1558 and 1625, using contemporary diaries and itineraries as his source material. In particular, he discussed Frederick, Duke of Wirtemberg, who had travelled to England in 1592, with two coaches and several riding horses, and an entourage of at least eight persons (Rye 1865, lvi). His private secretary, Herr Rathgeb, had written up their adventures, which were published in Tübingen in 1602.

Thomas Platter was a Swiss medical student, who was born in 1574 and died in 1628. In 1599, he travelled around Europe, spending five weeks in England. In 1937, Clare Williams translated his account and published a novel in English about his travels, using his German diary. His account was interesting, because of the locations and famous monuments seen on his travels. Unfortunately, his itinerary was limited as he did not travel further than Cambridge. However, Europe's past was starting to be discovered and the art of travel was clearly a product of sixteenth-century ideas (Williams 1937, 61).

These two accounts, although both brief, did provide some travel and road quality details, which had not been referenced elsewhere. They also explained about post-horses and other travel data which would have been too commonplace for the English travellers to mention. Their comments will be referenced within the Discussion and Conclusion sections.

3.6 CELIA FIENNES

The travels of Celia Fiennes are also included here, and as a traveller of the later seventeenth and early eighteenth-centuries, her diaries provided poignant and detailed descriptions on every aspect of early travel. This study has particularly benefitted from her discussions of road and journeying conditions, weather and accommodation, all of which are included in the Discussion section below. The *en route* information she provided is enlightening and personal and offers a huge insight into the everyday issues that early travellers must have had to deal with. These concerns were barely mentioned by the four antiquarians, discussed in the previous chapter, or indeed by the very early mapmakers.

Cecilia (Celia) Fiennes lived from 1662 to 1741. Rather than the earlier publication of her travels, *Through England on a Side Saddle in the time of William and Mary* (1888), I decided to use Christopher Morris' edited version of 1947, simply named *The Journeys of Celia Fiennes*. In his Introduction, 250 years after her travels were originally written, Morris described Fiennes as breathless in her writing style, and heroic and robust in the energy and endurance she showed during her journeys. During these journeys, she toured the South of England between circa 1685 and 1696; Kent and the North in 1697; Newcastle and Cornwall in 1698; and she travelled to and around London between 1701 and 1703. She was 'a model of propriety': prim and charming, yet, at times, childlike and unsophisticated. Her curiosity and the descriptions of her surroundings had great appeal to Morris. He commented, 'Celia Fiennes' narrative gains much from her having been a woman', with her Nonconformist, unromantic tastes and virtues; her plain-spoken attitude; her enthusiasm, warmth and charm (Morris Introduction, 1947).

Celia Fiennes provided 'miles' in distance from place to place, for example, on page 15, but Morris commented that the numbers were totally incorrect. Nevertheless, the data provides an approximation of the distances travelled on horseback each day. The account of these miles is quite amusing, as Fiennes talks of long and short miles, depending on the type of terrain and the arduousness of the route. For example, the miles are longer after rains in Norfolk, much longer than most miles in Yorkshire, and double the length of miles as about London! (Ibid., 146). Yet, miles in the seventeenth century were 'as long as anyone felt they should be'. Although a 'statute mile' had been introduced into London in 1593 and was a legal length, it was not widely accepted (Ereira 2016, 282). Fiennes was also criticised by Morris for the inaccuracy of her descriptions of bridges, in which she often miscounted the number of arches (1947, 122). This led me to question whether she and her servants could count? Did they dismount to carefully study each bridge, as I am sure antiquarians would have done, or was the number of arches an approximation? Perhaps, the number was merely a guide to the reader about different bridge lengths.

Yet, Fiennes, like the antiquarians, was superbly aware of her surrounding environment and noted structures as she passed them *en route*. An example was her discussion of two Cumbrian monuments. At King Arthur's Round Table, we 'came by a round green spott of a large circumference which they keep cut round with a banke round it like a bench...its

story is that it was the table a great Giant...used to dine at'. Long Meg and her Daughters was 'in a low bottom a moorish place...the story is that these soliciting her to an unlawfull love by an enchantment are turned with her into stone...Mag is...bigger...but the rest are but soe many craggy stones'. She did not understand the monument's purpose or why they were placed in such a form on 'moorish ground' (Ibid., 201). Yet, she could recognise some prehistoric monuments, such as barrows, interpreting them as marks of battles and camps (Ibid., 26). She commented about a journey from her home, Newton Toney, to Stonehenge, 'the many barrow or butts that are thick all over the plaine'. On visiting the 'Rowle Stone' (Rollright Stones) in Oxfordshire, Fiennes compared its 'many such greate Stones as is at Stonidge' (Stonehenge) (Ibid., 31).

In my opinion, however, it is her attitude to travel and her reporting style which most appealed. She was positive about each experience, demonstrating a resilience and a formidability which is so rare today and this may have been because she craved the free outdoor life which she enjoyed on these journeys. Her attitudes may have contrasted starkly with life at home, where expectations might have meant a much more demure and restricted set of behaviours, especially as she had never married. Her journeys were not made for work, but to regain her health, 'by variety and change of aire and exercise', which must have added to the amount of time taken in their pursuit and to the freedom she felt. In her memoirs, she added that she noted interesting facts as she travelled, 'that as my bodily health was promoted my mind should not appear totally unoccupied' (Ibid., 1). One example is Fiennes discussion of a large common in Taunton, Devon, where she had to pass over at least ten stone bridges during a two- or three-mile journey (Ibid., 243).

3.7 ORDNANCE SURVEY

The Ordnance Survey's surveyors travelled around Britain (and Ireland) between the mid-1700s and the mid-1800s. They experienced numerous trials and tribulations *en route*, all of which have been captured in Rachel Hewitt's *Map of a Nation*. In summary, since Christopher Saxton's atlas of England and Wales in 1579, map-makers had been updating pre-existing maps to produce new surveys, often with many inaccuracies (Hewitt 2010, xxii) and Ogilby's maps were difficult to follow (Ereira 2016, 411). After the 1746 Battle of Culloden Moor, it became clear that 'good geographical intelligence' was needed through

the creation of a military map of the whole country, especially of the coasts (Hewitt 2010, xix, 49), hence launching the Ordnance Survey.

Military operations drove many attempts to complete a comprehensive mapping project in Britain. First, conflict with Highland Scotland; followed by the Seven Years' War (1754-1763) and the Napoleonic Wars (1803-1815) with France; as well as the later Crimean War (1853-1856), all led to changing staffing and ideas within the Ordnance Survey. In addition, more money; improvements to equipment; and increased (and, at times, decreased) numbers of staff, competition and innovation abroad also led to exacting standards at home. However, the scales of maps altered frequently depending on required outcomes. The Poor Law Commission, the Tithe Communication Act and the Metropolitan Sanitary Commission, for example, all needed large-scale maps for their own purposes (Ibid., 294-7).

I wished to include the Ordnance Survey mapping data into this study for several reasons. First, as with Speed and Ogilby's maps, I wished to understand the order in which the maps first appeared, which counties they deemed the most important and any areas which they had failed to map. Secondly, I wanted to look at these early maps and note how prehistoric structures were referenced. Thirdly, I hoped for details about travel at that time: difficulties with roads, weather and accommodation, which would add to the overall picture of travel. In the current era, there are 403 Explorer Series maps and 204 in the Landranger Series, providing 'near-perfect accuracy' in their mapping of Britain's landscapes, with more than five thousand Triangulation Stations (Hewitt 2010, xxiv).

3.7.1 ORDER OF ORDNANCE SURVEY MAP DATES

Using Hewitt's book, I attempted to log the years mentioned as dates of the initial Trigonometrical and Interior Surveys for each County in England, Wales and Scotland; as well as Engraving dates; and the dates of Publication of the First Series Ordnance Survey maps (Figure 70; Table 10). Some of these were mentioned by Hewitt within her discussions, but Hewitt failed to provide a concise timeline for the completion of one-inch to one-mile Ordnance Survey First Series maps throughout Britain, within her 2010 publication. There was a general lack of precision. Notwithstanding her excellent anecdotal information, the use of phrases, such as 'among others', was unhelpful when trying to piece

together an exact timeline of the development of the Ordnance Survey within Britain. Hewitt provided some early publication dates, but not others and also provided broad-brush data, such as, by 1818, 25 plates of the Ordnance Survey First Series maps had been completed and were on sale; by 1820, 37 Ordnance Survey maps had been published (Ibid., 195, 234), yet without clarifying exactly which maps had been completed and/or published. I therefore used the British Library's and Charles Close Society's collections of First Series Ordnance Survey maps for clarification. Unfortunately, the dates of these 'First Series' maps are much later than those mentioned by Hewitt. For example, the Ordnance Survey maps of Wales were completed and available by 1841 but the British Library's dates range from 1859 to 1888. Therefore, I created a separate column for the British Library information and kept any of Hewitt's data in different columns. It is clear from Hewitt's comments that the Ordnance Survey felt obliged to re-survey completed regions every time a major new development in accuracy and detail was achieved. The scale of change during the Industrial Revolution was also unprecedented and made maps obsolete even before they were published. This led to frequent delays and meant that some regions were actually surveyed several times, each at different scales, whilst others were examined only once. From my perspective, this has meant that whereas my initial plan was to uncover a neat unfolding of regional mapping, following a southern to northern transit, which would add weight to my arguments about the forgotten north, these complications muddled the waters and provided no tangible evidence of neglect. The surveying of the northern counties of England may have not taken place until a later date, but their completion was at a much higher and more precise standard than those which were first completed in the south.

The Ordnance Survey mapping process was achieved in three ways. First, a Trigonometrical Survey was completed. This was taken from a French idea, as they had spent 100 years to hone the knowledge and machinery needed to create a triangulated map of France (Ereira 2016, 312). Then, the Ordnance Survey used secondary trigonometrical stations, such as church towers, to complete a Topographical or Interior Survey. All buildings, rivers, roads, woods, forests, heaths, commons, morasses, hedges and field boundaries were mapped, to flesh out the chart at a scale of six inches per mile. These were later reduced to a scale of one inch to one mile, for the First Series Ordnance Survey maps. Thirdly, the triangulation

(trig) point positions, Ordnance Survey symbols and place names were engraved, in reverse, onto a copper panel, and subsequently, the entire map needed to be etched onto it, before ink could be added, and the map formed within a pressured, roller press (Hewitt 2010, 149-151, 160-1). The head of the Ordnance Survey at the time, William Mudge, conceived that the First Series maps would be 'overlapping sheets that would...envelop the entire nation' (Ibid., 175). In fact, as Scottish and Cumbrian sight lines were used to start the Trigonometrical Survey of Ireland, this dream was eventually achieved.

Due to the location of the Ordnance Survey office, which was in the Tower of London at the time of the project's birth and because of the potential threats from the French, the project was started along the south coast of Britain. In fact, with the many interruptions to the project (mapping of Ireland and the Middle East, to name but two), by 1863, there were still eight incomplete sheets of the First Series, and all of those were in northern England. This could, however, be seen as an advantage as instrument improvements and the increased scale for the Interior Survey meant that northern England was mapped at a scale of six inches to one mile. This was then scaled down for the First Series. Kent's maps, the first of the First Series Ordnance Survey maps, were published in 1801, whereas the last of Northumberland's First Series maps was not published until 1870 (Ibid., 163; Table 10). Below is a timeline of the development of mapping within Britain, derived both from Hewitt's commentary and from my own investigations.

3.7.2 ORDNANCE SURVEY TIMELINE

<u>Country</u>	<u>County</u>	<u>Hewitt's Data from Map of a Nation (2010)</u>					<u>British Library store of First Series map dates</u>
		<u>Trigonometrical Survey</u>	<u>Interior/Topographic Survey</u>	<u>Engraving</u>	<u>1" to 1 mile Published Map</u>	<u>Published Map - other scale</u>	<u>O.S. Map First Series</u>
Scotland	Aberdeenshire					OS 6" 1st Ed 1874	
Scotland	Angus / Forfarshire					OS 6" 1st Ed 1865-1869	
Scotland	Argyll and Bute					OS 6" 1st Ed 1875	
Scotland	Ayrshire					OS 6" 1st Ed 1857	
Scotland	Banffshire					OS 6" 1st Ed 1872	
Scotland	Berwickshire					OS 6" 1st Ed 1857	
Scotland	Caithness					OS 6" 1st Ed 1876	
Scotland	Dumbartonshire					OS 6" 1st Ed 1864	
Scotland	Dumfriesshire					OS 6" 1st Ed 1860	
Scotland	Edinburgh / Mid-lothian					OS 6" 1st Ed 1853	
Scotland	Elginshire / Moray					OS 6" 1st Ed 1873	
Scotland	Fife and Kinross					OS 6" 1st Ed 1855	
Scotland	Haddingtonshire / East Lothian					OS 6" 1st Ed 1854	
Scotland	Invernessshire - Mainland					OS 6" 1st Ed 1876	
Scotland	Invernessshire - Hebrides					OS 6" 1st Ed 1881	
Scotland	Invernessshire - Isle of Skye					OS 6" 1st Ed 1878	
Scotland	Kincardineshire					OS 6" 1st Ed 1868	

<u>Country</u>	<u>County</u>	<u>Hewitt's Data from Map of a Nation (2010)</u>					<u>British Library store of First Series map dates</u>
		<u>Trigonometric Survey</u>	<u>Interior/Topographic Survey</u>	<u>Engraving</u>	<u>1" to 1 mile Published Map</u>	<u>Published Map - other scale</u>	<u>O.S. Map First Series</u>
Scotland	Kirkcudbrightshire (Galloway)					OS 6" 1st Ed 1853	
Scotland	Linlithgowshire / West Lothian					OS 6" 1st Ed 1864	
Scotland	Nairnshire					OS 6" 1st Ed 1871	
Scotland	Orkney Islands					OS 6" 1st Ed 1882	
Scotland	Peeblesshire					OS 6" 1st Ed 1858	
Scotland	Perthshire & Clackmannanshire					OS 6" 1st Ed 1867	
Scotland	Renfrewshire					OS 6" 1st Ed 1863	
Scotland	Ross & Cromarty - Mainland					OS 6" 1st Ed 1881	
Scotland	Ross & Cromarty - Isle of Lewis					OS 6" 1st Ed 1853	
Scotland	Roxburghshire					OS 6" 1st Ed 1863	
Scotland	Selkirkshire					OS 6" 1st Ed 1863	
Scotland	Shetland Islands					OS 6" 1st Ed 1880	
Scotland	Stirlingshire					OS 6" 1st Ed 1865	
Scotland	Sutherland					OS 6" 1st Ed 1878	
Scotland	Wigtownshire (Galloway)					OS 6" 1st Ed 1849	
England	Bath and North-East Somerset	1809	1804?		1820		1882-8
England	Bedfordshire	1809	1809				1876-82
England	Berkshire	1809	1809				1866-83

<u>Country</u>	<u>County</u>	<u>Hewitt's Data from Map of a Nation (2010)</u>					<u>British Library store of First Series map dates</u>
		<u>Trigonometric Survey</u>	<u>Interior/Topographic Survey</u>	<u>Engraving</u>	<u>1" to 1 mile Published Map</u>	<u>Published Map - other scale</u>	<u>O.S. Map First Series</u>
England	Brighton and Hove	1809	1809				1869-75
England	Bristol	1797	1809				1882-8
England	Buckinghamshire	1809	1809				1867-81
England	Cambridgeshire	1815	1809				1876-86
England	Cheshire	1808?	1809				1870-5
England	Cleveland	1809	1809				1888-93
England	Cornwall	1795-7	1803		1818		1859-88
England	Cumberland	1808?	1809				1859-65
England	Derbyshire	1808?	1809				1871-2
England	Devon	1795-7	1809				1855-89
England	Dorset	1795-7	1809				1862-88
England	Durham	1809	1809				1854-7
England	Essex	1799?	1803	1803	1805 First Series OS1 Explorer O.S. published, 2 "-1 mile		1862-76
England	Gloucestershire	1799?	1809				1873-85
England	Hampshire	1809	1809		1820	1795 Military map published (small-scale)	1856-75
England	Herefordshire	1809	1804?				1878-87
England	Hertfordshire	1809	1809				1865-85

<u>Country</u>	<u>County</u>	<u>Hewitt's Data from Map of a Nation (2010)</u>					<u>British Library store of First Series map dates</u>
		<u>Trigonometric Survey</u>	<u>Interior/Topographic Survey</u>	<u>Engraving</u>	<u>1" to 1 mile Published Map</u>	<u>Published Map - other scale</u>	<u>O.S. Map First Series</u>
England	Huntingdonshire						1882-7
England	Humberside	1809	1809				1888-93
England	Kent	1795	1795-8		1799	1795 Military map published (small-scale) / 1799 O.S. map ready for publication	1858-73
England	Lancashire	1808?	1809				1888-93
England	Leicestershire	1809	1809				1879-86
England	Lincolnshire	?	1818				1883-8
England	London Greater	1809	1809				1869-82
England	London Inner	1809	1809				1869-82
England	Merseyside	1809	1809				1888-93
England	Middlesex	1809	1809				1862-8
England	Norfolk	1815	?				1879-86
England	Northamptonshire	1809	1809				1880-7
England	Northumberland	1809	1809		1872 Last of First Series O.S. maps published		1856-64
England	Nottinghamshire	1809	1809				1876-85

<u>Country</u>	<u>County</u>	<u>Hewitt's Data from Map of a Nation (2010)</u>					<u>British Library store of First Series map dates</u>
		<u>Trigonometric Survey</u>	<u>Interior/Topographic Survey</u>	<u>Engraving</u>	<u>1" to 1 mile Published Map</u>	<u>Published Map - other scale</u>	<u>O.S. Map First Series</u>
England	Oxfordshire	1809	1809				1872-80
England	Rutland						1883-4
England	Shropshire	1809	1809				1873-84
England	Somerset	1797	1809		1818		1882-8
England	Staffordshire	1808?	1809				1875-86
England	Suffolk	1818	?		1818		1875-85
England	Surrey	1792	1809		1818	1795 Military map published (small-scale)	1861-71
England	Sussex	1792-3	1809		1818	1783 Map 2 "-1 mile/ 1795 Military Map published (small-scale)	1869-75
England	Warwickshire	1809	1809				1880-8
England	Westmorland	1808?	1809				1856-9
England	Wiltshire	1809	1804?		1820		1873-85
England	Worcestershire	1809	1804?				1880-8
England	Yorkshire East	1809	1809				1888-93
England	Yorkshire North	1808?	1809				1888-93
England	Yorkshire South	1809	1809				1888-93
England	Yorkshire West	1808?	1809				1888-93
England	Yorkshire Dales	1808	1809				1888-93

<u>Country</u>	<u>County</u>	<u>Hewitt's Data from Map of a Nation (2010)</u>					<u>British Library store of First Series map dates</u>
		<u>Trigonometric Survey</u>	<u>Interior/Topographic Survey</u>	<u>Engraving</u>	<u>1" to 1 mile Published Map</u>	<u>Published Map - other scale</u>	<u>O.S. Map First Series</u>
England	Isle of Man	1809	1809			1873 First Series map published	1868-70
England	Isle of Wight	1793	1809				1862-3
England	Channel Islands	?	?				
England	Scilly Isles	?	?				1859-88
Wales	Brecknockshire	1804-1811	1809				1876-82
Wales	Caernarvonshire	1804-1811	1809				1885-8
Wales	Ceredigion / Cardiganshire	1804-1811	1809				1885-8
Wales	Carmarthenshire	1804-1811	1809				1875-87
Wales	Denbighshire	1804-1811	1809				1870-5
Wales	Flintshire	1804-1811	1809				1869-72
Wales	Glamorgan	1804-1811	1809	1820			1867-78
Wales	Merionethshire	1804-1811	1809	1820			1873-88
Wales	Monmouthshire	1804-1811	1809				1875-85
Wales	Montgomeryshire	1804-1811	1809				1874-87
Wales	Pembrokeshire	1804?	1809		1820		1860-88
Wales	Radnorshire	1804-1811	1809				1883-8

Table 10 – The year of publication of each of the Ordnance Survey's maps for England, Scotland and Wales

These results show the dates of the trigonometrical and topographic surveys, the engraving and the production of the first published maps for each county of Scotland, England and Wales. They show that there was frequently a great discrepancy between the different mapping processes and that military mapping was unpredictable, with surveyors moving around Britain to survey areas on the basis of perceived military threats and priorities.

3.7.3 HISTORICAL TIMELINE

The Ordnance Survey's historical timeline (Figure 70) demonstrates the lack of consistency in mapping England's counties. As already mentioned, numerous distractions led to delays in the publication of the First Series maps. These included several long-lasting wars; the Industrial Revolution in general; fire and subsequent relocation of the Ordnance Survey office; as well as staff changes.

Historical Timeline of Events
(1555) Highways Act to improve Britain's roads
(1579) Christopher Saxton <i>Atlas of the Counties of England and Wales</i>
(1586) William Camden <i>Britannia: or a Chorographical Description of Great Britain and Ireland, Together with the Adjacent Iflands</i>
(1610) John Speed <i>The theatre of the empire of Great-Britain, presenting an exact geography of the kingdom of England, Scotland, Ireland, and the isles adjoyning</i>
(1675) John Ogilby <i>Britannia, volume the first, or, An illustration of the Kingdom of England and dominion of Wales</i>
(1719) John Ogilby <i>An actual survey of all the principal roads of England and Wales: described by one hundred maps from copper plates</i>
(1720s) Wade's military roads built, Scotland
(1746) Battle of Culloden
(1747-1752) Military Survey of Highland Scotland
(1752-55) Military Survey of Lowland Scotland and England/Scotland border region
(1755-62) Seven Years' War with France
(1759) Society of Arts offered £100 prize for map-making competition
(1766) William Roy, who had completed Military Survey of Scotland, petitioned King George III for Military Map of England
(1778-1783) Yeakell & Gardner completed a triangulated map of Sussex, on a scale of 2 inches to 1 mile, and published 4 of 8 sheets
(1783) Collaboration begun with French to triangulate land between Greenwich's & Paris' observatories
(1787) Triangulation between Paris and Greenwich completed
(1789) Start of French Revolution
(1790s) 1790s onwards Night Sky observations completed for latitudinal and longitudinal purposes
(1791) National triangulation achieved
(1791) Ordnance Survey founded (although not called this until 1801)
(1792) Fear of a French invasion of England's south coast
(1793) Map of Surrey completed by civilians, Joseph Lindley & William Crosley, using trigonometrical data

Historical Timeline of Events
(1793) Military Map of Kent, Sussex, Surrey & part of Hampshire completed
(1794) Trigonometrical Survey completed for 136 miles of England's south coast
(1795) William Gardner & Thomas Gream's triangulated map of Sussex published, on a scale of 1 inch to 1 mile
(1800s) Rapid industrialisation of Britain
(1801) First Ordnance Survey of Kent published in four maps
(1809) Trigonometrical and Interior Survey completed for England and Wales, bar Lincolnshire, Norfolk & Suffolk
(1810s) Guidebooks added in advice for ramblers
(1811-1816) Ordnance Survey maps withdrawn from sale, due to fears of French invasion
(1813) Trigonometrical Survey started in Scotland
(1816) French wanted to extend their triangulation plan as far as the Shetland Islands
(1816) Plan of Snowdonia completed
(1820) 37 Ordnance Survey maps completed
(1824) First footpath preservation society formed
(1824) New Weights and Measures Act introduced, to standardise the 'foot' measurement
(1825-1844) 6-inch to one-mile Ordnance Survey completed of Ireland
(1827) Compensation bars invented to improve measurement accuracy for the surveyors
(1833) First Irish Ordnance Survey map published, of County Derry
(Mid-1830s) Poor Law Commission needed maps of 5 ft- 1 mile for urban centres
(1836) Tithe Commission Act Maps needed to accurately delineate property boundaries for taxation purposes
(1835) Geological Survey Committee set up in Britain
(1840) Agreement to survey northern counties at a scale of 6" - 1 mile
(1840-1860) Datum Survey completed of Britain's peaks
(1841) Survey Act Ordnance Surveyors could enter property by law
(1842) 6"-1-mile Interior Surveys started in Lancashire and Yorkshire

Historical Timeline of Events
(1841) Fire at Tower of London ruined Ordnance Survey premises
(late-1841) Ordnance Survey moved to premises in Southampton
(1846) Last map of Ireland published
(1846) First Series published on a line between Hull to Preston southwards
(1847) Metropolitan Sanitary Commission needed map of London at a scale of 5 ft - 1 mile. Completed between 1848-1850
(1850) Only 23 sheets of Lancashire and Yorkshire maps published and none to 1"- 1-mile scale
(1850-4) Scales Dispute. Resolved by Henry James, new leader of Ordnance Survey. Decided on 1:2500 scale 1854
(1852) By this date, the Trigonometrical Survey had been recalculated to take into account local attraction and the size and shape of the Earth
(1853-1856) Crimean War
(1859) Survey of Scotland almost completed on 6" and 1:2500 scales
(1863) 8 sheets of First series still to be published
(1864-1869) Ordnance Survey map-makers sent to Middle East to map Jerusalem and Sinai Peninsula
(1870) England's First Series (1" to 1 mile) maps completed
(1872) Last map of First Series mainland published, no:1008 of south-west Northumberland
(1873) Isle of Man map published
(1935) Re-triangulation of Trigonometrical Points, by Ordnance Survey
(1939-1945) Ordnance Survey Office moved to Chessington
(1969) Ordnance Survey moved to purpose-built premises on outskirts of Southampton

Figure 70 – Historical timeline of events for the Ordnance Survey mapping project

3.7.4 ORDNANCE SURVEY ANALYSIS

The Ordnance Survey's work was revolutionary. Its mapping process was the first systematic attempt to map Britain in detail, using trigonometrical principles and professional surveyors. However, for the purposes of this assessment of the ease of travel in the past, its additions to the following analysis and discussion were the most useful insights. Nevertheless, the vast amount of time, people, resources and money needed to

create a comprehensive map of Britain could only have been achieved due to the perceived threat of invasion into Britain from abroad. Fear and a necessity to understand the make-up of this diverse island drove the work and explains the initial focus on the south of England and on Scotland.

3.8 OVERALL ANALYSIS

Early tourists and map-makers provided additional insights into travel between 1500 and 1900. As they were generally writing diaries, logging their day-to-day activities *en route*, they referenced valuable data about the conditions of weather, their travel itineraries and accommodation, which was often in graphic detail. Their anecdotal information provides us with a much richer view of the past, than the antiquarians' lists of places visited and monuments seen. It adds to the variable reporting on megalithic monuments, which were eventually recorded within their landscape settings and not just visited as a curiosity close to a main route. Many factors affected these explorers. Each will be discussed below.

3.8.1 WEATHER

For foreign travellers, poor weather was expected. As early as 1534, Joachim de Watt had translated Tacitus and had discussed Britain's 'damp climate' (Williams 1937, 43). Yet, foreigners loved and advertised Britain's verdant beauty and steep, sharp mountains (Ibid., 48). On the other hand, Speed never referred to, and Ogilby rarely mentioned, the weather during their travels. However, Ogilby clearly listened to the advice of locals as he stated that from Bath to Wells was 'A bad Winter Road' (1675, Image 125) and, of the road between Sharnford and Leicester, he wrote, 'Winter Floods into ye Road' (Figure 71) and he also made another comment about 'winter Floods', (Figure 72) further along the same road in the direction of Leicester. Whether or not Ogilby had personally experienced these conditions is unclear.

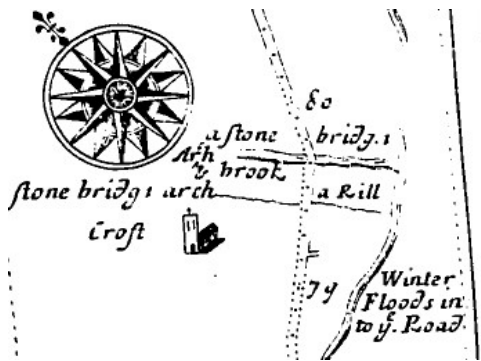


Figure 71 - Ogilby 1675, Image 235. Flooding on the Leicester road

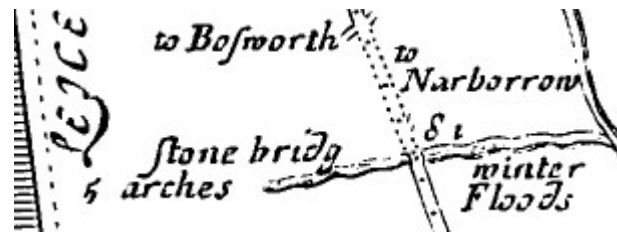


Figure 72 - Ogilby 1675, Image 235. Winter flooding on the Leicester road

Fiennes was valiant in her resilience, though she struggled with northern England's weather and during her visit over the Yorkshire Wolds from Burton Agnes to Scarborough, she missed all the upstanding barrows (Neolithic and Bronze Age) as, 'it prov'd misty...as raine or mist is in thick trees...so thick in some you could not see the top' (Morris 1947, 91).

Gibson wrote about the road between Pontefract and Knottingley, West Yorkshire, stating that it was named 'the Wash', and that travelling along it was weather-dependent in those days, 'if we consider that even now upon any violent rains, or the melting of snow, it is so overflow'd as to be scarce passable; and that formerly, before the conveyance of the waters into chanel to serve the mills, and the dreins...the passage must have been much more difficult' (1722, I, Yorkshire).

The Ordnance Survey mapping project encountered grave trigonometrical problems in London, in 1799, due to impenetrable smog and this affected the original theodolite's triangulation, even with flares (Hewitt 2010, 171). When trying to complete the one inch to one-mile Trigonometrical Survey in Scotland, the surveyors suffered with cloud, mist, rain and storms and their horizon was often 'lost' for several days at a time (Ibid., 222). This also occurred during the survey of Ireland in 1826 (Ibid., 247) and at the end of June, sometime between 1749-52, during the military survey of Scotland, a hailstorm and plummeting temperatures hampered the surveyor's efforts (Ibid., 33). The surveyors also had to deal with thick fog and an atrocious snowstorm during the survey of County Donegal in Ireland (Ibid., 248).

3.8.2 ROADS AND ROUTEWAYS

Frederick, Duke of Wirtemberg wrote about the land between London and Oxford in 1592, 'the country is in some places very fertile, in others very boggy and mossy' (translation WB Rye 1865, 30). At Oxford, the coachmen and post horses were tired; yet, no others could be found that evening, 'even at double the cost' (Ibid.). Between Oxford and Cambridge, they passed through, 'a villainous, boggy, and wild country'. They missed their way several times, 'because the country thereabouts is very little inhabited, and is nearly a waste; and there is one spot in particular where the mud is so deep...it would scarcely be possible to pass with a coach in winter or in rainy weather' (Ibid., 31). Today, it is strange to think of that region like that. Yet, Ogilby had also noted similar issues, calling the Oxford to Cambridge route, 'a very bad, deep Way' (1675, Image 261).

Platter's journey into England began in September 1599. He wrote, 'we took the post, for they would not let us hire hacks...unless the postmaster...gave permission' (Williams 1937, 148). Both Platter and other foreigners commented about the English horses' saddles, which made travel unpleasant (Ibid., 149). It is difficult for someone 'corpulent and heavy, to set himself comfortably on such small saddles' (Rye 1865, 5). Later, Platter and his group ordered a wagon with five horses, presumably for their luggage and Platter commented that they had, 'like all such waggons in England only two wheels, yet they hold as much as do our coaches abroad, for they are very long, and can be lengthened or shorted at will' (Williams 1937, 149). Platter also had trouble with his coachman and complained about him to the Chancellor of Oxford University, 'He had agreed for the sum of sixteen shillings to drive us to Oxford, then to Cambridge, and back to London, and now made objections that the road was too boggy and difficult to find, for that neighbourhood was...rather deserted'. The coachman had problems with a wheel on his coach, which was damaged and had already needed to be replaced. It had recently been raining, further adding to the issue (Ibid., 217). Despite Platter's short stay in southern England, he had gained an impression of travel, stating that the King's highways and streets were, 'not always to be trusted' (Ibid., 17). When he was in London, he was surprised to find that, although there was a 'very fine long bridge', 'it is more customary to cross the water or travel up and down the town...by attractive pleasure craft...wherries' (Ibid., 154).

Celia Fiennes provided many comments on her modes of travel, accommodation and the issues she faced *en route*. She was excellent in her discussion of the routeways available to travellers at that time, especially about poor roads. She wrote, for example, of the narrow roads in Devon, 'so as in some places a Coach and Waggons cannot pass...forced to carry their Corn...on horse backs...the ways grows narrower and narrower on to the Lands End' (Morris 1947, 14). She encountered a similar issue near to Plymouth (Ibid., 250) and coaches also struggled to pass one another in the vicinity of Prestwich, due to the hollow ways and lanes (Ibid., 231). There were many bad roads, according to Fiennes and this might have been due to the 'deep rich country', as in Gloucestershire (Ibid., 31); the 'deep clay ground' of the Rotherham area (Ibid., 95); to stony ground, as in Herefordshire (Ibid., 232); or, as at Dunstable, 'a sad road called Hockley in the Hole as full of deep slows [sloughs], in the winter it must be impassable' (Ibid., 120). The continual presence of surface water, as in Suffolk, also created problems for travellers, 'it's a low flatt ground all here about...the roade lay under water which is very unsafe for strangers to pass, by reason of the holes and quick sands and loose bottom' (Ibid., 146). This was also an issue in Essex (Ibid., 142). In Huntingdonshire, she had to take the ferry to avoid flooded roads (Ibid., 159). In other places, such as at the crossing of the River Dee, between Wales and England, the problem was quicksand. 'I forded the Dee when the tide was out...the sands are here soe loose...for as it brings the sands in heaps to one place so it leaves others in deep holes...that would swallow up a horse or carriages, so I had two Guides to conduct me over' (Ibid., 182). In Derbyshire, Fiennes explained that, 'you are forced to hire Guides...in all parts...if you take a wrong Way there is no passing...its impossible for Coach or Waggon to pass...the Country hereabout is so full of moore or quagmires and such precipices that one that is a stranger cannot travell without a Guide, and some of them are put to a loss some tymes' (Ibid., 101, 103, 106). Guides were also needed, 'to cross the river [Esk, near Carlisle] on the flats, even though the tide was out' (Ibid., 203). On the journey from her home at Newton Toney in Wiltshire, to Bath, the road passed over a common, 'we passed over one Common of some miles length on a narrow Causy [Causeway] that a coach can scarce pass...the Common is so moorish [marshy] their feete and wheeles would sinke in'. She added, 'its made only for Packhorses, which is the way of carriage in those parts' (Ibid. 17). Near Chudleigh, Devon, she noted that the lanes were 'full of stones and dirt'; that the sun never shines on them as they are so closed in with vegetation; and that the 'Causeys...are

uneven...for want of...continued repaire' (Ibid., 250). In Norfolk, Wymondham's causeway was also poorly maintained. In fact, there, she referenced an actual cost of travel, 'the Causey was in many places full of holes...you had to pay a penny a horse to get onto it...in order to the mending the way' (Ibid., 149). What a fantastic insight into travel at the turn of the eighteenth century!

Fiennes was impressed by good roads too. She referenced causeways, which were 'exceedingly good', as at Nympsfield, Gloucestershire. They were raised above the road, with a very good pitch (Ibid., 120) and those constructed to avoid 'a low moist place', she added, 'are here in good repaire' (Ibid. 234). Other, better quality roads were referenced too, possibly due to nearby hills (Ibid., 31), such as the Downs around Newbury (Ibid., 39) or Champion country (Ibid., 126); or sandy roads with fine pebbles, secured with a bank, as in Litchfield (Ibid., 111). She also enjoyed paved roads within the city walls of, for example, Norwich, which were 'very broad for 2 Coaches or Carts to pass on either side' (Ibid., 147). By Lumley Castle, County Durham, she considered the travel much easier, 'a pleasant road and country' and she passed Darlington on a 'good way' (Ibid., 213, 216).

Her discussion about signposts, ordered by Statute in 1697, is enlightening about travel at that time (Ibid., xiv). Fiennes stated about the region around Lancaster, 'they have one good thing in most parts off this principality...that at all cross wayes there are Posts with Hands pointing to each road with the names of the great town or market towns that it leads to' (Ibid., 188-9). This implies that, despite the Lancaster region and the recent Statute, signposts were not in common usage at the end of the 17th century.

Fiennes often encountered issues *en route* that demonstrate her resilience and courage. She discussed a descent, not for the feint-hearted, from the top of the Yorkshire Wolds towards Scarborough, 'by a steep and hazardous precipice on one side and the way narrow' (Ibid., 91). On another occasion, Fiennes chose not to take the moor road, despite many issues with stones on the road near Wigan, 'I avoided going by the famous...Martin Mer that as the proverb sayes has parted many a man and his mare indeed; it being neare evening and not getting a Guide I was a little afraid to go that way it being very hazardous for Strangers to pass by it' (Ibid., 184). During the earlier reference to quicksand whilst crossing the channel of the River Dee, Fiennes added, 'it was at least a mile...before I came

to the middle of the chanell which was pretty deep, and with such a current...together with the wind the horses feete could scarce stand against it, but it was but narrow...and so soone over' (Ibid., 182). Quicksand was also mentioned near to Stoke Edith in Herefordshire (Ibid., 335). Fiennes actually fell off her horse when its 'feete failed' on slippery ground, after rain, on her way from Newton Toney to Alresford (Ibid., 273) and at Thirlwall Castle, along Hadrian's Wall, Fiennes also encountered difficult terrain. There, she sent her 'man', presumably her servant, to ride up the hazardous 'black Moorish ground', which she considered so precarious, she 'tooke a Guide' to direct her (Ibid., 207). In fact, her servants often faced danger with her. They took the Cremyll Ferry to Plymouth in Cornwall, 'had I known the Danger before I should not have been very willing to have gone it, not but this is the constant way all people goe, and saved severall miles rideing' but was 'a very hazardous passage', 'notwithstanding there was 5 men row'd and I sett my own men to row alsoe I do believe we made not a step of way for almost a quarter of an hour' (Ibid., 255).

Antiquarians' biographers managed to piece together some facts from correspondence between antiquarians and their acquaintances, but these still lacked the fascinating insights into travel before John McAdam's roads in the later eighteenth century, provided by the early travellers. An example is Fiennes' description of her journey from Newton Toney, where she lived, to Warminster. The route was so narrow and 'pitched with slatts and stones' that her 'Coach was...wedged in the wheele in the stones that severall men were forced to lift us out' (Ibid., 17). Fiennes also provided the number of days taken for each journey, as well as her estimated number of miles, which helps us to grasp the extent of time needed for these pursuits (for example, Ibid., 132). Fiennes recorded minute details about the state of the roads, the weather and the issues faced, all so often overlooked, or not noted, by other early travellers. Through her, we have a much fuller and more tangible account of the trials and joys of this experience.

Speed did not refer to road quality at all during his discussion about his map-book. Ogilby, on the other hand, made several comments within *Britannia*, all of which add extra details about travel in the mid-eighteenth century. Ogilby described the road between London and Berwick as, 'one of the moft frequented Roads of the Kingdom, though none of the beft Way, for after the firft 20 or 30 Mile 'tis fo generally bad, that there was a certain late

Impofition upon Travellers, during 3 years, at *Stilton* and a place or two on this fide of about a Penny for a Horfe &c. towards the Repair of that part of it' (1675, Image 33). Yet, the road through Middlesex, Surrey and Kent was, 'in general a very good and well-beaten Road as any in the Kingdom...being certainly the moft frequented Road in *England*'. Nevertheless, on this route, Ogilby provided six side-roads to be avoided (Ibid., Image 74).

On his London to Arundel journey, Ogilby noted (as Fiennes had also done) the 'dirty Way' through Hockley-in-the-Hole (Ibid., Image 84). He advised readers to avoid the dirtiness of Honey Lane, Okewood, by taking a diversion through Horsham (Ibid., Image 31). Dunchurch Lane offered two miles of 'bad Way' (Ibid., Image 83) (Figure 74); the route through Somerset and Dorset was 'a bad, deep Way' (Ibid., Image 201); the Cambridge to Coventry road, 'a deep and unpleafant Way'; and Baldock Lane, on the London to St. Neot's route, St Columb Major was 'genrally Boggy' (Ibid., Image 123) and that from the 4 Shire Stone to Worcester 'very bad' (Ibid., Image 153). At Soham in Cambridgeshire, there was 'a very Dirty way' (Figure 73) and over Dartmoor towards Tavistock, the route was 'exceedingly bad, being Hilly, Boggy and Stony, without any Accomodation' (Ibid., Image 227).

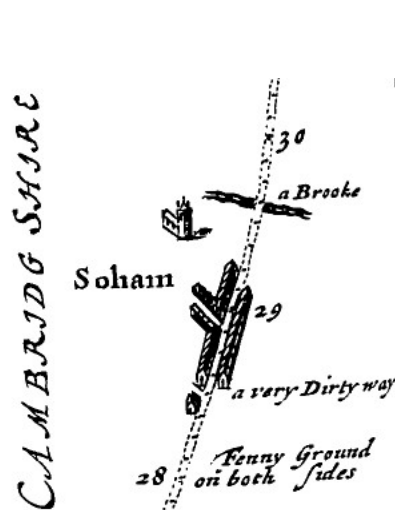


Figure 73 - Ogilby 1675, Image 238. Soham, Cambridgeshire

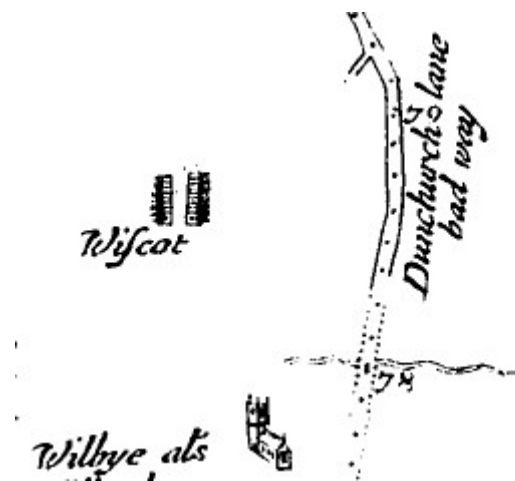


Figure 74 - Ogilby 1675, Image 85. Dunchurch Lane, Warwickshire

Ogilby found the road through Cheshire to be mostly sandy and firm; that through Lancashire to be 'more deep hard and Hilly'; and that through Cumbria to be 'harder and more Mountainous' (1675, Image 131). He stated that the road from Middlesex to Derbyshire was, in general, 'a deep bad Way', recompensed by the good towns through which it passed (Ibid., Image 140) and neither was he keen on the road south of London,

towards Hythe, finding it, 'lefs commendable...being generally a rough, hard, narrow Way, and not much frequented; Travellers choofing to pafs by ROCHESTER to Maidfton' (Ibid., Image 80). He found the road from London to Newhaven to have little traffic, 'nor commendable for its goodnefs...as to the Quality of the Way or otherwife' (1675, Image 107) and he was unimpressed with the Nottingham to Grimsby road, commenting that it, 'in general ad-mits of no pleafant way, it being in many places deep and Clayey' (Ibid., Image 254). The road to Winchester was deemed 'more unpleafant', but with no explanation (Ibid., Image 137). Yet, of all of these, the worst must surely be the crossing of the Maun River, described as 'a Dangerous Pafsage' (Figure 75), once again without clarification.



Figure 75 - Ogilby 1675, Image 220. Ogilby's annotated map

Yet, he referenced the 'well accommodated Thorough-fare' through Acton (Ibid., Image 22) and 'a very good Through-fare' through Morpeth, Northumberland (Ibid., Image 46). Ogilby also commented that the 'Fenny Part' of routes through Lincolnshire had been raised with causeways, although he does not elaborate on this (1675, Image 128). He seemed most pleased, however, with the roads through Norfolk, for which he commented that they offered, 'a very good Way, (much open and Heathy) as indeed the whole County generally' He added that James I had even 'once pleafantly laid, He *would have all Norfolk cut out into Roads*, to fupply the reft of the Kingdom' (Ibid., Image 248).

Between Godalming, Surrey and Liphook, Hampshire, Ogilby suggested an alternative route, to save a 'Foot-man' nearly a mile of travel (1675, Image 111). He also suggested that the route along the beach between Flint and Holywell was best attempted 'when the

Tide is out' (Ibid., Image 316). Ogilby made it clear that, as today, through traffic can keep a town alive. He discussed the state of Hertford, which had 'much decay'd' since the 'great Road' had been diverted from it (Ibid., Image 34).

Gibson made few extra comments about travel, other than to correct Camden's description of lost bridges, or newer roads. However, he clearly appreciated Roman roads, stating, 'A little above *Gainsburrow*...a Roman way goes into this County...It is a great road for pack-horses, which travel from the west of Yorkshire, to *Lincoln, Lyn, and Norwich*' (1722, Lincolnshire). Yet, despite his commentary, it is clear that Gibson had not visited the East Riding, providing Leland's comments about Monserrant Castle, rather than his own. Yet, he did provide a huge amount of extra details about Kingston upon Hull, implying an actual visit there.

For travellers, sea journeys, necessary for foreign travellers, and preferable for other journeys, were also fraught with difficulties. Frederick, Duke of Wirtemberg, noted that bad weather could make sea journeys extremely treacherous and when the Duke's twenty-four horses all fell over in a large swell during a stormy crossing *en route* to Dover, their combined weight nearly capsized the vessel (Rye 1865, 4).

3.8.3 ACQUAINTANCES AND ACCOMMODATION

When Christopher Saxton surveyed Wales for his 1579 maps, he carried with him an open letter allowing him access to all regions, including towns, castles and high points. The Privy Council Register (10/07/1576, 2/11, pages 44-45) also expected local mayors and Justices of the Peace to provide Saxton with a group of honest men, who knew the area well (Tyacke & Huddy 1980, 32). Yet, these types of guides were criticised by the surveyor, John Norden (c.1548-1625), who pointed out that he was completely reliant on their knowledge, without always being able to check each fact (Ibid.). Although not referenced, we can assume that acquaintances were sought by the early map-makers, to provide local data on the terrain and local facilities. Ogilby must have been in communication with his 'subscribers', as well as with local law-makers and clergy, to provide answers to the many questions he asked, about each region (Ereira 2016, 308, 319).

Platter travelled with five other gentlemen on his 'holiday' around the south-east of England (Williams 1937, 229) and while there is little information about the companions of the antiquarians, Celia Fiennes provided much data on the subject. She 'moved easily and freely between social spheres' (Morris 1747, Introduction). From her family home in Newton Toney, Wiltshire, she went on journeys into several parts of England with her mother, such as, to Berkshire and Oxford, and into Hampshire and along the Thames (Ibid., 5, 23, 27). Fiennes also travelled with her sister and a maid to Stonehenge and Somerset (Ibid., 17) and with her cousin's daughters, to Cambridge, Lincoln and Nottingham (Ibid., 63, 236). She referenced male servants at least twice (above) and she often stayed with relations on her travels, which she referenced on at least seventeen occasions, such as, on page 11, where she commented that she was staying with her 'Cos'n Colliers', near to Swanage.

During her journey from London to Herefordshire in or before 1696, Fiennes visited several different relations *en route* and whilst at her aunt's house at Wolseley, she frequently rode in the Wolseley equipage for shorter journeys, rather than riding (Ibid., 112). Fiennes also saw, visited or even stayed at a huge number of other houses and castles, such as her day visit to Audley End, in Essex (Ibid., 63). At other times, Fiennes recorded having stayed in towns on her journey, such as, St. Austell and Oxford (Ibid., 256, 341). Fiennes stayed at many inns too, such as the Angel in Doncaster; an inn in Knaresborough; the Swan in Warsford; and the Crown in Whitchurch (Ibid., 73, 78, 161, 226). She had a bad experience at Buxton Hall Inn, however, 'we staid two nights by reason one of our Company was ill but it was sore against our wills, for there is no peace of quiet' (Ibid., 103). Her worst experience was her stay in Haltwhistle, where an incident meant that she could not stay in the inn, 'so I was forced to take up in a poor cottage...the Landlady brought me out her best sheetes which serv'd to secure my own sheetes from her dirty blankets...but noe sleepe could I get' (Ibid., 207). There is, nevertheless, constant evidence of her resilience. For example, she ended up sleeping in Smockington, Warwickshire, with her 'équipage in Leicestershire 10 mile' (Ibid., 333). Yet, she rarely mentioned her own fear and seemed to take all eventualities in her stride.

For every route, Ogilby referenced the quality of accommodation, such as inns, that the traveller would find, for example, the Bull Inn on the Ferrybridge to Boroughbridge road

(1675, Image 307) or the White Horse Inn, on the York to West-Chester route (Ibid., Image 287). He sometimes added further comments, such as that for the Nottingham to Grimsby road, 'not affording altogether that conveniency of Entertainment as you have in the direct and more frequented Roads' (Ibid., Image 254). On the other hand, the Prestain to Carmarthen road 'hath ferveral Inns on the Road to accomodate Travellers, besides thofe in the Towns paft through' (Ibid., Image 273). Luckington village also had good inns for the accommodation of travellers (Ibid., Image 259).

The Ordnance surveyors really struggled with their accommodation in Scotland where the weather was so unfavourable that their tents often blew down during the night, and they found lodgings 'miserable', with little available food other than porridge (Ibid., 222).

3.8.4 LANGUAGE BARRIERS

The map-makers were concerned with the place-names of the regions they were visiting. It had also been a concern of Christopher Saxton in his 1579 map (Hewitt 2010, 162). Thomas Platter, who travelled around southern England in 1599, had to employ an interpreter to aid comprehension and Fiennes also referenced issues with comprehending directions. In Blyford, Suffolk, for example, she commented that, 'generally the people here are able to give so bad a direction that passengers are at a loss what aime to take, they know scarce 3 mile from their home' (Morris 1947, 145). Regional dialects and local accents must also have affected the antiquarians and, although they did not discuss it, we can surmise that some of the misspelling by antiquarians in Chapter 2 might have been due to these issues.

Language was a huge barrier to the Ordnance Surveyors, in certain parts of Britain. Hewitt, for example, discussed a particular issue with regards to Wales where, not only was there a language barrier, but also frequently two place names for each location, in bilingual parts of the country. Correctly spelling town names in Glamorganshire was a real issue (Hewitt 2010, 192-5) and surveyors had to include time to research town names, using printed and manuscript sources and they even needed their own library of reference material (Ibid., 193). This did not help in Ireland, however, where the general mistrust of the British military meant that people were reluctant to help the surveying process (Ibid., 253). Despite this, there were stories of collaboration between surveyors and locals, especially

after 1825, when landowners provided site data and local residents were employed to walk estate boundaries (Ibid., 266). Thomas Aiskew Larcom even learnt Gaelic, from 1828 onwards, to help to better understand place names and improve the Survey's accuracy (Ibid., 264). The problem was too great for him alone, though and Larcom later employed Irish-speakers to research its place names (Ibid., 273). Colby and Larcom wanted to provide a 'composition of 'memoirs'' to create 'a fully rounded national survey' of Ireland. From 1826, surveyors carried 'remark books' to note history, customs, traditions, ancient clan music, costume and marches for each area (Ibid., 270-1). All the same, that project had to be abandoned in 1840, as it became too time-consuming (Ibid., 285).

3.8.5 HOSTILITY

In 1576, Christopher Saxton was provided with a horseman, with knowledge of both English and Welsh, to guide him from town to town safely (Tyacke & Huddy 1980, 32). Clare Williams mentioned Jean Bernard's comment in 1579 when he provided a warning note for foreigners visiting Salisbury Plain, which was dangerous due to the thieves and brigands frequenting it (Williams 1937, 58). Frederick, Duke of Wirtemberg, had a close call when, between Rochester and Gravesend, at Gad's Hill, during the later evening, his group was set upon by a man with a drawn sword, who clearly intended to ambush them. Fortunately, the group rode away at speed (Rye 1865, 49). Celia Fiennes too had a lucky escape during her most dangerous experience by far, when she was confronted with highwaymen. This happened in Cheshire; she was on the road into Whitchurch with her servants when 'two fellows' on horseback with pistols, 'truss'd up with great coates' tried to get between her servants' horses and hers. Fortunately, it was market day, so there were other people on the road and haymakers in the fields and the men left and turned back (Morris 1947, 225). Ogilby's *Britannia* description of the transverse map from London to Portsmouth cautions travellers of a hill which is, 'not rarely infested by Robbers', between Comb and Kingston-upon-Thames (1675, Image 110).

There were issues for the Ordnance Survey in both Scotland and Ireland. In the latter, guards were actually needed to protect equipment from sabotage in some places and some surveyors were assaulted (Hewitt 2010, 252). Morris, in his annotation of Celia Fiennes' travels, commented that at the turn of the eighteenth century, from Carlisle onwards to the North, guides were needed for physical protection. Having referenced her attitude to

a poor cottage in Haltwhistle, above, one can imagine that Fiennes did nothing to ingratiate herself to the locals she saw or met. On her arrival in Scotland, for example, she discussed the 'Borderers', who 'seem to be very poor people which I impute to their sloth' (1947, 203-4).

3.8.6 INSTRUMENTS

Before the 1600s, there were no particular surveying techniques but rather it was a period of practical experimentation for cross-staffs; geometrical measuring of the land; sighting rules, semi-circles, magnetic needles, dividers and compasses; and eventually brass topographical instruments. From the 1570s onwards, these were used more effectively to triangulate points within the landscape (Tyacke & Huddy 1980, 19-23). However, only local and estate map-makers ever seemed to reference their plane tables and theodolites (Ibid., 55); national map-makers did not explain their methods. This led to inaccuracies, which can be seen by comparing county maps with one another. The main issue was scale, as the engravers altered this for each county.

The later Ordnance Surveyors continued to face problems with their instruments. The seventy-year period of the Ordnance Survey was a time of industrialisation, at a scale never before seen in Britain. It began in the early 1800s in Leeds; shifted northwards with the first passenger railway between Stockton and Darlington in 1825; then moved to Liverpool, Manchester, to South Wales, and 'finally across England and southern Scotland'. Railways, factories, urban centres and mines all created drastic alterations to maps over short time periods, which made the surveyors' work very difficult (Ibid., 292-4). Early mapmakers struggled with 'questionable' accuracy in their maps (Hewitt 2010, xx) and during the first military survey of Scotland between 1747 and 1755, discrepancies were found in the level of detail provided for each region and errors were discovered over large distances (Ibid., 39-40). When new surveys of British regions were attempted, surveyors were often let down by their instruments (Ibid., xxii) and for the Ordnance Survey project, therefore, 'the most advanced, accurate, intricate measuring instruments that had ever existed' were either purchased or developed (Ibid., xxiv, xxvii).

Fortunately, by the second half of the eighteenth century, Britain was home to some of the most precise map-making and astronomical instruments in the world (Ibid., 4). The Great

Theodolite, created by Jesse Ramsden, was utilised to accurately triangulate points around Britain. It had spirit levels, internal lanterns, a brass circular scale, lower and upper telescopes (Ibid., 82), with revolutionary, far-seeing, achromatic lenses, an invention by John Dolland in 1757 (Ibid., 79). High points around the landscape, such as beacons, were used as sights, to complete the Trigonometrical Survey (Ibid., 131). The secondary, Interior Survey was completed using a smaller theodolite (Ibid., 136) and the results were later scaled down to one inch to one mile (Ibid., 160).

In 1790, Charles Lennox, Third Duke of Richmond, held 'the conviction' that 'the honour of the nation' depended on creating 'a map of the British islands' 'greatly superior in point of accuracy to any that is now extant' (Ibid., 93-4). Yet, as mentioned above, there was sometimes great difficulty in locating sight lines, due to haze, mist and fog. Thomas Drummond had the foresight to use a 'limelight', which had been invented in the 1820s by a chemist, Sir Goldsworthy Gurney. This provided a much brighter, piercing light, which worked over sixty-plus mile distances, and became known as the Drummond Light (Ibid., 248). Another issue revolved around the accuracy of the glass rods used to measure baselines and in 1827, Thomas' Colby and Drummond invented Compensation Bars, to improve baseline accuracy, as this instrument remained reliable regardless of temperature or moisture (Ibid., 254-5). However, mistakes were made. Lundy Island, in the Bristol Channel, was drawn in the wrong place. At the same time, many more mistakes were also found on already-completed maps. These may have been the result of human error, such as the rushed Interior Survey of Lincolnshire in 1818; or of changes to the rapidly altering landscape, due to industrialisation in the first half of the nineteenth century, such as happened to Birmingham and its wider area. Keeping up with changes was not foreseen and added an extra burden to the work (Ibid., 236-8).

A 'mean sea level' was calculated at Victoria Dock, Liverpool and this was used as a 'datum' measurement from 1840 onwards. The Trigonometrical Survey was also recalculated by 1852, to better compensate for the effects of local attraction, size and shape of the Earth (Ibid., 292). These issues all led to further delays in publishing maps, as each new development ultimately meant that a renewed map of each region was needed (Ibid.).

3.9 DISCUSSION

This analysis has widened current knowledge about early travel in Britain. It is clear that the process was complicated and that it required much forethought and planning. A traveller needed great amounts of money and time, to complete a journey around the country; acquaintances and accommodation *en route* were highly desirable and might have influenced the routes taken. The early travellers discussed in this analysis have provided us with useful details, to add to our knowledge of the issues faced in the 1500s to 1900s.

Ogilby sometimes made comments regarding the issues he had faced during his road surveys, such as, a road being 'more unpleafant' beyond a certain point (1675, Image 137) but, as he did not elaborate on the reason for this, we are unable to comment further. As we have seen, Celia Fiennes, however, frequently provided great detail about the issues she faced while travelling around England. In fact, her commentary was by far the most interesting and enlightening, as she had much to say about every aspect of her journeys.

From the perspective of the early map-makers, their work was undertaken for money and this obviously affected where they went and how they travelled. Nevertheless, as the work was either for the Crown or for publication purposes, this might have led to issues for the map-makers. For example, if they knew that some local gentry might buy their maps, this might have persuaded them to include certain large properties in their surveys, whereas others may not have been known about or else were neglected. This 'spirit of commercial opportunism' continued into the 1770s, leading to multiple editions of both Speed and Saxton's groups of maps, with more and more inclusions (Tyacke & Huddy 1980, 37-38).

It is evident from this analysis that as Britain's roads, rivers and internal structures were surveyed, ancient monuments were rarely mentioned on maps, as way finders or prominent monuments in the landscape, to aid travellers. Bradley has highlighted the importance of natural features, such as prominent trees within a landscape (2007) and these were as likely to be referenced as standing stones. One rare reference to prehistoric monuments was found in the Military Survey of Lowland Scotland, which mapped the 'ancient stone circles of Ayrshire' (Hewitt 2010, 39). Ogilby had worked with Aubrey in Surrey, yet Ogilby referenced very few ancient structures on his maps, despite boasting in the Introduction to *Britannia*, that he had included descriptions of 'Ancient Monuments'

(Ogilby 1698, Image 2). Speed, however, excused his lack of other references, to some extent, by explaining that his purpose was to place towns correctly within each county and had therefore had to leave many other interesting sites off his maps. Whether he was referring to prehistoric structures within this statement, or not, is unclear.

As has been shown, travel in the early eighteenth-century England was almost exclusively a masculine pursuit, whether for personal fulfilment, or for work purposes. Celia Fiennes, who travelled at the turn of the eighteenth century, therefore, was in an unusual position. She was free from family burdens as a single woman and was financially self-sufficient. Morris accepted that Fiennes was enthusiastic and adventurous. However, he did not acknowledge that her journeys were remarkable for a female in this period. He neglected to adequately compare her to other travellers of the time. Whilst antiquarians discussed what could be seen from the road on their travels, they often failed to include personal details about their modes of travel; their difficulties; with whom they were travelling; and where they stayed. Fiennes added in numerous details about her personal travelling experiences. Morris implied in his Introduction that Fiennes was poorly educated, yet her accounts of the monuments she saw and the places she visited are full of insight and thoughtful observation. They are just framed by the time she wrote and travelled; and by the level of education that she would have had.

3.10 CONCLUSION

These early travellers were amazing chorographers, describing and mapping the areas they visited. Their commentary has been very instructive, by providing an insight into early travel, rarely mentioned by the antiquarian explorers. Contra Ereira's view that travel problems in the later seventeenth century 'tend to be exaggerated', this study has demonstrated the realities of early travel (2016, 278). The hindrances to these explorers were numerous: bad roads; marshy land; highwaymen; poor weather; toponymic issues, among others. Early travellers, whether mapmakers, later antiquarians or early holidaymakers, provided a rich picture of the trials faced whilst travelling between the 1500s and 1900s. As with the issues faced by the antiquarian Aubrey and the Duke of Wirtemberg, an inability to travel due to a lack of animals, seems slightly farcical today, yet it was a very real problem for these travellers. It is in the dangers that we really understand

the issues faced, however. Robbery at knife point, highwaymen, dangerous sea and river crossings, as well as local hostility were all very real problems in the past. It is a testimony to the resilience of these early travellers, both those at work, and those early holidaymakers, that they chose to brave such situations, in order to widen their knowledge. Given the stresses they faced, it is no wonder that northern England was so rarely visited. Had great swathes of Yorkshire been owned by one influential and prehistory-loving gentleman, the overall picture might have been very different. Stonehenge's location between the fashionable towns of London and Bath, and close to Pembroke's collection of marbles at Wilton House, meant that it was a local curiosity, passed *en route* (Sweet 2004, 134). Travel was so much more challenging in the upland north, with its rugged, untamed terrain, far away from the homes of these distinguished gentlemen. The low-lying lands of the south meant that distances could be achieved more quickly, either by boat or on land. In fact, miles were often counted as longer in the north as in the south. In the seventeenth century, for example, there were 3,208 yards to a mile in Northamptonshire but only 1,689 yards to a mile in Lancashire (Ereira 2016, 282). Early travellers needed vast amounts of time and money, as well as local knowledge and a team of helpers, to visit Britain widely.

The early traveller's accounts in this chapter have demonstrated that, although megalithic monuments were known and recognised in the 17th and 18th centuries, they were rarely drawn onto maps. Travel was extremely problematic and the weather and road quality hugely hampered travel around England. Despite this, travellers with little or no formal education, such as Celia Fiennes, were clearly fascinated, driven by curiosity and interest, to educate themselves and to pursue their wider interests. They attempted routes to the far reaches of the country although they clearly found travel in lowland England far easier than that in the west and the north. Their variable reporting reinforces the reality of their situations. The map-makers had more success. They were paid to achieve a certain goal and given the time needed to complete the tasks, even though they too struggled through many trials. The early antiquarians had faced similar challenges. Whereas Leland was tied to his role for King Henry VIII, Camden had the time and the freedom to follow whichever route he found. I anticipated the maps completed by Speed, Ogilby and the Ordnance Survey to be stock full of drawn ancient monuments passed en route, as easy waymarkers for the new and interested traveller. Charles II's conspiracy plot, therefore, came as a shock. Money and

power dominated at a time when valuing ancestry and roots might have achieved the same goal. As we again enter a period of huge political and national uncertainty, might we now use these remaining ancient monuments as positive structures, links from the past to the future, bonds of certainty and absoluteness, to encourage pride in our nation and its heritage.

The following chapter will consider the locations of early excavations of stone circles and barrows around Britain, to see whether their geographical locations have affected the current focus on monuments of interest.

4 EARLY EXCAVATIONS

This chapter considers early county publications, journals and excavations and demonstrates the variation in early, regional levels of interest in Neolithic and Bronze Age monuments in Britain for the period 1500 to 1900. Highland and lowland landscapes are represented through excavation data on megalithic and non-megalithic structures. The current-day marginalisation of the N/EBA monuments of northern England is proven not to have been reflected in the perseverance of early writers and excavators, who endeavoured to explore their own regions and monuments but were often constrained by time and other factors (see chapters 2 & 3, for further details).

4.1 INTRODUCTION

The antiquarians and other early travellers' routes, commentary and accounts have provided us with some powerful data about the benefits and consequences of travel during the 1500s to 1900s. This section will focus instead on early regional archaeological research. Firstly, early county histories, including the Victoria County Histories, and local archaeological and historical journals were focussed on, to uncover the spread of interest in Neolithic and Early Bronze Age monuments within Britain over time. Then, the geographical emphasis of the first logged excavations of British Neolithic long and round mounds and N/EBA stone circles will be assessed, to further unpick this issue.

Each of these elements of research have been considered separately, below. The value of the data will then be considered within the Analysis and Discussion section and the Conclusion.

4.2 EARLY COUNTY HISTORIES

Data was collated on early county histories, to see where antiquarians and historians were working and placing their emphases. The Victoria County Histories are one strand of this investigation, but there were many other earlier histories written about both counties and major towns. Yet, the concept of the county history was an English phenomenon. 'Scottish antiquarian traditions were rooted in kinship networks and genealogy rather than territorial boundaries and the descent of property'. Lower population density and a smaller propertied class would have also impeded volume sales. In Wales, there was a tradition of

topographical literature, and early chorographical and antiquarian publications remained unpublished until the end of the eighteenth century when 'new' gentry wanted to establish and legitimise their own antiquity (Sweet 2004, 42-4).

4.2.1 VICTORIA COUNTY HISTORY

The concept of the Victoria County History project (VCH) was to 'create an encyclopaedic record of England's places and people from earliest times to the present day' (<https://www.victoriacountyhistory.ac.uk/>). It was founded in 1899 and dedicated to Queen Victoria. According to the project, it is 'without doubt the greatest publishing project in English local history' (Ibid.). However, it is an ongoing project and its historians continue to gather data for twenty counties to this day. The Victoria County History archive was used to gather information on the publication of the various county histories for England (Ibid.). Any other pertinent information was also logged if it explained the process of data-gathering within each county and details on any information not recorded.

4.2.2 VICTORIA COUNTY HISTORY RESULTS

The dates provided indicate the date of the first volume published for each county (Table 11). Where there was more than one entry per year, these were placed in alphabetical order, as all were published in the January of each year.

There are also, surprisingly, some ongoing histories, which are listed as 'Incomplete but active'. These are for the counties of: Westmorland and the West Riding of Yorkshire. One county remains incomplete and there seem to be no plans to revive it or affect its completion. Northumberland is labelled as 'Incomplete and inactive'; however, as seen below, *A history of Northumberland* was at least completed in 1858, by John Hodgson, which would serve as an alternative to the VCH (see Table 12).

1900	Hampshire
1901	Norfolk
	Worcester
1901-5	Cumberland
1902	Northampton
1902-14	Surrey
1902-37	Hertford
1903	Essex
1904	Warwick
1904-14	Bedford
1905	Derby
	Durham
	Sussex
1905-28	Buckingham
1906	Cornwall
	Devon
	Lancaster
	Lincoln
	Nottingham
	Somerset
1906-27	Berkshire
1907	Gloucester
	Leicester
	Oxford
	Suffolk
1907-25	York
1908	Dorset
	Hereford
	Kent
	Rutland
	Stafford
1909	London
1911	Middlesex
1926-38	Huntingdon
1938	Cambridgeshire
1953	Wiltshire
1979	Chester
2005	Darlington
2008	Sunderland

Table 11 - Dates of the earliest to latest publications of the Victoria County Histories

4.2.3 OTHER EARLY COUNTY HISTORIES

To compile the list of early county histories, Durham University library catalogue entries were researched, rather than the British Library's (BL) website. The BL might have revealed a much wider selection of early books on county histories and antiquities but would have overwhelmed the data needed for this short analysis/chapter. Within Durham University

Library, only books about whole counties were selected, and not those about specific places within a county, for example, the History of Manchester, by John Whitaker (1771). County journals and the dates of their first publications were also added.

Once map-makers and early antiquarians had published their works, knowledge of one's local antiquities became fashionable and the concept of the tourist was established (Chapters 2 and 3). By the mid-1600s, whole county histories were starting to be compiled.

4.2.4 OTHER EARLY COUNTY HISTORIES RESULTS

4.2.4.1 Other Early County Histories by English county

County/Area	Publication	Year	Author
Bedfordshire	----		
Berkshire	A compleat history of Berkshire The history and antiquities of Berkshire	1730 1736	Anthony Hall Elias Ashmole
Buckinghamshire	The history and antiquities of the county of Buckingham	1847	George Lipscomb
Cambridgeshire	A compleat history of Cambridgeshire A history of Cambridgeshire	1730 1897	Thomas Cox Edward Conybeare
Cheshire	Lancashire and Cheshire, past and present	1867?	Thomas Baines
Cleveland	The history and antiquities of Cleveland	1846	John Walker Ord
Cornwall	Observations on the antiquities historical and monumental, of the county of Cornwall	1754	William Borlase
Cumbria	The history and antiquities of the counties of Westmorland and Cumberland	1777	Joseph Nicholson and Richard Burn
Derbyshire	The history of the county of Derby	1829	Stephen Glover
Devon	The history of Devonshire	1793	Richard Polwhele
Dorset	The history and antiquities of the county of Dorset	1774	John Hutchins
Durham	The history and antiquities of the county Palatine of Durham	1785	William Hutchinson
Essex	The history and antiquities of Essex The history and antiquities of the county of Essex	1740 1768	N. Salmon Philip Morant
Gloucestershire	The ancient and present state of Glostershire A new history of Gloucestershire	1712 1779	Sir Robert Atkyns Samuel Rudder
Hampshire	The Hampshire repository; or, Historical, economical, and literary miscellany, including the Isle of Wight	1800	? Mr Robbins ? Thornton Gale
Herefordshire	Introductory sketches towards a topographical history, of the county of Hereford Collections towards the history and antiquities of the county of Hereford	1793 1804	John Lodge John Duncumb
Hertfordshire	The history of Hertfordshire	1728	N. Salmon
Humberside	A new and complete history of the town and county of the town of Kingston-Upon-Hull	1788	George Hadley
Kent	The history and topographical survey of the county of Kent	1797	Edward Hasted

County/Area	Publication	Year	Author
Lancashire	Lancashire and Cheshire, past and present	1867?	Thomas Baines
Leicestershire	The history and antiquities of the county of Leicester	1796?	John Nichols
Lincolnshire	The history of the county of Lincoln	1833-4	Thomas Allen
London	The history of London and its environs	1811	Henry Hunter
Middlesex	The history of the county of Middlesex	1795	Luke Pope
Norfolk	The history and antiquities of Norfolk	1781	Anon
Northamptonshire	The history and antiquities of Northamptonshire	1791	John Bridges
	The history and antiquities of the county of Northampton	1822	George Baker
Northumberland	A history of Northumberland	1858	John Hodgson
Nottinghamshire	The history and antiquities of the town and county of the town of Nottingham	1795	John Throsby
Oxfordshire	A compleat history of Oxfordshire	1730	Thomas Cox
Rutland	The history and antiquities of the county of Rutland	1684	James Wright
Shropshire	----		
Somerset	The history and antiquities of the county of Somerset	1756	John Collinson
Staffordshire	The history and antiquities of Staffordshire	1801	Stebbing Shaw
Suffolk	The history and antiquities of the county of Suffolk	1848	Rev Alfred Suckling
Surrey	The history and antiquities of the county of Surrey	1814	Rev Owen Manning
Sussex	The history, antiquities and topography of the county of Sussex	1835	Thomas Walker Horsfield
Tyne and Wear	The history and antiquities of the town and county of the town of Newcastle upon Tyne	1789	John Brand
Warwickshire	The antiquities of Warwickshire illustrated	1656	Sir William Dugdale
Wiltshire	The history of ancient Wiltshire	1810	Sir Richard Colt Hoare
Worcestershire	History of Worcestershire	1781	Thomas Nash
Yorkshire East	History and topography of the city of York, the Ainsty Wapentake and the East Riding of Yorkshire	1855-6	James Joseph Sheehan
Yorkshire North	History, directory and gazetteer of the county of York	1822	Edward Baines
	Yorkshire: the North Riding	1977	Malcolm Barker
Yorkshire West	History, gazetteer, and directory of the West-Riding of Yorkshire	1837	William White
Yorkshire (general)	A topographical dictionary of Yorkshire Yorkshire, past and present	1822 1871-7	Thomas Langdale Thomas Baines
Isle of Man	The history and description of the Isle of Man	1742?	George Waldron
Scilly Isles	Observations on the ancient and present state of the islands of Scilly	1756	William Borlase

Table 12 – Other early counties histories, their years of publication and authors

4.2.4.2 Other Early County Histories by year of publication

Year	County/Area	Publication	Author
1656	Warwickshire	The antiquities of Warwickshire illustrated	Sir William Dugdale
1684	Rutland	The history and antiquities of the county of Rutland	James Wright
1712	Gloucestershire	The ancient and present state of Glostershire	Sir Robert Atkyns
1779		A new history of Gloucestershire	Samuel Rudder
1728	Hertfordshire	The history of Hertfordshire	N. Salmon
1730	Berkshire	A compleat history of Berkshire	Anthony Hall
1736		The history and antiquities of Berkshire	Elias Ashmole
1730	Cambridgeshire	A compleat history of Cambridgeshire	Thomas Cox
1897		A history of Cambridgeshire	Edward Conybeare
1730	Oxfordshire	A compleat history of Oxfordshire	Thomas Cox
1740	Essex	The history and antiquities of Essex	N. Salmon
1768		The history and antiquities of the county of Essex	Philip Morant
1742?	Isle of Man	The history and description of the Isle of Man	George Waldron
1754	Cornwall	Observations on the antiquities historical and monumental, of the county of Cornwall	William Borlase
1756	Somerset	The history and antiquities of the county of Somerset	John Collinson
1756	Scilly Isles	Observations on the ancient and present state of the islands of Scilly	William Borlase
1774	Dorset	The history and antiquities of the county of Dorset	John Hutchins
1777	Cumbria	The history and antiquities of the counties of Westmorland and Cumberland	Joseph Nicholson and Richard Burn
1781	Norfolk	The history and antiquities of Norfolk	Anon
1781	Worcestershire	History of Worcestershire	Thomas Nash
1785	Durham	The history and antiquities of the county Palatine of Durham	William Hutchinson
1788	Humberside	A new and complete history of the town and county of the town of Kingston-Upon-Hull	George Hadley
1789	Tyne and Wear	The history and antiquities of the town and county of the town of Newcastle upon Tyne	John Brand
1791	Northamptonshire	The history and antiquities of Northamptonshire	John Bridges
1822		The history and antiquities of the county of Northampton	George Baker
1793	Devon	The history of Devonshire	Richard Polwhele
1793	Herefordshire	Introductory sketches towards a topographical history, of the county of Hereford	John Lodge
1804		Collections towards the history and antiquities of the county of Hereford	John Duncumb
1795	Middlesex	The history of the county of Middlesex	Luke Pope
1795	Nottinghamshire	The history and antiquities of the town and county of the town of Nottingham	John Throsby
1796?	Leicestershire	The history and antiquities of the county of Leicester	John Nichols
1797	Kent	The history and topographical survey of the county of Kent	Edward Hasted
1800	Hampshire	The Hampshire repository; or, Historical, economical, and literary miscellany, including the Isle of Wight	? Mr Robbins ? Thornton Gale
1801	Staffordshire	The history and antiquities of Staffordshire	Stebbing Shaw
1810	Wiltshire	The history of ancient Wiltshire	Sir Richard Colt Hoare

Year	County/Area	Publication	Author
1811	London	The history of London and its environs	Henry Hunter
1814	Surrey	The history and antiquities of the county of Surrey	Rev Owen Manning
1822 1871-7	Yorkshire (general)	A topographical dictionary of Yorkshire Yorkshire, past and present	Thomas Langdale Thomas Baines
1822 1977	Yorkshire North	History, directory and gazetteer of the county of York Yorkshire: the North Riding	Edward Baines Malcolm Barker
1829	Derbyshire	The history of the county of Derby	Stephen Glover
1833-4	Lincolnshire	The history of the county of Lincoln	Thomas Allen
1835	Sussex	The history, antiquities and topography of the county of Sussex	Thomas Walker Horsfield
1837	Yorkshire West	History, gazetteer, and directory of the West-Riding of Yorkshire	William White
1846	Cleveland	The history and antiquities of Cleveland	John Walker Ord
1847	Buckinghamshire	The history and antiquities of the county of Buckingham	George Lipscomb
1848	Suffolk	The history and antiquities of the county of Suffolk	Rev Alfred Suckling
1855-6	Yorkshire East	History and topography of the city of York, the Ainsty Wapentake and the East Riding of Yorkshire	James Joseph Sheehan
1858	Northumberland	A history of Northumberland	John Hodgson
1867?	Lancashire	Lancashire and Cheshire, past and present	Thomas Baines
1867?	Cheshire	Lancashire and Cheshire, past and present	Thomas Baines
	Bedfordshire	----	
	Shropshire	----	

Table 13 – Other early county histories, colour-coded by year of publication (pink-pre-1700; green-1700-1750; orange-1750-1800; blue-1800-1850; yellow-1850+)

As can be seen, from Table 12 and Table 13, the first eight published early county histories above, produced between 1650 and 1740, are all for land-locked, internal counties of central southern and midland England. Over the next 130 years, many other county histories from all parts of England were published, by a wide variety of antiquarians. Bedfordshire and Shropshire do not seem to have had an early county history of their own.

4.2.5 EARLY COUNTY JOURNALS

The county journals do not begin to appear until the nineteenth century. The earliest journal was *Archaeologia Aeliana*, of the Society of Antiquaries of Newcastle-upon-Tyne, which released its first publication in 1822 (Table 14). 30 local journals were started before 1900 and 3 between 1900 and 1940. 7 new local journals began after the 1960s.

County/Area	English County Journal	Year of Commencement
Bedfordshire	Bedfordshire Archaeological Journal	1962
Berkshire	Journal of the Berkshire Archaeological and Architectural Society	1889
Buckinghamshire	Records of Buckinghamshire	1854
Cambridgeshire	Proceedings of the Cambridge Antiquarian Society	1859
Cheshire	Lancashire and Cheshire Antiquarian Society	1884
Cleveland	Teesside Archaeological Society	1994
Cornwall	Cornish Archaeology	1962
Cumbria	Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society	1870
Derbyshire	Derbyshire Archaeological Journal	1879
Devon	Proceedings of the Devon Archaeological Society	1929
Dorset	Proceedings of the Dorset Natural History and Archaeological Society	1877
Durham	Transactions of the Architectural and Archaeological Society of Durham and Northumberland	1862-3
Essex	Essex Journal	1966
Gloucestershire	Transactions of the Bristol and Gloucestershire Archaeological Society	1876
Hampshire	Proceedings of the Hampshire Field Club and Archaeological Society	1890
Herefordshire	Herefordshire Natural History, Philosophical, Antiquarian and Literary Society	c.1845?
Hertfordshire	Transactions of the St. Alban's and Hertfordshire Architectural and Archaeological Society	1883
Kent	Archaeologia Cantiana	1858
Lancashire	Lancashire and Cheshire Antiquarian Society	1884
Leicestershire	Transactions of the Leicestershire Archaeological and Historical Society	1862
Lincolnshire	Lincolnshire History and Archaeology Journal	1966
London	London and Middlesex Archaeological Society	1860
Middlesex	London and Middlesex Archaeological Society	1860
Norfolk	Norfolk Archaeology	1846
Northamptonshire	Northamptonshire Archaeology (Federation of Northamptonshire Archaeological Societies)	1966
Northumberland	Transactions of the Architectural and Archaeological Society of Durham and Northumberland	1862-3
Nottinghamshire	Thoroton Society of Nottinghamshire Record Series	1903
Oxfordshire	Proceedings of the Oxfordshire Archaeological Society	1853
Rutland	Rutland Record	1930s?
Shropshire	Transactions of the Shropshire Archaeological and Historical Society	1878
Somerset	Somerset Archaeology and Natural History	1851
Staffordshire	Transactions of the Staffordshire Archaeological and Historical Society	1959-60
Suffolk	Proceedings of the Suffolk Institute of Archaeology (Quarterly Journal of the Suffolk Institute of Archaeology and Natural History)	1869
Surrey	Surrey Archaeological Society	1858
Sussex	Sussex Archaeological Collections	1846
Tyne and Wear	Archaeologia Aeliana	1822
Warwickshire	Birmingham and Warwickshire Archaeological Society (Birmingham and Midland Institute Archaeological Section)	1870
Wiltshire	Wiltshire Archaeological Magazine	1854
Worcestershire	Transactions of Worcestershire Archaeological Society	1854
Yorkshire (general)	Yorkshire Archaeological and Topographical Journal (YAJ)	1869

Table 14 - Early county and local journals and their years of commencement

4.3 EARLY EXCAVATIONS IN BRITAIN

Neolithic or Bronze Age stone circles and Neolithic long and round mounds are found all over Britain and have been referenced since the 1600s and excavated since the 1700s, such as Broad Field stone circle, Cumbria , excavated in 1789 (Burl 2000, 405). There may have been an earlier interest in these monuments but no written records exist to back up this statement. The data from the excavations of these structures provided a useful data source to consider, regarding regional interest into our prehistoric past. Data from three gazetteers was entered into an Excel spreadsheet, to build up an overview of early N/EBA excavation in Britain. The gazetteers chosen for the purpose of this study were: Aubrey Burl's *The Stone Circles of Britain, Ireland and Brittany* (2000); Ian Kinnes' *Round Barrows and Ring-ditches in the British Neolithic* (1979); and Kinnes' *Non-Megalithic Long Barrows and Allied Structures in the British Neolithic* (1992). From each gazetteer, the country, county, monument name, grid reference and details of excavations and/or publications was noted for each reference. Burl's stone circle references include four-poster stone circles and ring-cairns. However, it also included references to stone circles in Brittany, Ireland and the Channel Islands, which were not included. For the purpose of this study, I referenced only data pertaining to England, Wales and Scotland.

A couple of Burl's grid references were incorrect and therefore altered, such as, Machrie Moor stone circles have NR, not NS co-ordinates; and Backlass in Caithness has an ND, not NO co-ordinate. Burl provided a wealth of data on the events that had affected the history of the stone circle, with dates wherever possible, along with publications pertaining to it.

4.3.1 BURL (2000) RESULTS - REFERENCES TO PUBLICATIONS AND EXCAVATIONS OF BRITAIN'S NEOLITHIC AND BRONZE AGE STONE CIRCLES

Number of referenced stone circles for each period per country	1600-49	1650-99	1700-49	1750-99	1800-49	1850-99	1900-49	1950-2000	No data	Grand Total
England	4	16	3	19	10	65	71	129	4	321
Scotland		12	1	7	59	112	212	110	4	517
Wales		4	1	3	1	7	18	47	3	84
Grand Total	4	32	5	29	70	184	301	286	11	922

Table 15 – Dates for the number of referenced stone circles for each time period per country

British Counties and Total References to Stone Circles per Period of Time	1600-49	1650-99	1700-49	1750-99	1800-49	1850-99	1900-49	1950-2000	No data	Grand Total
England										
Cheshire								2		2
Cornwall	2		1	1		11	7	17		39
Cumbria	1	2		13	1	15	18	10		60
Derbyshire				4	2	1	5	19	1	32
Devon						12	12	49		73
Dorset		1	1			3		2		7
Durham				1						1
Isle of Man							1			1
Lancashire					1	9	1	1		12
Northumberland						3	7	6	3	19
Oxfordshire		3								3
Shropshire		1			4			2		7
Somerset	1	3				3	4	5		16
Wiltshire		6	1		1	4	2	3		17
Yorkshire					1	4	14	13		32
England Total	4	16	3	19	10	65	71	129		317
Scotland										
Aberdeenshire		4		2	31	22	69	4		132
Angus					3	5	1	5		14
Argyll					1	3	1	3		8
Arran					2	9	5	3		19
Ayrshire					1	3	2			6

British Counties and Total References to Stone Circles per Period of Time	1600-49	1650-99	1700-49	1750-99	1800-49	1850-99	1900-49	1950-2000	No data	Grand Total
Banffshire		1			2	4	13			20
Berwick						1	1			2
Borders									2	2
Bute					2	2				4
Caithness						2	9	4		15
Clackmannan						1	1	1		3
Colonsay								1		1
Dumfries/Galloway				2	2	19	13	7		43
East Ayrshire									1	1
East Lothian							10			10
Fife				2		1	2	2		7
Hebrides-Benbecula							2			2
Hebrides-Berneray							1	1		2
Hebrides - Harris						1				1
Hebrides - Lewis			1			1	4	5		11
Hebrides - N Uist							5			5
Hebrides - Raasay								1		1
Hebrides - Skye						1	1	3		5
Inverness-shire		1		1	3	3	1	23		32
Islay								3		3
Kincardineshire		4			2	7	6	1		20
Lanarkshire								2		2
Midlothian					1		1			2
Moray					3	2	6	2		13
Mull					1		1	1		3
Nairn					1	1		2		4
Orkney Islands		2								2
Peebles-shire							1	1		2
Perthshire					2	14	38	24		78
Renfrewshire								1		1
Ross & Cromarty						3		1		4
Roxburghshire					2	2	5	1		10
Selkirk						1	1			2
Shetland Islands							1	6	1	8
Sutherland						4	8	2		14

British Counties and Total References to Stone Circles per Period of Time	1600-49	1650-99	1700-49	1750-99	1800-49	1850-99	1900-49	1950-2000	No data	Grand Total
Tiree							2			2
West Lothian							1			1
Scotland Total		12	1	7	59	112	212	110		517
Wales										
Anglesey		1		2		1				4
Brecknockshire							1	11		12
Caernarvonshire		1		1		1	1	8		12
Cardigan								3		3
Carmarthenshire		1						4		5
Clwyd		1				1	2	2	3	9
Flintshire							1			1
Glamorgan							1			1
Merioneth			1				3	6		10
Monmouth						1		2		3
Montgomeryshire					1	3		6		10
Pembrokeshire							5	2		7
Radnorshire							4	3		7
Wales Total		4	1	3	1	7	18	47		81
Grand Total	4	32	5	29	70	184	301	286		911

Table 16 – British counties and the total references to stone circles per period of time (in 50-year time-slots)

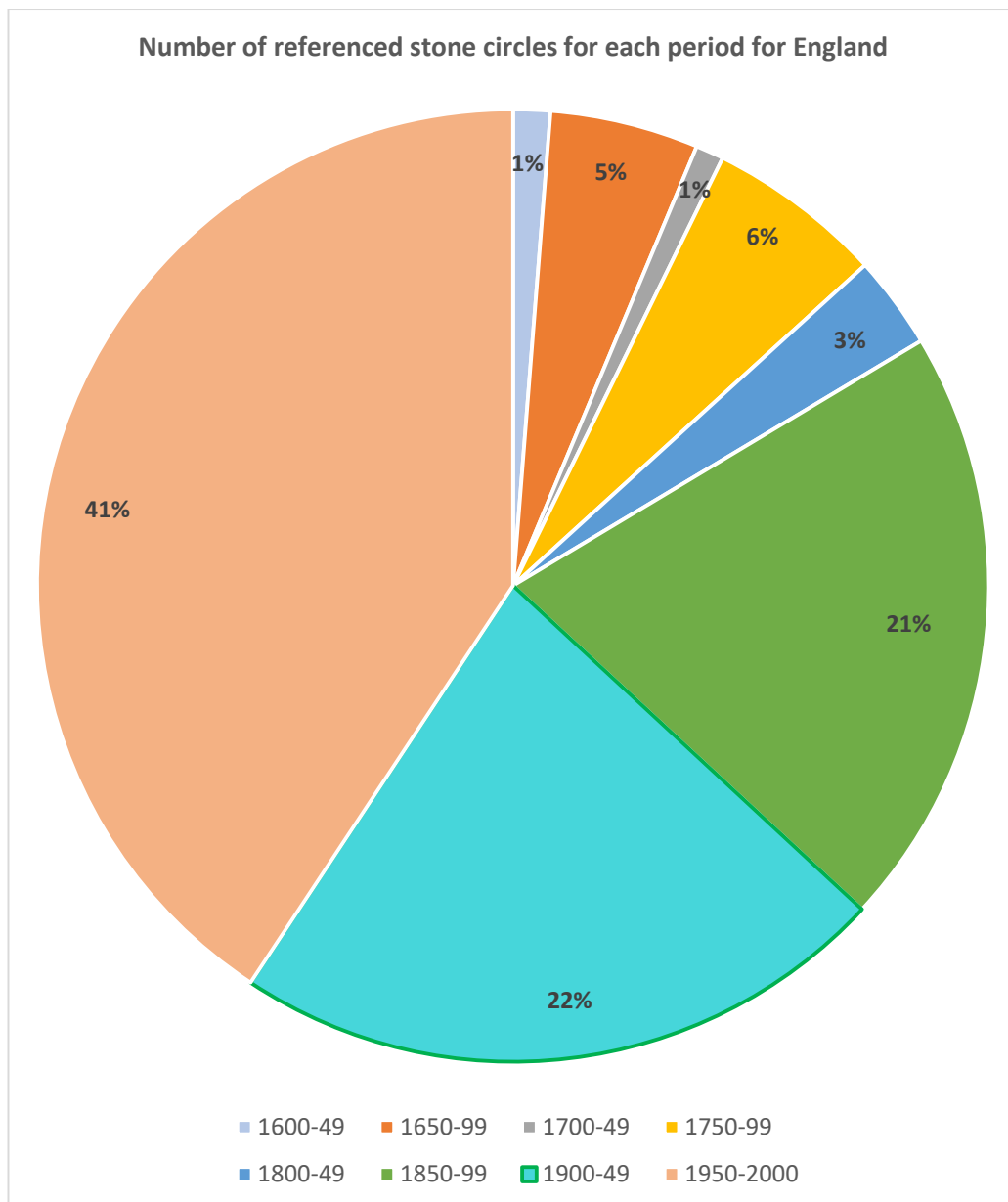


Figure 76 – Pie chart of the percentage of first references to each of the stone circles per time period for England

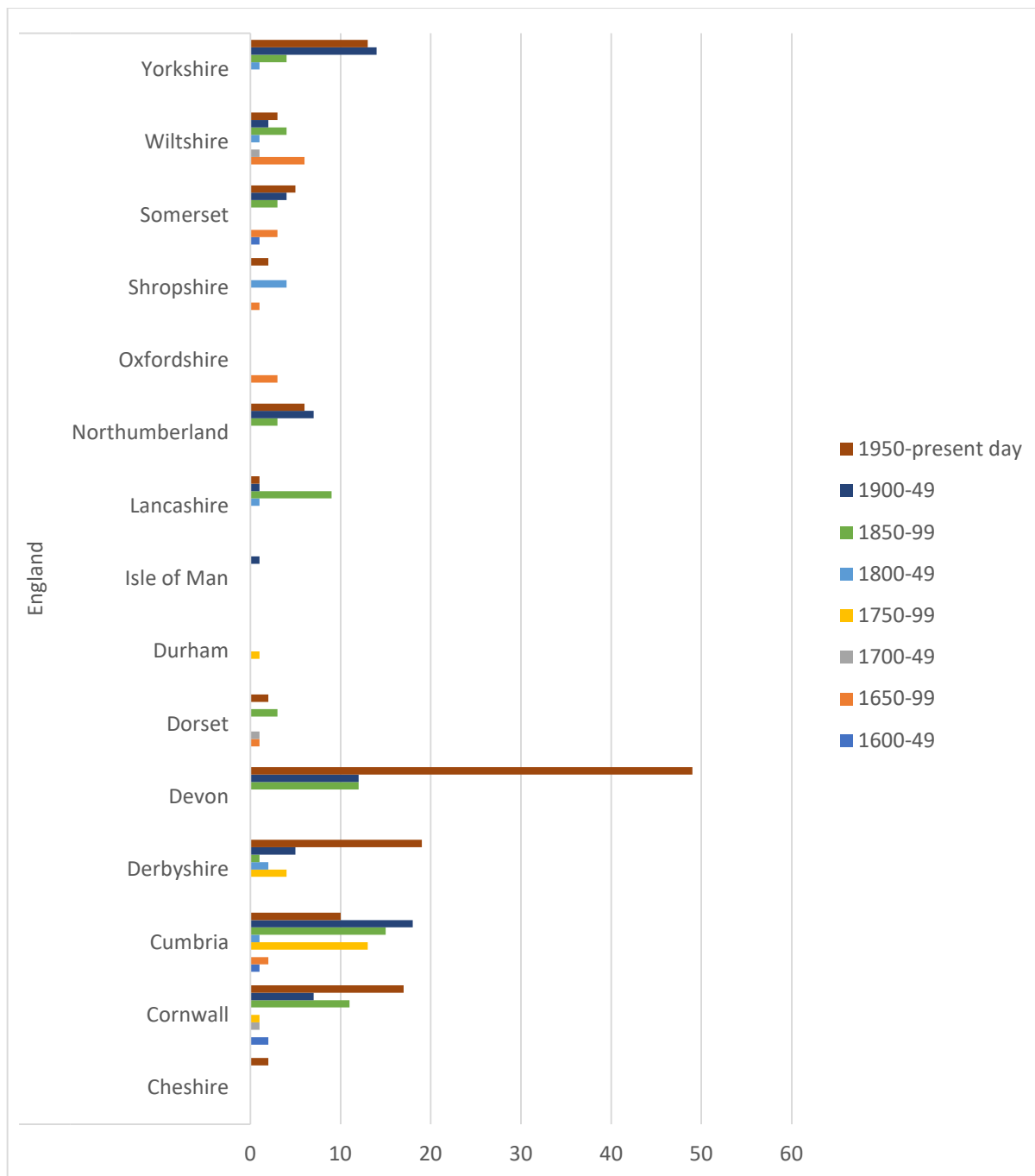


Figure 77 - Number of first references to each of the stone circles per time period for England

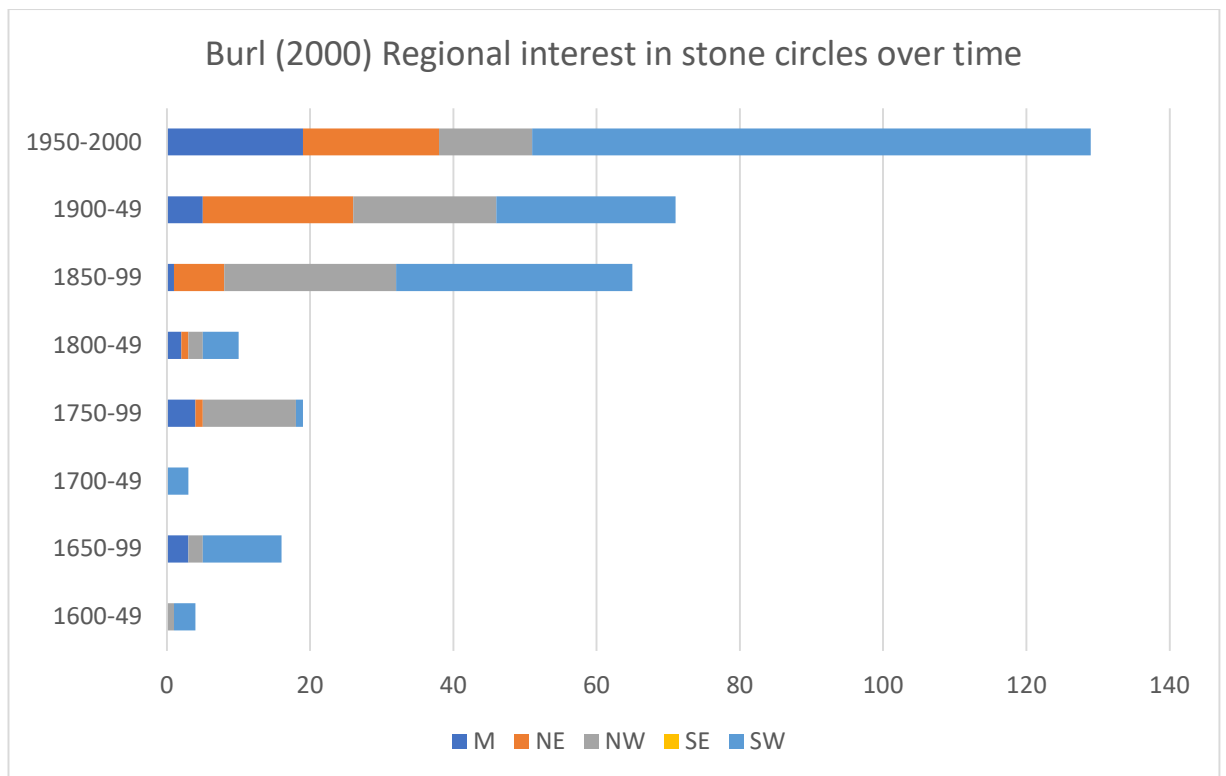


Figure 78 - Burl 2000 Regional interest in stone circles over time

There are 922 listed stone circles in Britain, with 321 in England, 517 in Scotland and 84 in Wales (Table 15). Of those in England, 156 are still extant, 49 of which have been excavated; 88 have been destroyed, at least 15 after excavation; 16 have been excavated but their whereabouts are now unsure; and a further 59 are currently missing. No data was available for two circles. In Scotland, 267 stone circles are still extant, 87 of which have been excavated; 167 have been destroyed, at least 20 after excavation; 14 have been excavated but their whereabouts are now unsure; a further 65 are currently missing; and there was no data for 4 circles. In Wales, 31 stone circles are still extant, 3 of which have been excavated; 33 have been destroyed, at least 6 after excavation; 1 has been excavated but its location is now unknown; a further 16 are currently missing; and there was no data for 3 circles.

There was a greater interest in England's stone circles after 1850, whereas Scottish stone circles were referred to or excavated from 1800 onwards. Welsh stone circles were not really noticed until after 1900.

20 stone circles in England were referred to or excavated before 1700; 22 before 1800; 75 between 1800 and 1899; 71 by 1949; and 129 between 1950 and 2000 (Table 16; Figure 76; Figure 77). Four stone circles were referenced as having been destroyed between 1600 and 1649, all in England (Cornwall, Cumbria and Somerset). During the next fifty years, a further thirty-two were noted. Of those, in England, nine extant stone circles were written about, by Aubrey, Camden, Llywd or Plot, one of which was excavated in the 1670s. Six other circles were discussed; all of these are now destroyed, but whether it happened at that time or at a later date, is unclear. In Scotland, 12 stone circles were referenced, all by Aubrey in 1693. He mentioned one excavation in circa 1650. Of the twelve, 6 are still extant, and 6 now destroyed. Of those, 7 have been excavated since 1855. In Wales, 4 were referenced, 2 by Camden and 2 by Aubrey. 2 were excavated in the mid-twentieth century and only one of the four is still extant. Between 1700 and 1749, only 5 British circles were mentioned. A stone circle in Merioneth was destroyed before 1746; Callanish was referenced by Tolland in circa 1726; Stukeley mentioned Boscawen-Un in Cornwall (it was restored in 1862) and Winterbourne Bassett in Wiltshire in 1740 and 1743, respectively; and in 1728, Gale referenced Little Mayne stone circle in Dorset. The latter two have since been destroyed.

In the second half of the eighteenth century, nineteen circles were referenced in England: thirteen in Cumbria (by Stukeley (1776), Nicholson & Burn (1777) or Hutchinson (1794), four in Derbyshire, one in Cornwall (by Borlase) and one in Durham. Of these, the whereabouts of two are not uncertain; twelve are now destroyed (two having been excavated: Broad Field, Cumbria, in 1789, and the Bull Ring, Derbyshire, in 1902 and again in 1949); and five are considered extant. Of these, Castlerigg and Swinside, Cumbria, were excavated in 1882 and 1901, respectively. Nine Ladies stone circle, Derbyshire, was excavated pre-1782, and Arbor Low in the same county, in 1901-2. In Scotland, seven stone circles are referenced from this period, five of which are now destroyed. Kirkgunzeon, Dumfries and Galloway, was demolished between 1790 and 1870. Of the two extant circles, both have been excavated. Lundin Links, Fife, was investigated pre-1790 and Kinchyle of Dores in Inverness-shire was dug in 1952. Only three circles in Wales were referenced in the period, and more precisely, in the 1760s: two by Rowlands in his *Mona Antiqua* in 1766; and one in Farrington's 1769 *Snowdonia Druidica*. All three are now destroyed.

Between 1800 and 1899, there was a great flurry of interest in Scotland, with 171 references in total, and fifty-three references to Aberdeenshire's recumbent stone circles alone. Many of these were referenced in the *New Statistical Account of Scotland, XII*, for the Aberdeen region; or in the *Proceedings of the Society of Antiquaries for Scotland (PSAS)*. Of these, only twenty-six are still extant. Three were excavated in the 1820s (Ardlair, Crookmore and Druidsfield) and thirteen more in the mid-nineteenth century. A number were also destroyed during this period: Hill of Bucharn in circa 1810; Loanhead of Daviot South in circa 1820; Hatton recumbent stone circle in 1831; Nether Balfour and Logie Coldstone circles in circa 1847; and Holywell in 1861. There were more excavations in the mid-1930s, during which time Aberdeenshire had sixty-nine 'new' stone circle references, with four more discovered between 1950 and 2000, when Burl's book was published. For the rest of Scotland, Perthshire has the most references: seventy-eight from 1800 to 2000. Of these, sixteen were documented before 1900. The two earlier discoveries are both still extant: Moncreiffe was destroyed in the Late Bronze Age, excavated in circa 1830, and restored in 1974; and Dunmoid was excavated in circa 1840. Of those discovered in the latter half of the nineteenth century, eleven are still extant; five of those have been excavated. From 1900 onwards, a further sixty-two stone circles were noted from Perthshire, mainly by Coles between 1908 and 1911. Every one of these was discussed, either individually, or more generally, in articles in the *Proceedings of the Society of Antiquaries for Scotland*. Dumfries and Galloway's stone circles are also well referenced from 1800 onwards, with a peak between 1850 and 1950, when thirty-two circles were referenced. Eighteen of these are still extant, with fourteen destroyed. Three of these have been excavated: The Greystone circle pre-1886; and Park of Tongland and Steeps Park stone circles in 1987, after having been first referenced in the late-nineteenth century. Nineteen of Banffshire's stone circles were referenced between 1800 and 1949: of those, eight are still extant; five are missing (two having been excavated in circa 1830, and pre-1886, respectively); and six have been destroyed (one in circa 1840). The Isle of Arran had nineteen references between 1800 and 2000. Thirteen of these are still extant. However, another was destroyed in 1813 and a further stone circle, Drumadoon, was excavated pre-1845. It has now disappeared. Of those which are upstanding, many were excavated by Bryce in 1861, which he published in PSAS in 1862 and 1902. East Lothian has only ten referenced circles, all added to our knowledge by the Royal Commission for Ancient and

Historic Monuments in Scotland, in 1924. Twenty-three stone circles were referenced for Inverness-shire, mainly in Henshall's book, *The Chambered Tombs of Scotland I*, in 1963.

For Wales, Whetstones stone circle, Montgomeryshire, was referenced in 1841 but then destroyed in circa 1870. Between 1850 and 1899, seven circles were mentioned; three of those as destroyed. Of the four others, two are now destroyed but were excavated (Dyffryn Lane in circa 1857, and Bryn Celli Ddu's stone circle in 1865); and two are extant: Cerrig Gaerau and Ross Y Beddau South stone circles, both in Montgomeryshire.

From 1800 onwards in England, there were 275 'newly found' and referenced stone circles. In Cornwall, thirty-five stone circles were referenced between 1850 and 2000, eight by Lukis in 1885 in the *Proceedings of the Society of Antiquaries of London*. Twenty of the thirty-five are upstanding monuments, four having been restored in the second half of the nineteenth century. There were four excavations in total: at Duloe, in circa 1863; at Men-an-Tol, in 1885; at the Stripples Stones henge and stone circle, in 1905; and at the Hurlers Centre stone circle, in 1936. Tregaseal Centre stone circle was destroyed before 1905. Cumbria had 44 'new' stone circle references. Of these, twenty-five are extant and nineteen destroyed or of uncertain location. Blakeley Raise was restored in 1925. There were six excavations before 1899 (two of these monuments are now destroyed); Studfold pre-1924; and a further eleven between 1934 and 1960. Three of Broomrigg's four stone circles, after excavation, are now missing in a timber plantation. Two of Lacra's stone circles were excavated at this time and are still extant. Derbyshire had three references to stone circles between 1800 and 1899, five in the next fifty years and then nineteen between 1950 and 2000. Of the latter twenty-four, six have been excavated (Tunstead in circa 1905; Froggatt Edge and Stanton Moor South in the 1930s; Brown Edge stone circle was excavated and destroyed in 1963; Seven Stones in Hordron was excavated in 1992; Barbrook Centre was excavated in 1966, and restored in 1989); thirteen are still extant, including Eyam Moor and Barbrook stone circles; and eleven are destroyed or missing. There were no referenced stone circles in Devon before 1850. Since then, 73 have been mentioned: twelve for the period of between 1850 to 1899, at which time, there were six excavations, and six circles (not necessarily those excavated) were restored; twelve again between 1900 and 1949, with four restorations between 1909 and 1921; and forty-nine 'new' stone circles added to the record between 1950 to 2000. The first referenced circles

were thanks to the *Transactions of the Devon Association*, whereas the majority of the forty-nine references were by Worth (1967) in *Worth's Dartmoor*; Barnatt's *Stone Circles of Britain* (1989); or Turner (1990), whose article appeared in *Proceedings of the Devon Archaeological Society*, although others also mentioned the circles. There were a few references to the stone circles of Dorset, the Isle of Man and Shropshire, during this period. Lancashire and Northumberland also had some references over the 200-year period, with twelve and sixteen, respectively. For Lancashire, Delf Hill is the stone circle with the earliest reference: it was first mentioned in 1842 and excavated in 1982 and is extant. Also upstanding is Bleaberry Haws, near Coniston, and was excavated in 1886. There were four excavations between 1886 and 1887, all but one published in *Transactions of the Lancashire and Cheshire Archaeological Society*. Sunbrick Druid's Circle, on Birkrigg Common, is another extant circle. It is a concentric stone circle, excavated in 1911. One other circle is extant, known as Cheetham Close. Eight stone circles are now missing (their grid reference may be incorrect) or destroyed, three after excavation. In Northumberland, of the sixteen referenced, ten are still extant, including Doddington Moor, Goatstones and Three Kings, all of which are Four-Posters. The latter was mentioned in 1911-12 and excavated in 1971. Ilderton (Threestoneburn) was excavated pre-1862 and Duddo in 1890, and to my own knowledge, again in 2008 by Miket. There are three other extant circles, with no data on previous interest, Crawberry Hill, Hart Heugh and Whinny Hill circles. Somerset and Wiltshire have both had a steady interest in their stone circle monuments between 1800 and 2000, with the identification of twelve and ten 'new' circles, respectively. Only two of Somerset's monuments are now extant, that is, Porlock and Withypool Hill stone circles. The rest are destroyed or, although earlier referenced, cannot now be found. In Wiltshire, ten circles were identified during this two hundred-year period, three of those in or around Avebury. Of these ten, one is extant, that is, Avebury Inner South circle; all others are now missing or destroyed, one of which was excavated in 1849. Thirty-two 'new' stone circles were identified in Yorkshire, between 1800 and 2000. Of these, thirteen monuments are extant, such as, Comondale stone circle, which is upstanding and was excavated in circa 1968. There have been eight other excavations: one in 1843; two in the 1860s; two more at the turn of the twentieth century; and two more in the mid-twentieth century, but all of those monuments, and eleven others, are now missing or destroyed, according to Burl

(2000); another may have been excavated before its destruction but no information is available.

4.3.2 KINNES (1992) RESULTS – EARLY NEOLITHIC NON-MEGALITHIC LONG BARROWS

Number of Long Barrows in each County	pre-1700	pre-1750	pre-1800	pre-1850	pre-1900	pre-1950	pre-1980	Grand Total
England								
Bedfordshire						2		2
Cambridgeshire							1	1
City of Peterborough							1	1
City of Portsmouth							1	1
Cleveland							2	2
Cumbria						2	3	6
Derbyshire			1	1			1	3
Dorset		1	2	1	3	38	15	61
East Yorkshire					3		7	14
Gloucestershire							1	1
Hampshire					1	2	25	28
Herefordshire							1	1
Hertfordshire				2				2
Isle of Man						1		1
Isle of Wight				2				2
Kent	1						1	2
Lincolnshire			1			13	1	15
Luton						3		3
Norfolk						3		3
North Yorkshire				4				15
Northamptonshire						1	1	2
Northumberland						1	6	7
Oxfordshire						3	2	5
Somerset						2	6	8
South Yorkshire				1			2	4
Surrey						1		1
Sussex					1	7	1	10
Warwickshire							2	2
West Berkshire				1		2		3
West Sussex							5	5
Wiltshire			19	2	2	29	5	71
England Total	1	1	23	14	10	110	90	282

Table 17 – Total numbers of non-megalithic long barrows per British county, from Kinnes' 1992 data

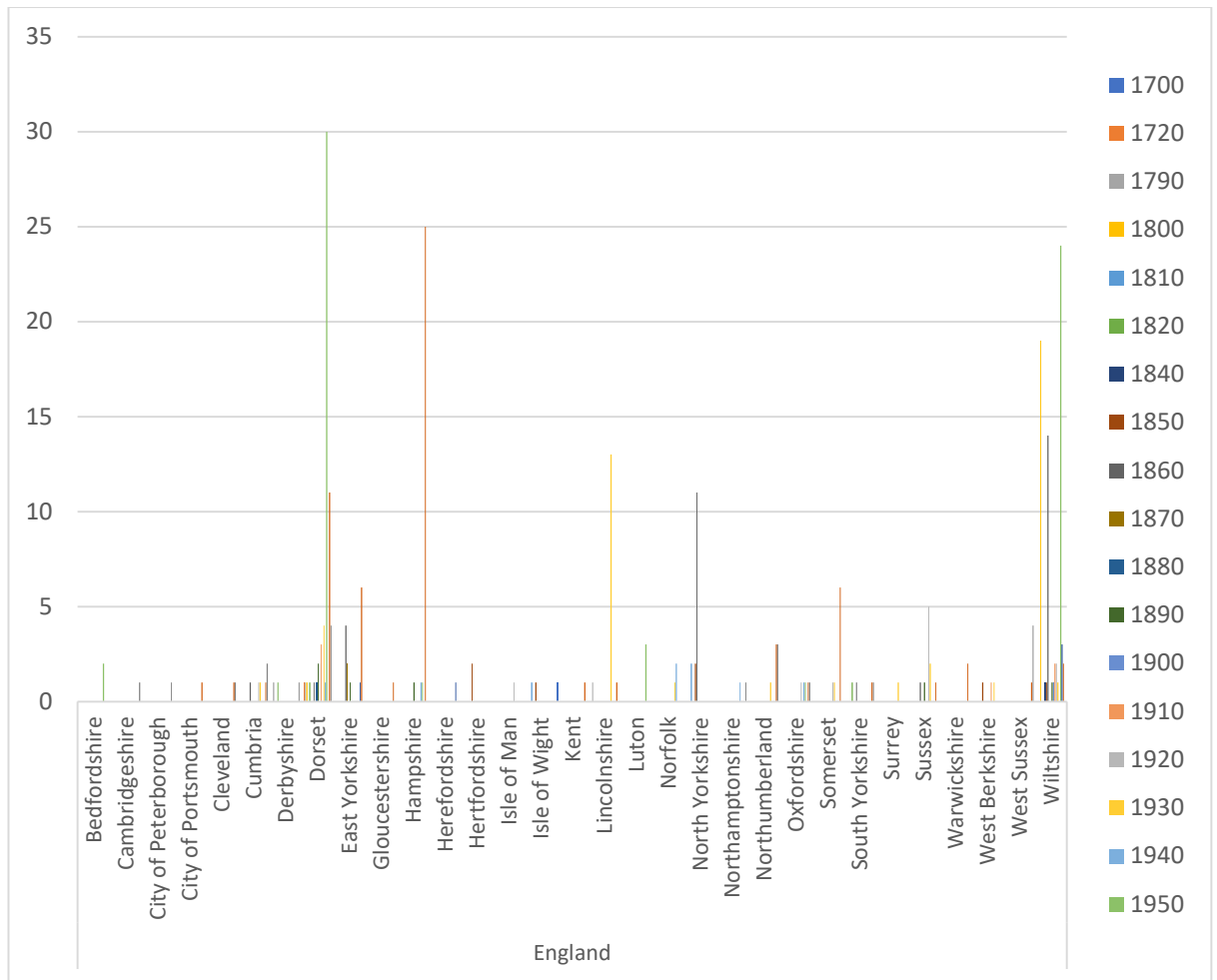


Figure 79 - Kinnes (1992) Total number of English county non-megalithic long barrows and their excavation decade

Kinnes (1992) recorded 326 Neolithic non-megalithic long mounds up to the point of publication. 282 of these are in England; 43 in Scotland and one in Wales. These have been recorded based on the decade of publication and county in England, Scotland and Wales (Table 17).

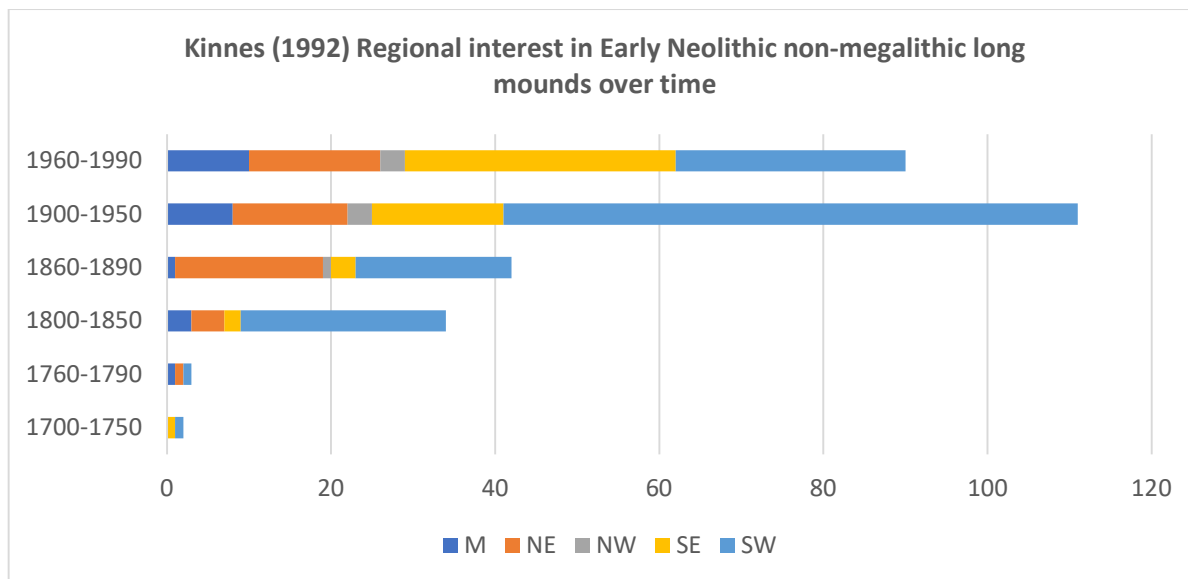


Figure 80 - Kinnes (1992) Regional interest in Neolithic non-megalithic long mounds over time

In England, there was a gradual increase in the number of non-megalithic long barrows that were referenced (Figure 79; Figure 80). Dorset has 30 references in the 1950s, and 15 in the 1970s and 1980s. Hampshire has 25 references in the 1970s and Lincolnshire 13 in the 1930s. North Yorkshire has 11 references in the 1860s, all by Greenwell. There were peaks of interest in Wiltshire's monuments. In 1800-1810, 19 non-megalithic long barrows were referenced, followed by 14 in the 1860s and 24 in the 1950s.

Up to 1800, there were six excavations, and twenty-five long barrow references, all in central to southern England. Over the next forty years, this pattern continued with 26 further excavations in these regions, especially by Colt Hoare in Wessex. There were 2 references to North Yorkshire's monuments in the 1810s. Between 1850 and 1880, 23 excavations had occurred in northern England and 32 in the south. Many of those in the north were by Greenwell, Mortimer and Bateman. In the south, Dyer, Turner, Thurman and Cunington completed the excavations. The turn of the twentieth century was a quiet time, with regards to investigation, although three long barrows were excavated in the 1910s. Sussex had seven excavations in the 1920s and 1930s. In Lincolnshire, there were thirteen excavations during the 1930s and Dorset had thirty-five digs between the 1930s and 1960s. Wiltshire, Dorset, Hampshire, West Sussex and Somerset had many investigations 1950s and 1980s, with eighty excavations in southern England. East Yorkshire had some renewed

interest in the 1960s and 1970s with seven excavations, and six of Northumberland's monuments were excavated between the 1970s and 1980s.

In Scotland, of the forty-three non-megalithic long barrows identified, there was one earlier excavation in Dumfries and Galloway in the 1930s. All the other excavations occurred between the 1960s and 1980s, with thirty-two in the 1970s. Most of these were investigated by Audrey Henshall (1963) (1972) *The Chambered Tombs of Scotland 1, 2*, respectively.

Wales' only excavation of a non-megalithic long mound was in the 1950s in Powys.

4.3.3 KINNES (1979) RESULTS – EARLY NEOLITHIC ROUND BARROWS AND RING-DITCHES

British County Neolithic round barrow totals per 50- year period	pre- 1750	pre- 1800	pre- 1850	pre- 1900	pre- 1950	pre- 1980	Total
Anglesey					1	2	2
Argyll & Bute						1	1
Bedfordshire					1	1	2
Buckinghamshire					1		1
Cumbria				2	1		3
Derbyshire		1	6	3	2	1	10
Dorset			1	1	1		2
Durham				1			1
East Yorkshire				13		4	13
Gloucestershire			1	3	2		5
Hertfordshire				1			1
Moray						2	1
North Yorkshire			1	20		4	23
Northamptonshire						2	2
Northumberland				1	1		1
Oxfordshire					7	1	8
Perthshire						1	1
Staffordshire			1				1
Suffolk						1	1
Sunderland					1		1
Warwickshire						1	1
West Lothian					1		1
Wiltshire			3	1	1	3	6
Grand Total		1	13	46	20	24	88

Table 18 – Total number of non-megalithic Early Neolithic round mounds and ring-ditches, from Kinnes' 1979 data

Ian Kinnes' 1979 paper provided data on eighty-eight excavated Neolithic round barrows (Table 18; Figure 81; Figure 82).

The earliest known excavation was at Winhill in Derbyshire in 1770. Derbyshire had another eight excavations over the next thirty years. North Yorkshire has had the most excavations, with twenty-three over the last two hundred years, eleven of those in the 1850s and 1860s. In fact, more than double the amount of references were made in the 1860s than in any other decade. This was thanks to an interest by Greenwell in North and East Yorkshire's Neolithic round and long mounds. In fact, East Yorkshire has had the second highest number of excavations, with thirteen, followed by ten in Derbyshire and eight in

Oxfordshire. Scotland has only had four excavations, from the 1940s onwards and Wales only two, one in the 1920s and one in the 1960s.

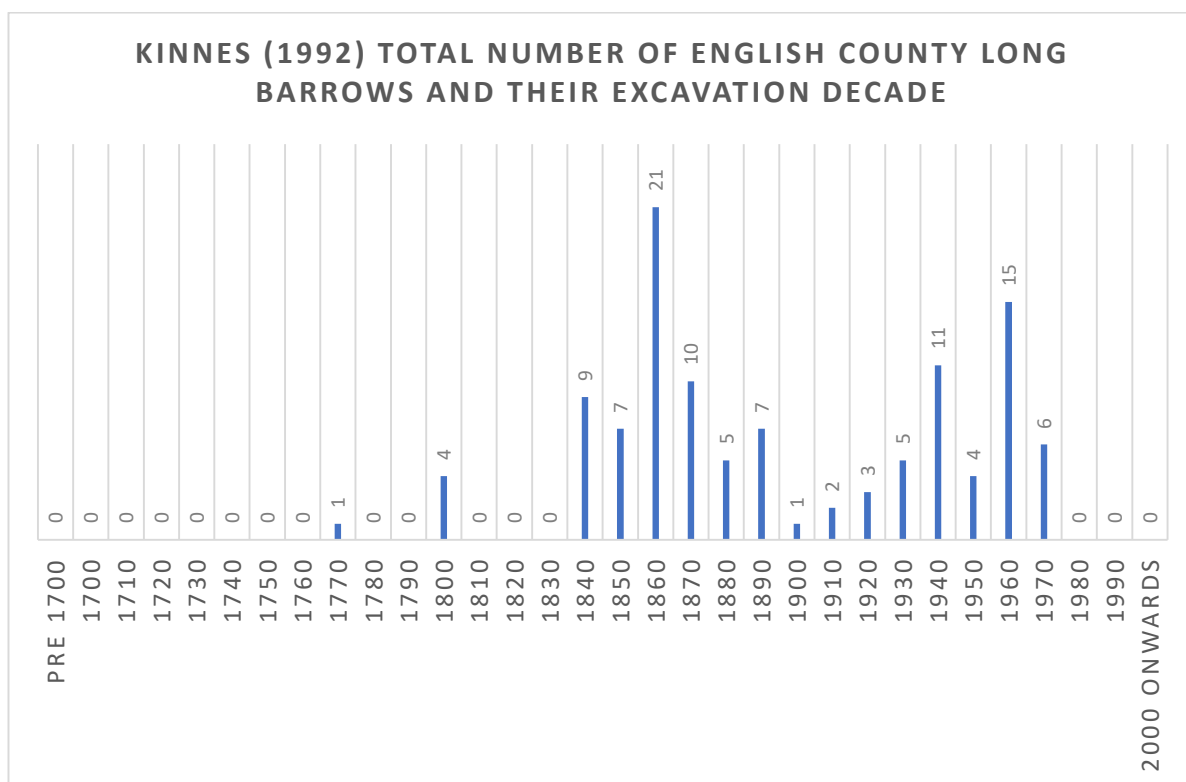


Figure 81 - Kinnes (1979) Total number of Neolithic round barrows and ring ditches and their excavation decade

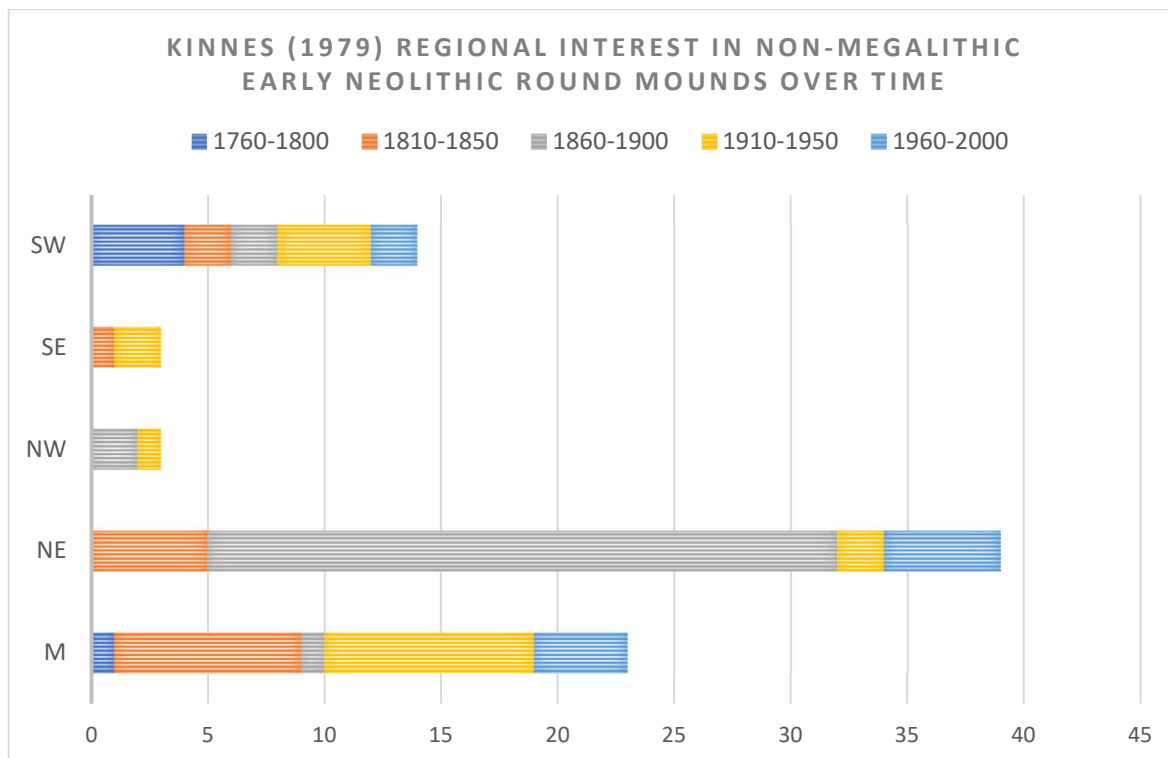


Figure 82 - Kinnes (1979) Regional interest in non-megalithic Early Neolithic round mounds over time

4.4 ANALYSIS AND DISCUSSION

I had anticipated that the Victoria County Histories would have been the first county publications of their kind. I was therefore pleasantly surprised to uncover how much work had previously been completed on all but two counties in England. Shropshire and Bedfordshire's inability to have gathered an early history has been described as 'a blot on the reputation of a county' (Sweet 2004, 41). These attempts to gather detailed data on an individual county were admirable. Yet, until each county history has been read and its data logged, it is not clear which information was studied or noted. Some of these early county histories might have a section on prehistoric monuments; others might simply have a collection of local genealogies. Only further research would unpick this issue.

Data from the later, published Victoria County Histories (VCH) can also be somewhat misleading. A VCH publication date for a county inspires confidence. It sends a message that all knowledge about this county has been logged; everything needed to be known about the towns and villages within the county has been noted; the county's history and archaeological significance has been clearly written down for future generations. Yet, this is clearly not the case. The content of each VCH is different, depending on the level of detail

published. Three county histories from northern England remain incomplete, Northumberland, Westmorland and the West Riding of Yorkshire, which implies one of four things. Firstly, it could be that there is a general lack of interest in the history of those counties; secondly, that there is so much data that the compilation of all is a huge task, unachievable at present; thirdly, that the terrain and accessibility of sites may have been a factor which, among other issues, has prevented their completion; or fourthly, that there is little current interest in the VCH, as a history of the county has been completed in another way, such as, for Northumberland, by John Hodgson, in 1858. For those completed histories, there are numerous other issues. Cumberland's Volume 1 was very early (1901), implying it was completed. Yet, that volume contained no town or village histories, and only covered the areas of Furness and Cartmel, formerly in Lancashire. Secondly, some counties contained much notable information and had to be published in several volumes over an extended period, such as Yorkshire, e.g. Volume 1 was published in 1907; Volume 2 in 1912; Volume 3 in 1913; North Riding in 1914 and again, with further information in 1923; the East Riding was published between 1969-84; the West Riding remains incomplete. Another example is Leicestershire, which had five volumes published between 1907 and 1964; yet, there are around three hundred town and village histories, which have not yet been researched nor written (<https://www.victoriacountyhistory.ac.uk/>).

Early journal articles aimed to note archaeological, architectural and historical finds and other information at a county level in England. However, these did not begin to be published until the mid-nineteenth century, at the earliest. Some counties only began to log data in the later decades of the twentieth century. This interest, from the 1960s onwards, may indicate rescue excavations, due to the increase in housing and infrastructure projects from that period onwards, such as the report on Peter Topping's excavation of Scorton Cursus in 1978, which was published in the *Yorkshire Archaeological Journal* in 1982 (54: 7-21). Towards the end of the twentieth century, the appearance of new societies, and therefore their publications, may have coincided with a renewed interest in the archaeology of certain counties, thanks in the main to media and political interest in archaeology, and the formalisation of the archaeological process, with the introduction of the NPPF and the Treasure Act in 1996. *Time Team*, and other archaeology programmes on television, may also have encouraged the general public to get involved

with community archaeology projects. However, a point noted during this analysis was that important excavations and report publications from northern England often tended to be published in national, rather than local journals. Examples are Blaise Vyner's report of Street House, Loftus, or Vatcher's excavation of East Heselton long barrow, Yorkshire, or Manby's excavations of Willerby Wold and Kilham long barrows in the East Riding, which were published in the *Proceedings of the Prehistoric Society* (1984, 50: 151-195); *Antiquity* (1965 39: 49-52); and the *Proceedings of the Prehistoric Society* (1963, 29: 173-204) & (1976, 42: 111-160), respectively. This was hopefully done deliberately, by the excavator, to share the data nationally, rather than just locally, in order to increase the impact and knowledge of northern England's structures. However, it has meant that local journals have missed out on these important articles.

The second part of this analysis looked at early excavations in Britain. It is clear that once barrows and other prehistoric monuments were recognised, there was either a growing fascination in them or else they were deemed recorded and known about, which on occasion devalued their overall worth. Their allure may have been due to the fact that human corpses and valuable items were thought to be within the centre of these structures. Aubrey, in the seventeenth century, had discovered from a local resident in Wiltshire that George Villiers, Duke of Buckingham, 'had engaged in barrow-digging on Salisbury Plain out of curiosity, but nothing had been recorded'. When located, finds were sometimes kept in display cupboards (Hunter 1975, 160) but knowledge about the excavation was either not recorded or has not been made public. Given this example, it is clear that other monuments must have sustained earlier interest than was recorded within the three data collections used.

Aubrey Burl's excellent gazetteer (2000) provided a wealth of information about the total number of stone circles in England, Scotland and Wales, with data on over nine hundred stone circles in Britain. It also held facts about early antiquarian interest and excavations of these stone circles. 157 are listed as extant in England, 267 in Scotland and 31 in Wales. This therefore means that 456 British circles are classed as now destroyed, or their whereabouts uncertain/unknown, that is, 164 in England; 250 in Scotland; and 53 in Wales.

Local antiquarians, such as Nicholson and Burn, were clearly concerned about the destruction of so many stone circles. They documented their demise in the two volumes of *The History and Antiquities of the Counties of Westmorland and Cumberland*. Two examples of destroyed stone circles, mentioned by them, are Chapel Flat and Lamplugh (1777, 477).

Burl's study not only provided the details mentioned above, but also the excavations, restorations and/or destruction of stone circles and other more intimate details. Cairnfauld recumbent stone circle, in Kincardineshire, for example, was excavated pre-1900. However, it was discussed in 1925, as its stones had been removed, as superstition had linked the presence of the stone circle with some locally diseased cattle. Only a partial circle is extant today (Burl 2000, 429). Gamelands stone circle, in Westmorland, was ploughed from 1862 onwards (Ibid., 412), which would account for the missing stones at the south-east and south-west segments of the circle. Le Wheles (or Corcickle) stone circle, in Cumberland, was destroyed in 1628 (Ibid., 406). Frogden 'Trysting Stones' stone circle in Roxburghshire was destroyed pre-1881 by gunpowder (Ibid., 434). However, the most dramatic description of destruction must lie with Penruddock (or Motherby) stone circle, in Cumbria. It was 'an excellent peristalith', blown up in circa 1850, 'by orders of [the] Duke of Norfolk's steward' (Ibid., 406). The coming of the railway may have been advantageous for travellers but meant the partial destruction of Kemp Howe stone circle in Shap, Cumbria, which is still in its dilapidated state today.

From Burl's gazetteer, it is interesting to note that the upstanding monuments of some counties took a long time to be noticed, whereas those in other counties were documented at an earlier date. The majority of Wales' stone circles (61/84 in total) were only 'noticed' after 1900, whereas those in Aberdeenshire, Kincardineshire and the Orkneys had some interest between 1650 and 1700. However, the main interest in Scotland's monuments came after 1750. Aberdeenshire, with 122 stone circles, added much to the archaeological record between 1800 and 1950, and to a lesser extent, Dumfries and Galloway and Inverness-shire, all had an upsurge of interest from 1750 onwards. This is most likely due to the increased interest in the landscape of Scotland. After the Battle of Culloden, as discussed in Chapter 3, great mapping projects in Scotland were undertaken. Roads were improved, with the introduction of Wade's roads. Between 1747 and 1755, a Military Survey of Highland, Lowland and the Border Counties of Scotland was undertaken. Also,

there was a Trigonometry Survey in 1813. These results were reported back to London, to the Ordnance Office in Greenwich, along with details about ancient structures found *en route*, such as the stone circles of Ayrshire, which were recorded by the Ordnance Survey (Hewitt 2010, 39). Inverness-shire also had twenty-three 'new' stone circles referenced between 1950 and 2000. Perthshire, Angus, Arran, Banffshire, Kincardineshire, Moray and Roxburghshire had an upsurge of interest in siting 'new' stone circles between 1800 and 2000. From 1850 onwards, the stone circles of Sutherland, East Lothian and the Hebrides all gained interest from the wider antiquarian and archaeological community.

Over the last four hundred years, it is the more remote counties which have provided the most interesting data on stone circles. Devon, Lancashire, Northumberland and Yorkshire all had little early interest but their stone monuments were well noted after 1800-50; Devon's most particularly after 1950 with forty-nine 'new' references, and Yorkshire's after 1900. Derbyshire and Cornwall also had renewed interest after 1950.

Before this study, it was considered that early references to stone circles might have ensured their survival to the current era. However, this is most certainly not the case. As mentioned in the Analysis section of Chapter 2, above, Camden, Aubrey and Stukeley, among others, referenced stone circles between 1550 and 1750, which have since been destroyed. In the second half of the eighteenth century, for example, 12 of 19 newly-referenced stone circles were destroyed in England.

Ian Kinnes' gazetteers held information on over 400 Neolithic monuments in Britain. For long barrows, Kinnes noted the earliest references, and excavations separately. For the round mounds, the two were combined.

Up to 1850, there was little interest in the non-megalithic long barrows of northern England, with only two references to North Yorkshire's monuments in that time. After 1850, there was more interest in northern England, thanks to Greenwell, Mortimer and Bateman. However, there was a greater focus on the monuments of southern England, than those in northern England. This can be explained, as there are so many more southern non-megalithic long barrows, than those in the north. According to Kinnes, in 1992, there were 158 monuments in Dorset, Hampshire and Wiltshire and 195 in total for south-east

and south-west England together. Central England had 26 references; the north-east had 52 and the north-west had only 7 referenced non-megalithic long barrows (Table 17; Figure 79). On the other hand, as there are many more Neolithic round mounds and ring-ditches in northern England, than in the south, it is unsurprising that there have been so many more excavations in the north. According to Kinnes (1979), there were 39 Neolithic round barrows in north-east England; 3 in the north-west; 21 in central England; 5 in the south-east; and 14 in the south-west (Table 18; Figure 81). Greenwell excavated 46 structures in North and East Yorkshire, and Derbyshire. Mortimer, however, held 'the best antiquarian record' for both his excavation techniques and levels of recording of the Yorkshire Wolds' barrows (both Neolithic and Bronze Age), 'taking into account both objects and human bodies' (Woodward 2000, 22). This is in sharp contrast to Sir Richard Colt Hoare and William Cunnington in Wiltshire, whose excavations were 'poorly recorded' (Ibid., 22-3). The current knowledge of non-megalithic Neolithic long and round mounds is steadily increasing, with more potential finds every year, through rescue excavations and aerial photography, which is slowly altering the above picture.

4.5 CONCLUSION

This analysis was completed to examine the geographical focus of early excavations within Britain. Both Burl and Kinnes provided essential data for this study, which was much appreciated. Within this section, a study of local county histories and journals was also completed. The results from both sections show a gradual increase in the recognition and excavation of monuments over time. However, from these results, it would not be possible to anticipate the current focus of interest in Wiltshire's N/EBA monuments, as referenced from my MA Research, within the above results and totals. The picture must be more complex than previously anticipated.

In the past, it is clear that reference to a particular site, group of sites, region or county, by a local antiquarian or historian required the curiosity of a person, usually middle-class and male, who could plan and fund the research of a region or the excavation of a site. This person therefore needed to be able to take time away from their work; they had to have enough money and interest to complete the task. It is most likely for this reason that interest appeared to wax and wane over time. Certainly, as travel became easier in the

later eighteenth and early nineteenth centuries, historians and antiquarians would have visited locations of consequence within their own regions, rather than relying solely on desk-based gathering of data, as Aubrey was sometimes forced to do, when he had no transport. Yet, the national pursuit for and interest in monuments was still a rare phenomenon.

Figure 78, Figure 80 and Figure 82 demonstrate how awareness and excavations of prehistoric stone circles, non-megalithic long and round mounds have regionally altered since the 1700s. Despite early interest in all regions, which has grown over time, attention towards the prehistoric long mounds and stone circles of south-western England has increased from 1950 onwards, a factor which has not happened elsewhere. This is despite the great fascination in the non-megalithic Early Neolithic round mounds of north-eastern England, during the period 1860 to 1900.

The results of these three chapters have brought new information to light, regarding the hazards of voyaging during the period 1500 to 1900 and have highlighted, as part of my broader research question, the changing focus of interest in prehistoric structures over time. To some extent, this chapter has demonstrated an initial, organic, regional development of both referencing and excavation of N/EBA monuments, based on local appeal and funding, rather than an early, pre-determined, organised emphasis on the monuments of southern England. Yet, despite this, these chapters have highlighted that descriptions and images of certain monuments, such as Stonehenge and Avebury, along with their convenient locations between the fashionable towns of Bath and London, led to an unintended bias of interest throughout the later Middle Ages into the Industrial period. The different analyses within these three chapters have highlighted the authority of the written text within the modern era and have enlightened us with the influence of images from the past to the present. Ogilby's strip maps in Britannia, Stukeley's bird's eye views of monuments, Aubrey's architectural representations of structures, the Ordnance Survey's one-inch to one-mile mapping and Speed's county maps were (and are) all hugely powerful tools of persuasion. They shaped views, harnessed and controlled new knowledge and were the means to an improved status for their creators, one which continues to this day. Once again, the influence of an image cannot be understated. They began an unintended trend by which Stonehenge and Avebury, among other monuments, began to be focussed on over others.

This analysis has therefore begun to show an unconscious drift towards the monuments of south-western England but has not fully answered the two PhD thesis questions. Further investigations will therefore be needed to totally understand the marginalisation of northern England's monuments in the modern era.

Chapter 5 will therefore look at the current situation in England. This will include regional monument totals and how interest, through research and commercial activity, is shaping the knowledge of and attention given to, England's Neolithic and Early Bronze Age monuments. Chapters 6 & 7 will look more specifically at regional disparity and regional significance, respectively, with concluding thesis remarks in Chapter 8.

5 CURRENT SITUATION AND SOURCES OF EVIDENCE

This chapter will reveal the total number and individual importance of the Neolithic and Early Bronze Age monuments and landscapes of northern England, through a study of Pastscape. The research will then go on to evaluate current research and publications from a national perspective, through an assessment of recent developer-funded and research-based archaeological work. This is followed by a quantitative analysis on the current state of these monuments throughout England, which includes a comparison of the preservation of northern England's extant megalithic and non-megalithic monuments with those of other regions.

5.1 INTRODUCTION

Chapters 2, 3 and 4 demonstrated that an unintended bias formed as antiquarians and early excavators discovered 'new' monuments throughout England. Travel routes and modes of transport, the weather, local contacts and time all contributed to this issue. Certain areas were passed through more often than others, which created its own emphasis in the numbers of monuments noted and visited in each region.

This basis of this chapter, therefore, is to establish a baseline for discussion, regarding the whole of England, to include monument totals, geographical distribution and the current foci of archaeological interest, from developer-funded and research-based investigations, for the Neolithic and Early Bronze Age periods. Firstly, Historic England's website, Pastscape (<https://pastscape.org.uk/default.aspx>) will be used to provide details about the current numbers of Neolithic monuments within the counties and regions of England, their level of preservation and scheduling. Secondly, this baseline data needs to be compared to the current situation in England, to ascertain whether there is an actual or perceived disparity between the level of interest towards Neolithic monuments throughout England, or whether this reflects the total number of monuments in each area. This analysis has been achieved by considering the archaeological work completed and recently documented within England. To that end, REF2014, ADS, COPAC, British Archaeological Reports (British Series), PPS (Proceedings of the Prehistoric Society) and Antiquity journals will also be assessed.

PASTSCAPE is Historic England's website. It holds over 420,000 National Records of the Historic Environment (NRHE) for England. Within those records are references to monuments, settlements, field systems, findspots and landscapes for all periods of the past. These results can be compared to the levels of interest in different regions, from an analysis of the following data and catalogues.

REF2014 (Research Excellence Framework for the year 2014) evaluated the impact of research completed by UK institutions. The 2014 framework assessed research completed between 2008 and 2013. The REF database was used to evaluate the intensity and distribution of university-based research on Neolithic and Early Bronze Age monuments, recognising that not all archaeological research projects are included within each REF.

ADS is the Archaeology Data Service, which was established in 1996 to support archaeological research. It provides an online catalogue of data, which has resulted from both fieldwork and desk-based studies. It incorporates BIAB (the online bibliography for British and Irish archaeology and its 150,000 references). It was studied to search for a fuller picture of commercial archaeology and research into the Neolithic and Early Bronze Age periods within Britain, over the last 20 years.

COPAC is a unique catalogue, which holds the information from over 80 major UK research libraries. It contains approximately forty million records from national, academic and specialist libraries. It was assessed to look at published works and their foci within Britain.

BAR British Archaeological Reports (British Series) have been published since 1974, providing over 600 peer-reviewed publications concerning specialist archaeological research throughout Britain. These were evaluated to look for the geographical distribution of reports, to see if there has been representation of all British regions over the last forty years.

PPS (Proceedings of the Prehistoric Society) began a national journal in 1935, having expanded from the regional Proceedings of the Prehistoric Society of East Anglia. It has issued one or two publications per year since then (with the exception of 1967), to widen the understanding of prehistory through articles about sites and landscapes in Britain and abroad.

ANTIQUITY is a well-known archaeological journal, founded in 1927. From the first issue, its focus has been on the discovery of knowledge, as stated in the very first Editorial by OGS Crawford, 'Each article will be but a tiny facet of the whole; for our field is the Earth, our range in time a million years or so, our subject the human race'. Over the last fifteen years, due to a deliberate change in the interests of the journal, its coverage has deliberately become global. Nevertheless, it has been responsible for many major articles, which have hugely affected archaeological thoughts both here and abroad. The intention was to gain an idea of the focus of British Archaeology over time and to look for patterns within the data. Each source will be analysed, to see which data about England's Neolithic and Early Bronze Age monuments can be obtained and to log how selective and partial each dataset might be. It is important to note that each of these sources was set up for different reasons, which might affect cross-comparison. However, as these sources provide useful datasets about the number of, interest in and focus on the N/EBA monuments within England, this study will assess regional trends and emphases in research and excavation across differing regions.

5.2 METHODOLOGIES

5.2.1 PASTSCAPE

As previously mentioned, Pastscape, the Historic England website, holds over 420,000 National Records of the Historic Environment (NRHE), which document monuments, findspots and landscapes for all periods of the past. It includes details of archaeological investigation: excavations, evaluations, fieldwalking and remote sensing, among others. It is a Sites and Monuments database and each record provides details about a single or grouped sites, monuments or landscapes. This includes details about the preservation of monuments and years of excavation or site visits. Of these Pastscape records, 12,775 records pertain to the Neolithic period and 1,741 to the Early Bronze Age (September 2017). Each record therefore needed to be accessed individually, to assess its use. A comparison of the total numbers of monuments in northern England, as compared to other regions in England, can then form the basis of this study, which intends to demonstrate that archaeological research into northern England's Neolithic and Early Bronze Age monuments has differed from that of other British regions.

Using www.pastscape.org.uk, a N/EBA monument search was conducted for each of the separate counties mentioned in its database. Initially, the criteria were narrowed, using the Advanced Search algorithm, for the period Neolithic 4,000-2,200BC. For each county in England, every reference was analysed and data for all extant, and formerly extant, monuments was logged in Excel (Table 19).

Country	County	Site name	Site type	Pastscape monument number	Grid Reference	Preservation	S-Scheduled; D-De-scheduled; N-Not Scheduled	Last extant, interest showed or excavated
---------	--------	-----------	-----------	---------------------------	----------------	--------------	--	---

Table 19 – Data gathered from the Advanced Search of Pastscape, September 2017

Using the planned Methodology was problematic, as many results referenced findspots of Neolithic artefacts (usually pottery sherds or flint implements); or locations of the sites of monuments which had produced Neolithic pottery or implements. Complications arose as sites may have been a medieval pillow mound or Roman settlement, at which a Neolithic artefact had been found. The remainder of the references were of interest to this study, that is, the locations of all extant Neolithic monuments; and the locations of crop- or soil-marks of possible or probable Neolithic sites, such as hengiform monuments, seen on aerial photographs. As the focus of the thesis is ‘Monuments’, neither ‘Shafts’, ‘Flint mines’, ‘Mines’, ‘Rock Shelters’, ‘Caves’, ‘Pits’, ‘Settlements’ nor ‘Artefacts’ were referenced. Within the Excel spreadsheet, the term Excavation included trial trenching, evaluations and excavations; and Geophysics included all below-ground sensing.

The main issue with the Pastscape database involved terminology. The variety of nomenclature used to describe a Neolithic or Bronze Age barrow made a search for the total number of monuments of a particular type or age very complicated, especially as many of the monuments were listed under several titles, and therefore artificially inflated the overall totals. Different counties used different group terms at different periods. For example, a long barrow may also be called long mound, long cairn, chambered cairn, chambered barrow, chambered mound, passage grave, oval cairn, oval barrow, short long barrow and so on. Some descriptors may even have been missed, as many were found by chance.

The term Barrow, within the Excel spreadsheet, was therefore reserved for a Bronze Age barrow, whereas Neolithic barrows were termed Long Mounds or Long Cairns or Neolithic Round Barrows/Ring Ditches. There were also Dolmens, Portal Dolmens, Chambered Tombs, Unchambered Tombs and Quoits. Oval Barrow, Bowl Barrow, Ring Ditch or Mortuary Enclosure may be either Neolithic or Bronze Age monuments. Causewayed Ring Ditches were referenced as both Causewayed Enclosures and Ring Ditches. Later Prehistoric Pit Circles were not entered unless other terms were also posited within the same entry, such as a henge or Neolithic Ring Ditch (such as Pastscape examples, 927210 or 927235). For ease of re-referencing, the term Standing Stone was used to imply any large stone, even those within a larger monument, such as, a Portal Dolmen or Chambered Tomb, whilst also referencing its wider monument type, such as Long Barrow.

There were huge challenges with this data entry process. It was very difficult to decide how to log certain data: for example, a cup-marked stone, found in a cairn, which was later given to a museum. Technically, the cairn is still extant but the rock art is no longer there to be visited. Therefore, its preservation level was logged as 'No'. Sometimes, only scant information was logged and no date was added to the record, such as Pastscape number 1367577, despite the apparent importance of the monument (in this case, a timber circle twice as large as the northern ring at Durrington Walls, which was revealed by excavation in Dorset). The only date on the record, in these cases, was the 'Last updated' notification, likely to be the date the website itself was updated, rather than the date the entry was completed. Another similar example is a stone alignment in Devon, Pastscape number 1405946.

Any record, such as a possible long barrow at North Cerney, Gloucestershire, which stated that recent re-interpretation had confirmed that it was not a long barrow but rather, a much later feature, for example, a quarry spoil heap, was not retained. However, on the other hand, sometimes the information provided was also an issue. Merton, Oxfordshire (Pastscape number 1432439) is labelled as, 'A circular ditched enclosure two entrances, possibly representing a causewayed ring ditch, a henge or a windmill, visible as cropmarks'. This lack of clarity made it very difficult to determine whether or not to include such a site. It was much easier when the terms used to describe a crop- or soil-mark, such as Causewayed Enclosure, Henge, Hengiform Enclosure, Ring Ditch or Causewayed Ring Ditch,

were also linked with the Neolithic period. Without looking at thousands of individual aerial photographs, which was not possible within the time available, judgements had to be made, based on the data entered into the Pastscape records. Clearly, there are tens if not hundreds of sites for which only excavation may (or not) provide a clearer timeframe.

There were also several mistakes within Pastscape (although, as the website holds over 420,000 records, there were relatively few). Kirkby Underdale Cursus in East Yorkshire has a grid reference that places it in Cornwall. At Buscot, Oxfordshire, the cursus seemed to have been entered twice along its length. Without aerial photography, it was not clear as to whether the references referred to one or two monuments (Pastscape numbers, 225826 and 661376). Pastscape number 1607032 is the exact location of Giant Hills I in Lincolnshire, which is clearly a duplication.

Towards the end of the data entry process, the Pastscape website itself was cyber-attacked. Their staff were excellent and supplied two large csvs of the data required, so that this process of data collection could continue. Trawling through these two huge databases meant that many more monuments, previously uncovered, were found. Entered solely as 'Earthworks', some sites were not picked up by any query and would therefore have been left out of the database. However, from the Neolithic csv Excel spreadsheet, 'Earthworks', 'Cropmarks', 'Linear Features', 'Ditches', 'Enclosures', 'Embanked Enclosures' or 'Sub-surface Deposits' were not referenced, unless Neolithic Ring Ditches, Hengiform Enclosures, Barrows or Causewayed Enclosures/Ring Ditches were also referenced within the same Pastscape Monument entry. However, this extra trawl through data found several examples which would otherwise have been missed. An example is Pastscape monument number 1476305, listed as a probable long barrow, yet referenced solely as Barrow. As there are over 17,000 barrows listed within Pastscape, they were only checked if the term Neolithic was also referenced. Another example is Gally Hill, a Scheduled long barrow in Lincolnshire. This was also only referenced under Monument Types as Barrow, so might also have been missed. Within the Bronze Age csv spreadsheet provided after the attack, there were references to many Cumbrian stone circles, labelled only as Bronze Age. This is surprising as the date of those monuments is under question. Aubrey Burl posited that idea of several phases of stone circle construction within Cumbria (Burl 2000, 104, 108-9). He considered at least twelve of the largest Cumbrian stone circles to be Neolithic in date, with

a further ten constructed during the Neolithic to Bronze Age cross-over period (up to 2000BC). The only modern-day excavation of a Cumbrian stone circle, at Long Meg and her Daughters, in March 2015, came up with firm Neolithic dates (Paul Frodsham, pers. comm.).

It is clear, from a Pastscape perspective, that noting the scheduling and survival of N/EBA monuments is important for our current-day needs; for future preservation and investigation; and for analyses of the current-day care of these structures. However, to ascertain whether these monuments were as 'important' as one another leads to a more complex problem. Clearly, the issue is further impacted by the level of preservation of the monument from a geological perspective, as well as the care taken to preserve the monument, along with the publication of any previous excavations within these structures.

While it may be entirely possible to glean data from preserved chalk-sited structures, the survival of anything but stone can hardly be expected within acidic peatland monuments. Secondly, some burial artefactual assemblages may be available from investigated mounded structures but artefacts cannot be expected to have survived around stone circles. They may have lain, propped up against a stone for millennia, only to be removed later.

In total, 3873 records were logged onto an Excel spreadsheet. This included 32 extra references to monuments named by Burl (2000), Kinnes (1979) or (1992), which were not found in Pastscape's NRHE archive, even with a specific 'Location Search' for each entry.

5.2.2 REF2014

The analysis of the REF2014 data was designed to look at the most up-to-date information regarding the regions and time periods covered by research undertaken by different Archaeology Departments in the UK and compare its total references with those for the rest of England and Britain. This should provide data on the most important N/EBA sites within England. However, it is well known that the REF criteria affect the choice of reports submitted for scrutiny by a university. To gain a 4*, the research needed to be 'world-leading'; for a 3*, it would be 'internationally excellent'. Those projects, which were 'recognised internationally' gained a 2*; and those 'recognised nationally' only gained a 1*.

The terminology of REF was not created for Archaeology and this is a continuing issue for these departments. There is always a concern that if data on a local project is submitted, it might be challenged. This therefore leads to a focus on overseas excavations, which might then be deemed of international significance.

To analyse the regions and periods covered by REF2014 for UK institutions, a spreadsheet was created to note the key data for each university. Only 34 UK universities currently offer Archaeology as a degree subject (<https://www.thecompleteuniversityguide.co.uk/league-tables/rankings?s=archaeology>). Each of these are assigned a UKPRN, which has been referred to in the Excel spreadsheet, for ease of cross-checking. Of those, five universities did not provide REF2014 data for Archaeology (Birkbeck College, University of Kent, Swansea University, Canterbury Christ Church University and Anglia Ruskin University, ranked 4th, 22nd, 28th, 33rd and 34th, respectively).

Following the REF2014 criteria was challenging, especially as Archaeology, Geography and Environmental Science were grouped together as Assessment Unit 17. Within the Units of Assessment, there were submission letters (A, B) denoting specific subjects for each university. The difficulty was that letter A or B meant different subjects (Archaeology, Geography or Environmental Science) for each institution. There were also many institutions which did not use these letters, instead grouping all entries together. Aberdeen, Birmingham, Bournemouth, Bradford, Central Lancashire, Edinburgh, the Highlands and Islands, Hull, Queen's in Belfast, Worcester and York all used this entry system, so it was sometimes difficult to know which entries were archaeology-based, and which were Environmental Science or Geography. In those cases, all entries were added.

The title of each 'Output' was assessed and based on this and a time-period and location were assigned. The following time periods and locations were referenced (Table 21;

Table 20 – Time periods for REF2014 entries

Table 21 - Locations for REF2014 entries

).

No specific date
Lower Palaeolithic
Palaeolithic
Upper Palaeolithic
Mesolithic
Mesolithic Neolithic
Neolithic
Neolithic Bronze Age
Chalcolithic
Chalcolithic Bronze Age
Bronze Age
Bronze Age Iron Age
Iron Age
Iron Age Roman
Roman
Roman Medieval
Early Medieval
Medieval
Late Medieval
Industrial World Wars

Northern England
England Other
Britain
North Sea
UK Britain Ireland
Ireland Scotland
Scotland
Scotland England
Wales
England Wales
Ireland
England Ireland
Irish Sea
Europe
Middle East
Worldwide
N/A

Table 20 – Time periods for REF2014 entries

Table 21 - Locations for REF2014 entries

Within the titles of each journal or book entry, there were some issues. Sometimes, the period coverage of the written piece was sometimes too broad to assign a time category.

For example, Exeter University entered a piece on North Sea Archaeology, from 10,000BC to AD1500. In this case, the region could be noted, but the time-period was assigned as ‘No specific date’. Bournemouth University’s article on coastal zone management was an eight-country study, so Not Applicable (N/A) was logged as its location data and the same for its time period.

5.2.3 ADS

The Archaeology Data Service is a bibliographic database, which provides ‘the only accredited digital repository in the UK for heritage data’ (<http://archaeologydataservice.ac.uk/>). The parcels of information, within its database, are in the form of journal articles, books or reports, with 1356531 results in total. This includes data from the British and Irish Bibliography (BIAB). In order to narrow down the 1.3 million Archaeology Data Service (ADS) references, the term ‘Neolithic’ was chosen within the ‘Keyword’ Search Engine, followed by ‘Monument Types’, ‘England’, and ‘Early Prehistoric’. This narrowed the search down to 2000 entries. For each of these, the following information was noted (Table 22).

Year	English location	County	Site Name	ADS intervention type	Grid Reference	Neolithic monument type	Bronze Age monument type
------	------------------	--------	-----------	-----------------------	----------------	-------------------------	--------------------------

Table 22 – ADS referencing criteria

For this study, the intention was to compare interest in the Neolithic and Early Bronze Age monuments of northern England with those in southern England. Flints, pottery sherds, pits and ditches were therefore not noted, even though these may be indicators of monuments. Site and Settlement information was referenced, as well as Burnt Mounds, Barrows, and all Neolithic monument types. Sometimes the expression ‘Bronze Age’ was used to describe the age of a monument; sometimes, ‘Early- or ‘Middle Bronze Age’. These three indicators were accepted, but not ‘Late Bronze Age’. In total, 1257 sites were entered.

5.2.4 COPAC

COPAC is also a bibliographic database, which has access to approximately 90 research libraries. Its monograph publications should provide a comprehensive record of the number of Neolithic sites which have been the subject of major publication over the last 20 years. Within COPAC, the keyword ‘Neolithic’ was used. The search was narrowed, by

choosing 'England' as the 'Place published'. The 'Year published' was restricted to 1990-2017. This provided 251 records (January 2018) (Table 23). This amount seemed very low but several attempts were made to glean more data, without success.

Title	Relevance	Year	Location	County	N/EBA site	Specific Site Name
-------	-----------	------	----------	--------	------------	--------------------

Table 23 – COPAC referencing criteria

To improve the search for records which might contain data about the N/EBA monuments of northern England, the search was widened as much as possible. For example, if a study named Atlantic Europe in its title, this was referenced as 'Britain/Europe' in the General Location reference.

5.2.5 BAR REPORTS

641 British Archaeological Reports (British Series) were produced from 1974 to 2018 (<https://www.barpublishing.com/>). Of these, 316 pertained to English sites only and a further 325 to Britain (England & other countries). As so many regions have been linked together for data comparison within these research reports, it was difficult to easily compare regional totals. Therefore, a rough division of English sites and landscapes was achieved through a comparison of those pertaining to the north, the south and to the central region of England and a table was created to demonstrate the results.

5.2.6 PPS

The journal of the Proceedings of the Prehistoric Society began their publications in 1935. To analyse the PPS journal articles, 1935-2019, (<https://www-cambridge-org.ezphost.dur.ac.uk/core/journals/proceedings-of-the-prehistoric-society/all-issues>), an Excel spreadsheet was created. Each article's title was assessed and any place or archaeological site name used was logged on the spreadsheet as a location. All articles were checked, but not Notes, Shorter Contributions nor Book Reviews.

5.2.7 ANTIQUITY

To analyse *Antiquity* from 1927-2018 (<https://www.antiquity.ac.uk/>), an Excel spreadsheet was created. Each article's title was assessed and any British place or archaeological site name used was logged on the spreadsheet as a location. All articles were checked, but not

Review Articles nor Book Reviews. No distinction was made between historic and prehistoric references, to provide as wide coverage as possible. England, Scotland and Wales were referenced separately and also broken up into north-east (NE), north-west (NW), south-east (SE), south-west (SW) and Central. Occasionally, a reference mentioned only northern or southern regions, or the country itself so those also had to be added, where necessary. Britain, Ireland and Northern Ireland were added, as well as Hadrian's Wall, Stonehenge, Wessex, Isle of Man (IOM), Anglesey and Orkney (as these regions were so often very well referenced in my MA results).

There were several issues to overcome. If two separate regions were referred to in one title, such as England and Wales, or Britain and Ireland, neither were referenced. Volume 71 offered the title, 'A Cornish vessel from farthest Kent'. This was assigned to south-east England, as that was where the excavation happened.

5.3 RESULTS

5.3.1 PASTSCAPE

The results of the PastScape investigation into the Neolithic and Early Bronze Age monuments of England are very revealing. In total, 14,516 records were investigated, along with two CSV Excel files, provided by the Heritage England team, after their cyber-attack. This led to the collation of 3,873 records (Figure 83).

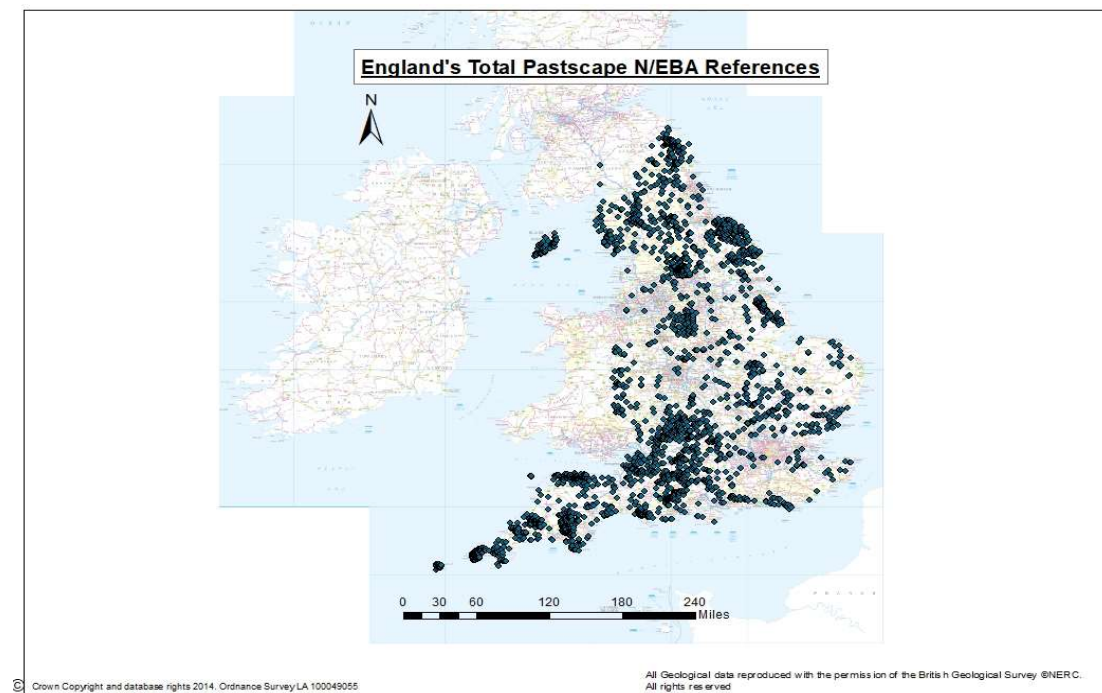


Figure 83 – Location of each of the 3,873 Neolithic and Earlier Bronze Age PastScape records

There are many monuments (both extant and lost) throughout England, with some key areas of density (those areas with so many monuments that the dots have amalgamated into a black mass). These monuments were then divided into regional totals for the north-east, north-west, south-east and south-west. Central England had to be divided into North Central and South Central England, as there are now so many smaller unitary authorities that it would have been difficult to compare data across 31 ‘counties’ (Table 24).

English Region	Total Count of Location
North Eastern England	919
North Western England	290
Northern Central England	377
Southern Central England	354
South Eastern England	326
South Western England	1607
Grand Total	3873

Table 24 – Monument totals per English region – Pastscape results

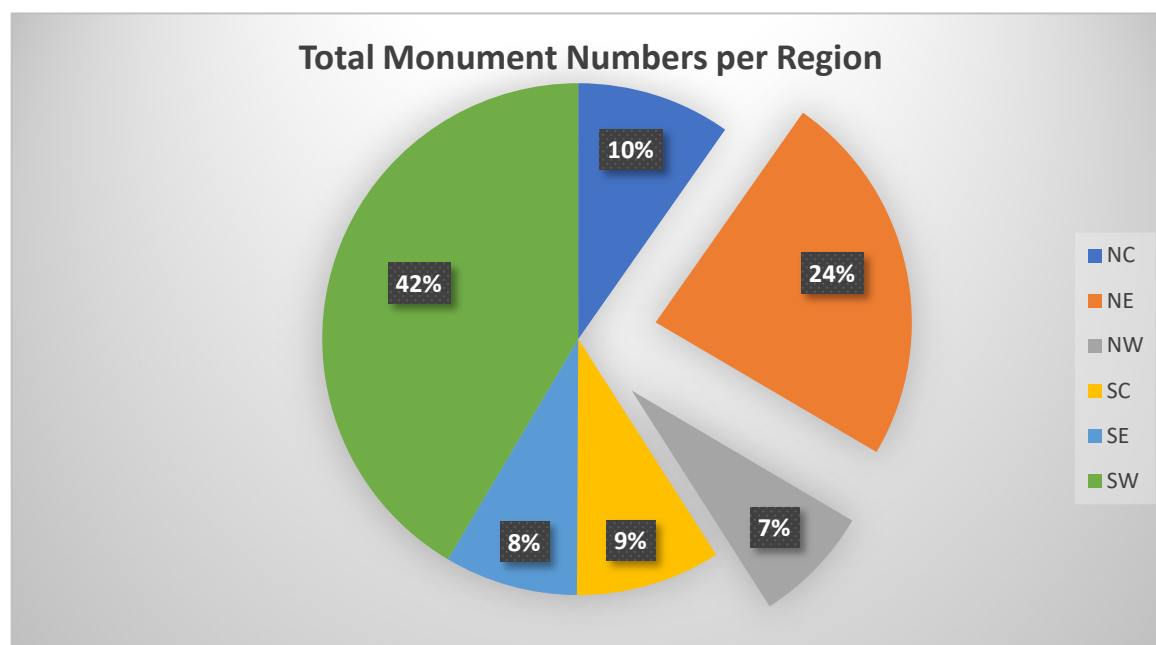


Figure 84 – Pie chart of percentages of monuments per English region – Pastscape results

Pastscape’s records have been compiled over a long period of time and from a variety of sources, and continues to be updated, usually on an eight-weekly basis. This updating has clearly led to some inconsistencies in the available data, which was not as systematic in some regions as in others. This issue is currently being rectified through the ongoing NRHE

(National Record of the Historic Environment) to HER (Historic Environment Records) project (<https://nrhe-to-her.esdm.co.uk/>).

From PastScape's analysis, the south-west of England has the most N/EBA monuments, followed by the north-east. The other regions have similar totals. Each region was then analysed (Figure 84) and the monument types and totals for each region were created (Appendix A).

North-eastern England has 912 PastScape records for the N/EBA period (Table 27). Of those, rock art panels are the most prolific, with 77 records in Durham, 105 in North Yorkshire and 88 in Northumberland. East Yorkshire, Lincolnshire and North Yorkshire have 137 long barrows and 100 round mounds between them, all from the Early Neolithic period. Northumberland has 25 henges, with another 26 in Yorkshire. The north-east also has 135 standing stone records, 57 stone circles and 6 stone alignments (Appendix A). There are 502 extant and 388 lost monuments. Of those, 370 are in North Yorkshire; 214 in Northumberland and 119 in Lincolnshire (Table 27). The state of preservation of these monuments can be seen on the annotated map below (Figure 86).

In north-west England, Cumbria has the most PastScape records, with 198 of 290 in total (Table 28). It has 80 stone circles, 41 standing stones and 5 stone avenue/alignments. The Isle of Man has 7 stone circles, 25 standing stones and 2 alignments, as well as 13 Early Neolithic long or round mounds. Lancashire has 11 stone circles and Cumbria has a further 44 Early Neolithic long or round mounds. For north-western England, there are 132 extant and 59 lost monuments in Cumbria, and 64 on the Isle of Man, of which 46 are extant and 17 have disappeared (Appendix A). The map of north-western England's extant monuments shows the high level of monument preservation in the region, with lost structures only along the low-lying landscapes along the south-western coastline and the Eden valley (Figure 87).

North Central England has a total of 377 N/EBA PastScape entries, of which 143 pertain to rock art panels, 65 to stone circles, 57 to standing stones and a further 55 to Early Neolithic long and round mounds or cairns (Appendix A). In north-central England, there are 243 extant and 126 lost monuments (Table 29). 149 monuments are the region formerly known

as West Yorkshire (now, Bradford, Calderdale, Kirklees and Leeds); 106 are in Derbyshire; 48 in Shropshire; 28 in Staffordshire; and 17 in South Yorkshire (including Doncaster, Rotherham, Wakefield and Sheffield). In North Central England, preservation along the upland landscapes of West Yorkshire and Derbyshire is most pronounced, with most loss in low-lying regions (Figure 88).

South Central England has 354 Pastscape entries, of which 149 pertain to Oxfordshire (Table 30). In total, there are 78 Neolithic round mounds and 73 long mounds, as well as 13 standing stones, 1 stone alignment and 2 stone circles. South Central England has 326 Pastscape entries in total (Appendix A). Hampshire has 74 entries, with 53 long barrows and 3 Neolithic round mounds. There are a further 61 Early Neolithic long and 41 round mounds within the southern central region. In south-central England, only 44 monuments remain extant, whereas 309 have disappeared (Table 30). Of these, 148 are in Oxfordshire (including West Oxfordshire); 81 are in Cambridgeshire (including those in the City of Peterborough) and 50 in Bedfordshire (including Bedford Town). Pressure on infrastructure (both housing and road developments) has led to the loss of the majority of N/EBA monuments in South Central England (Figure 89).

In south-eastern England, there are 107 upstanding and 219 lost monuments (Table 31). This includes 75 in Hampshire (including Portsmouth); 69 in Essex (including Thurrock); and 47 in Sussex (including East/West Sussex and Brighton and Hove). There has been widespread monument preservation on the Hampshire and South Downs, the New Forest and the Vale of Kent, with major loss elsewhere, for the reasons discussed above (Figure 90).

South-western England has the most Pastscape entries, with 1607 (Table 32). Devon has 413 entries, with 157 standing stones, 101 stone alignments/rows and 75 stone circle references. Cornwall has 316 entries in total, with 141 standing stones, 49 stone circles and 17 stone rows. Overall, the south-west region has entries of 421 chambered tombs/long mounds and 117 Neolithic round mounds. South-western England has the most monuments, with 1597 (Appendix A). 1037 of these are extant and 540 lost. Of these, Devon has 411 sites (including Torbay); Cornwall has 316 structures; Wiltshire has 258 sites (including those in Swindon); Somerset has 194 monuments (including North Somerset,

Bath and NE Somerset and Bristol); and Gloucestershire has 170 structures (including those in South Gloucestershire). Figure 91 & Figure 92 demonstrate the high level of monument protection in south-western England, with the most loss along major routeways and around cities.

Of these totals, the numbers of both extant (Y)/non-extant (N) and restored monuments (R) (preservation of monuments); and Scheduled/ Non-scheduled/ De-scheduled monuments were assembled, both within England (Table 25; Figure 85), and on a regional basis (Table 26). Due to the layout of the Pastscape website (discussed below), there was occasional confusion as to the current state or scheduled nature of a particular structure. Where no decision could be reached, a ? was used (Table 25). The data demonstrates that there has been better preservation of monuments in northern England, than in the south (apart from the south-west) (Table 26). The map created does not include the 49 unknown sites (listed as ? on the table above) (Figure 85).

Preservation	
Extant vs non-extant	England Total
Y	2131
N	1665
R	1
?	49
Grand Total	3846

Table 25 -Total number of extant and lost monuments in England (Y-extant; N-lost; R-restored)

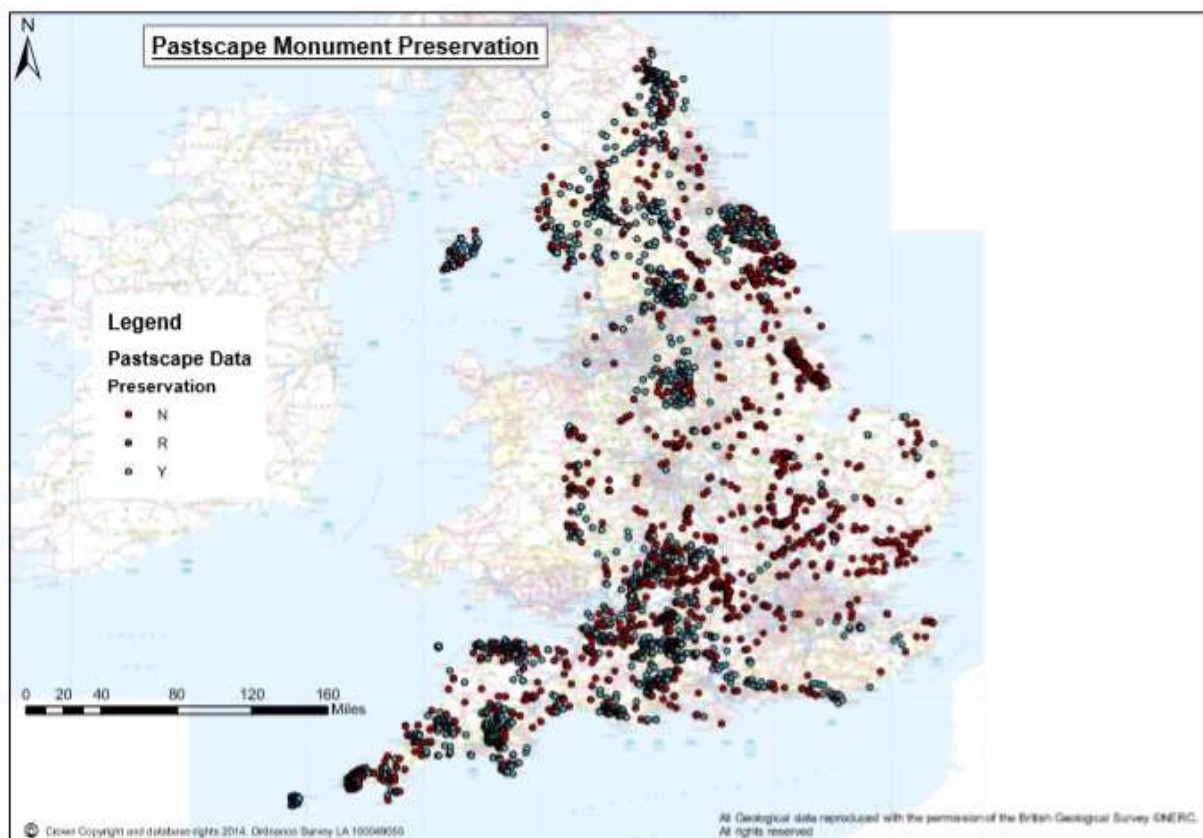


Figure 85 – Map showing the preservation status of N/EBA monuments within England

PRESERVATION Extant versus non-extant monuments per region	Y	N	?	R	Total
North East England	505	387	22	0	914
North West England	198	83	5	1	287
South East England	108	218	0	0	326
South West England	1050	543	20	0	1613
Northern Central England	244	126	2	0	372
Southern Central England	44	310	0	0	354
Overall Totals	2149	1667	49	1	3866

Table 26 – Preservation of monuments by English region

North-east England

	Extant	Non-Extant	Restored	Unknown	Grand Total
North Eastern England	502	388		22	912
Durham	82	13		1	96
East Yorkshire	17	52			69
Gateshead		4			4
Lincolnshire	23	96			119
North Lincolnshire		5			5
North Tyneside		1			1
North Yorkshire	230	121		19	370
Northumberland	132	80		2	214
Redcar and Cleveland	15	6			21
South Tyneside		1			1
Stockton-on-Tees	1				1
Sunderland	2	3			5
York		6			6

Table 27 – North-east England's monument types and their current status

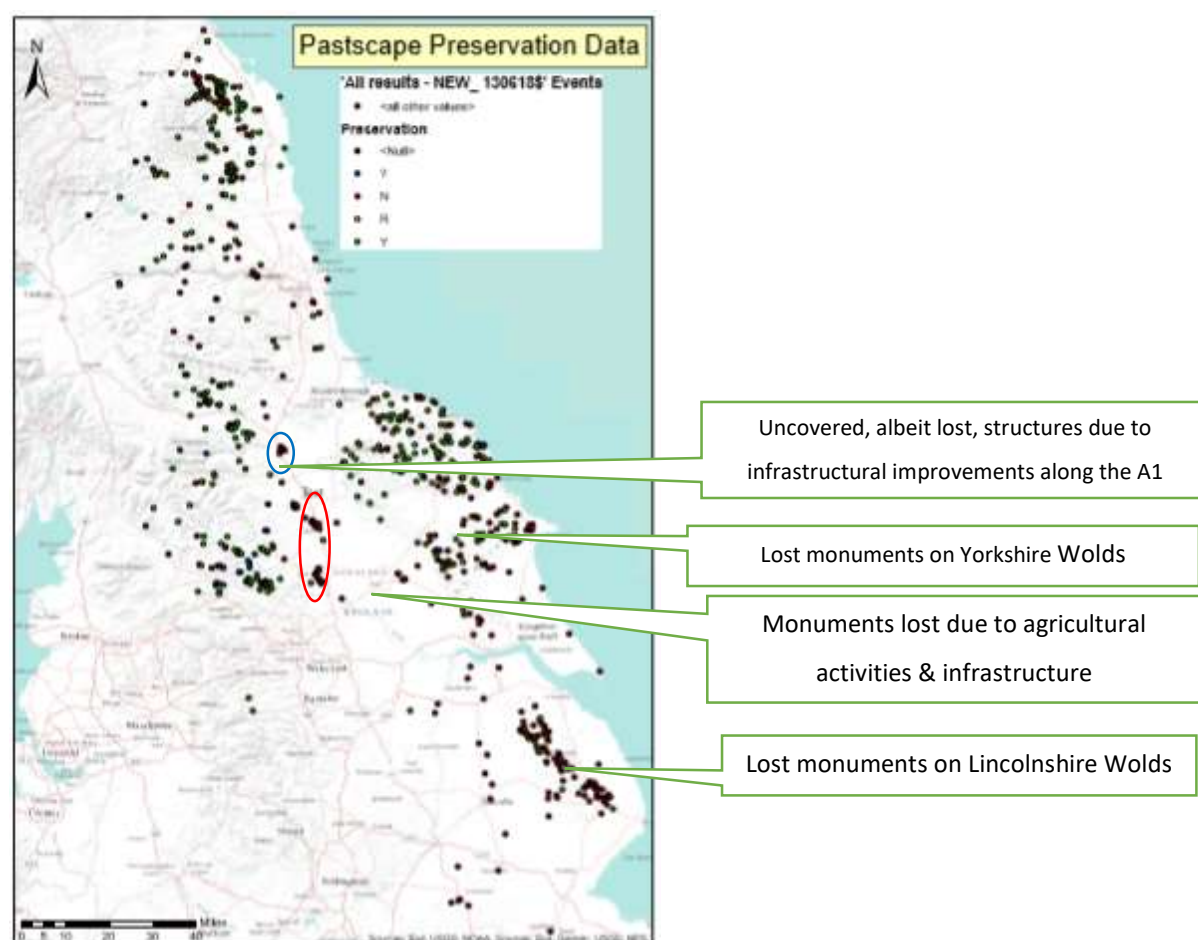


Figure 86 – Annotated map of extant and lost monuments within north-east England

North-west England

	Extant	Non-Extant	Restored	Unknown	Grand Total
North Western England	198	83	1	5	287
Cheshire	2				2
Cheshire East	3	1			4
Cumbria	132	59	1	4	196
Isle of Man	46	17		1	64
Lancashire	13	5			18
Liverpool	2				2
Warrington		1			1

Table 28 – North-west England's monument types and their current status

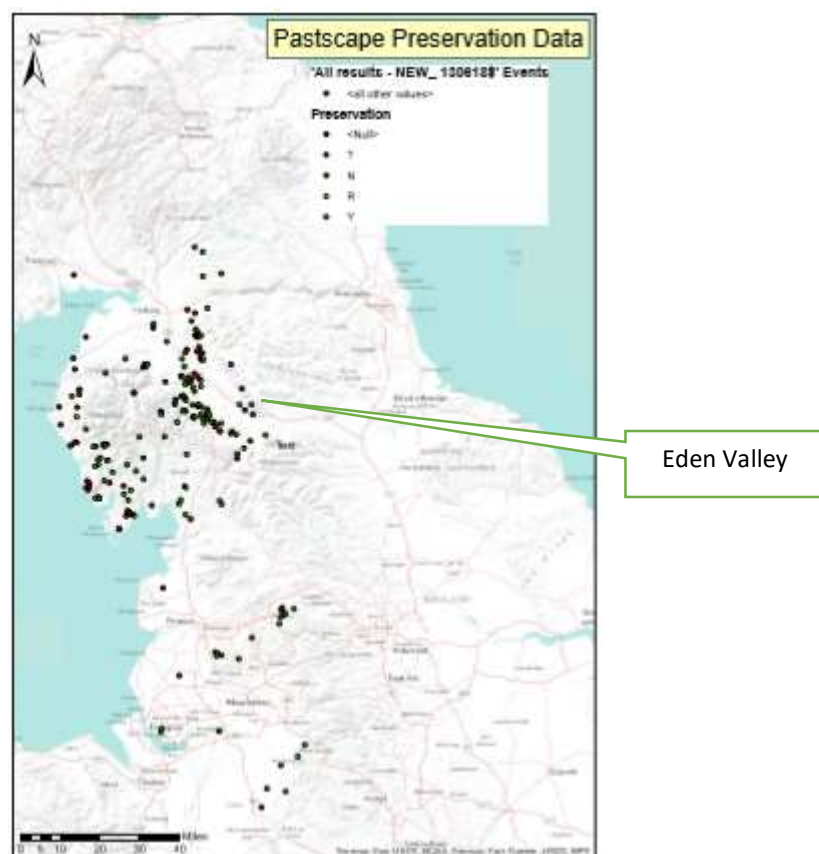


Figure 87 - Annotated map of extant and lost monuments within north-west England

North Central England

	Extant	Non-Extant	Restored	Unknown	Grand Total
North Central England	243	126		2	371
Bradford	118	9			127
Calderdale	1	3			4
Derbyshire	78	27		1	106
Doncaster	1	2			3
Kirklees	1				1
Leeds	16	1			17
Leicestershire	3	6			9
Nottinghamshire	2	10			12
Rotherham		1			1
Rutland		2			2
Sheffield	5				5
Shropshire	13	34		1	48
South Yorkshire		1			1
Staffordshire	4	24			28
Wakefield	1	6			7

Table 29 - North central England's monument types and their current status

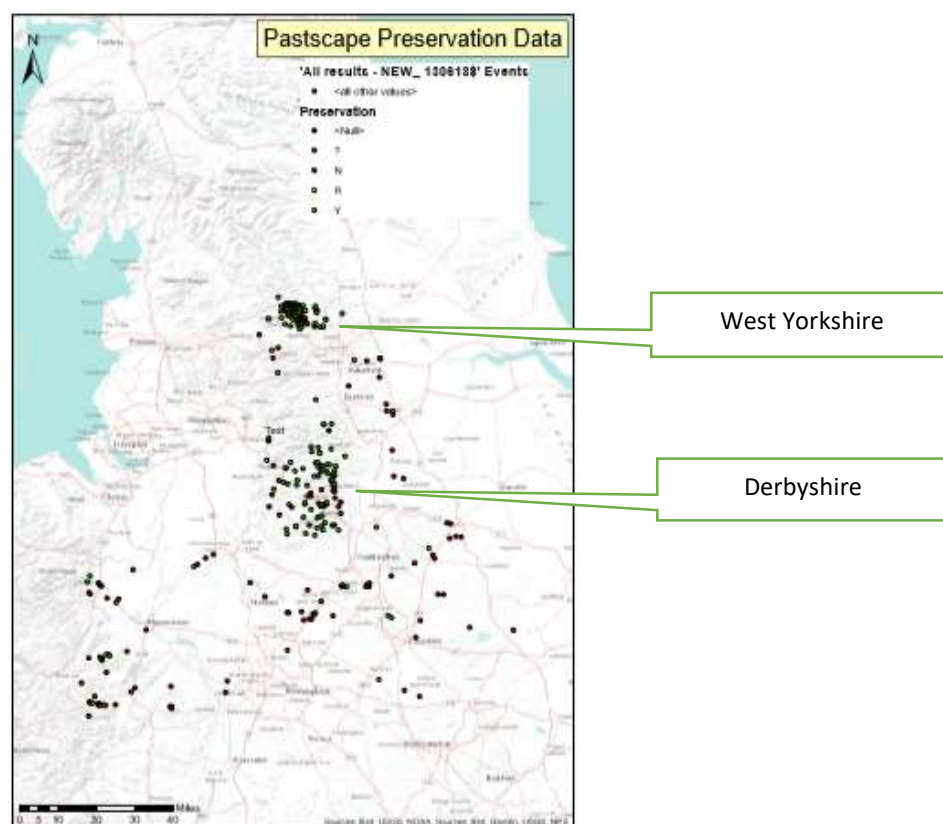


Figure 88 - Annotated map of extant and lost monuments within north central England

South Central England

	Extant	Non-Extant	Restored	Unknown	Grand Total
South Central England	44	309			353
Bedford	3	36			39
Bedfordshire	4	7			11
Birmingham	1				1
Cambridgeshire	6	42			48
Central Bedfordshire		1			1
City of Peterborough	1	32			33
Milton Keynes		4			4
Northamptonshire	1	27			28
Oxfordshire	21	123			144
Reading		1			1
South Oxfordshire		1			1
Walsall		1			1
Warwickshire	1	20			21
West Berkshire	5	11			16
West Oxfordshire	1	3			4

Table 30 – South central England's monument types and their current status

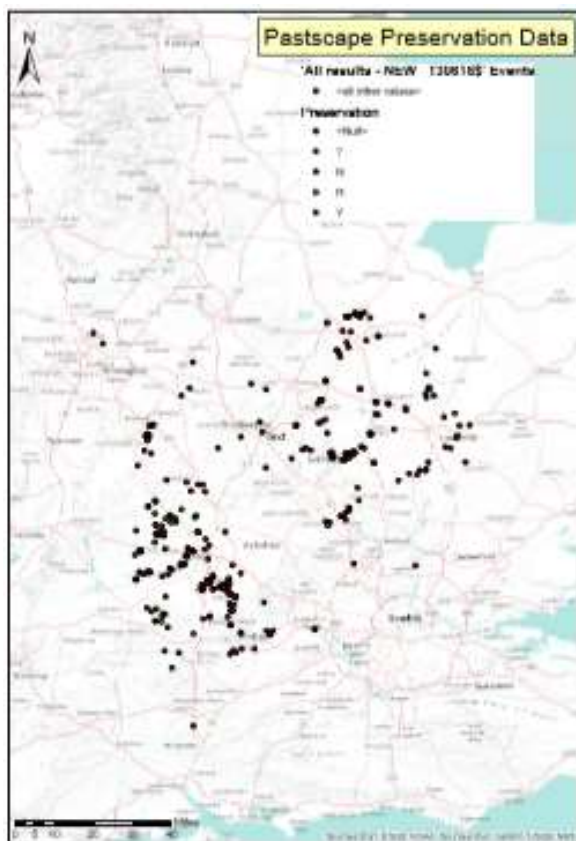


Figure 89 - Map of extant and lost monuments within south central England

South-east England

	Extant	Non-Extant	Restored	Unknown	Grand Total
South Eastern England	107	219			326
Brighton and Hove	2	5			7
Buckinghamshire	4	8			12
City of Brighton and Hove		1			1
City of Portsmouth		1			1
East Sussex	16	3			19
Essex	1	65			66
Greater London	3	2			5
Hampshire	45	29			74
Hertfordshire	2	16			18
Kent	12	20			32
Luton	1	3			4
Norfolk	7	20			27
Suffolk	1	23			24
Surrey		6			6
Sussex		1			1
Thurrock		3			3
West Sussex	13	6			19
Windsor and Maidenhead		2			2
Wokingham		5			5

Table 31 – South-east England's monument types and their current status

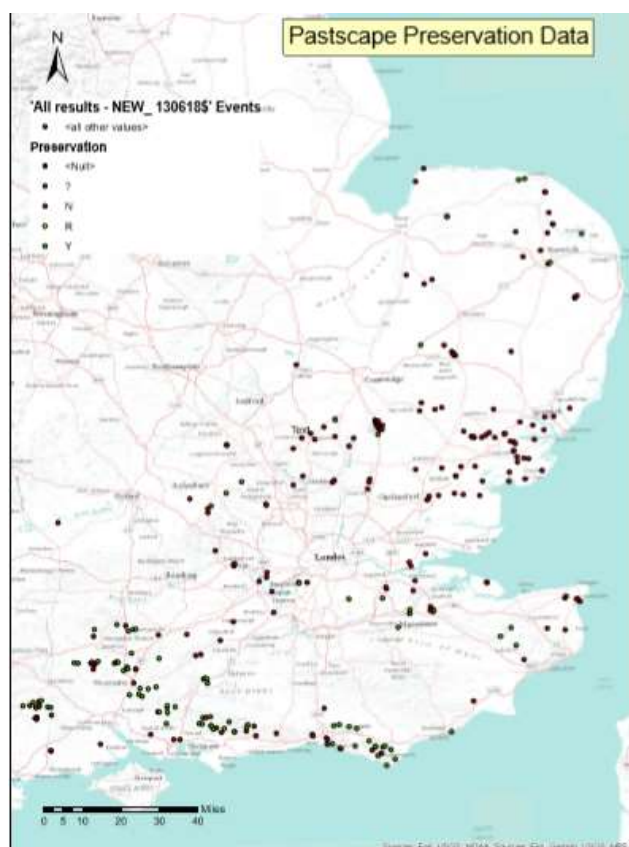
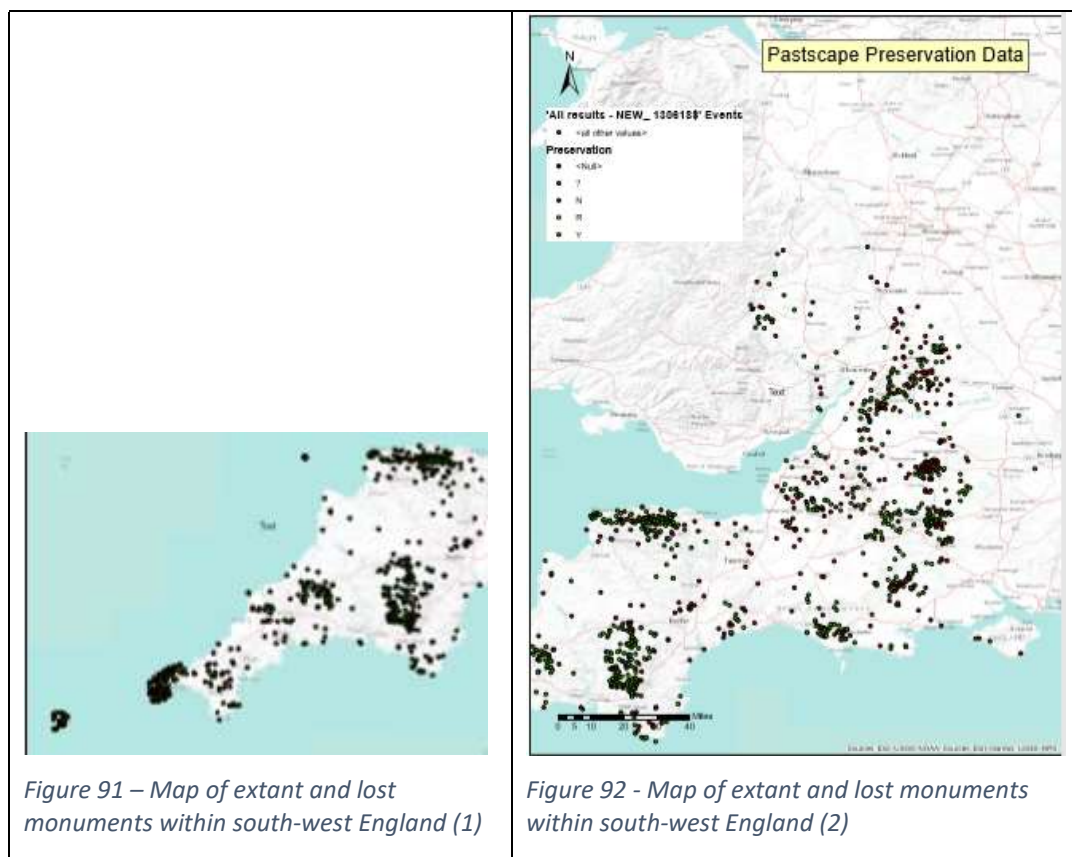


Figure 90 - Map of extant and lost monuments within south-east England

South-west England

	Extant	Non-Extant	Restored	Unknown	Grand Total
South Western England	1037	540		20	1597
Bath and NE Somerset	11	9			20
Bournemouth		1			1
Bristol	3	1			4
Cornwall	208	105		3	316
Devon	312	88		10	410
Dorset	95	56		2	153
Gloucestershire	81	78		3	162
Herefordshire	21	10			31
Isle of Wight	2	2			4
Isles of Scilly	37	9			46
North Somerset	6	4			10
Somerset	100	59		1	160
South Gloucestershire	7	1			8
Swindon	2	4			6
Torbay	1				1
Wiltshire	149	103			252
Worcestershire	2	10		1	13

Table 32 – South-west England's monument types and their current status



5.3.1.1 Scheduled versus non-scheduled monuments

Count of Scheduled S/not scheduled N/ de-scheduled D, according to Pastscape site descriptors	NE	NW	NC	SC	SE	SW	Grand Total
S	398	95	170	54	74	385	1176
N	511	178	194	299	252	1209	2643
?		3	1				4
D	2	6	5			1	14
Grand Total	911	282	370	353	326	1595	3837

Table 33 – The totals of scheduled monuments per English region (S-scheduled; N-not scheduled; D-de-scheduled; ?-unknown)

All regions have less scheduled, than non-scheduled, monuments, with the most scheduling in the north-east and south-west, respectively (Table 33).

Total county numbers of scheduled, non-scheduled and de-scheduled monuments

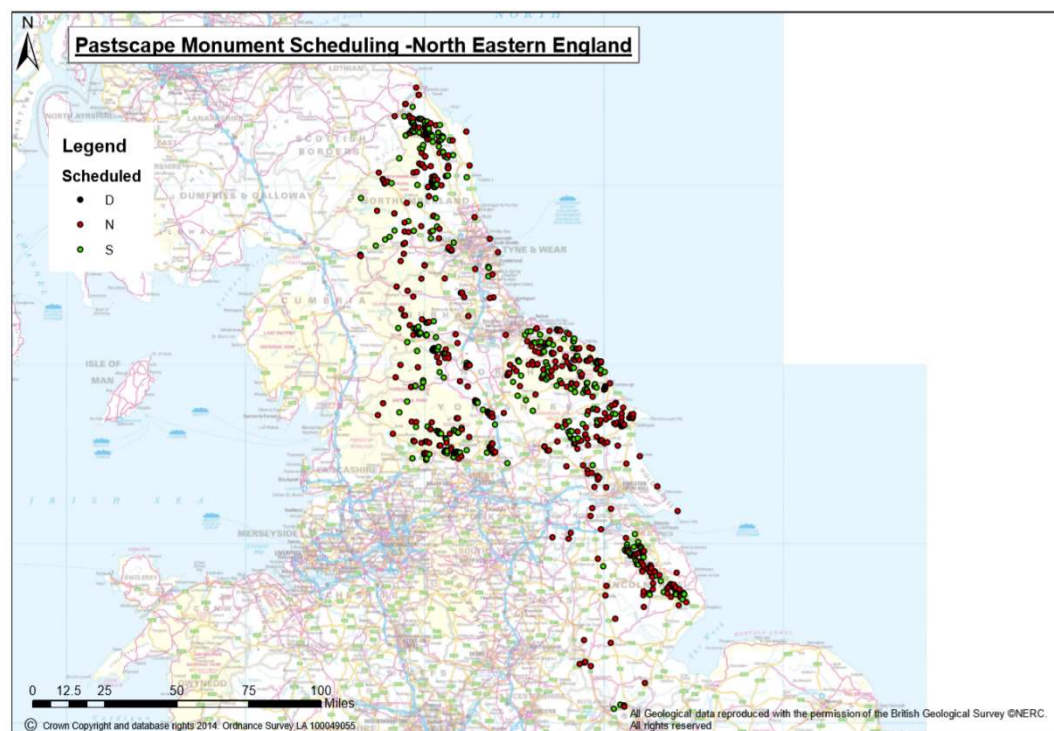


Figure 93 - Map of scheduled, not scheduled and de-scheduled monuments within north-east England

This map shows the scheduled, non-scheduled and de-scheduled monuments in north-eastern England (Figure 93). The majority of scheduled monuments are situated on higher, more marginal land, than those which are not scheduled.

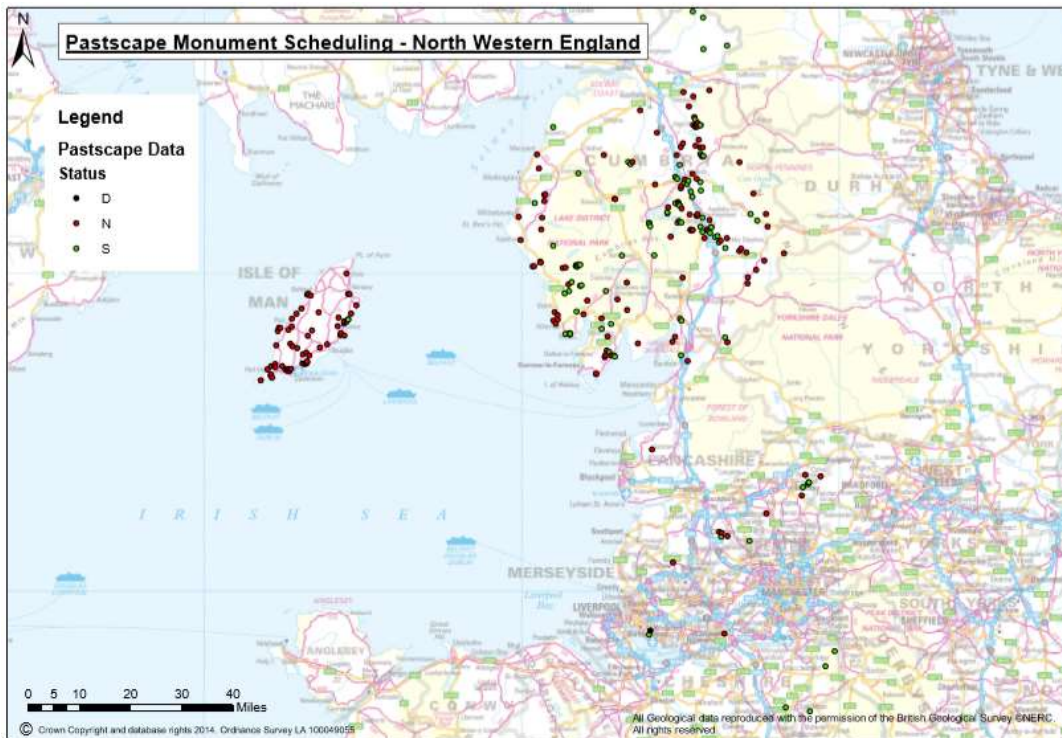


Figure 94 - Map of scheduled, not scheduled and de-scheduled monuments within north-west England

In north-western England, the majority of scheduled monuments are along the main routeways through the region (Figure 94). Whether this is because these are the most important structures or the most noticeable will be discussed below.

North Central England

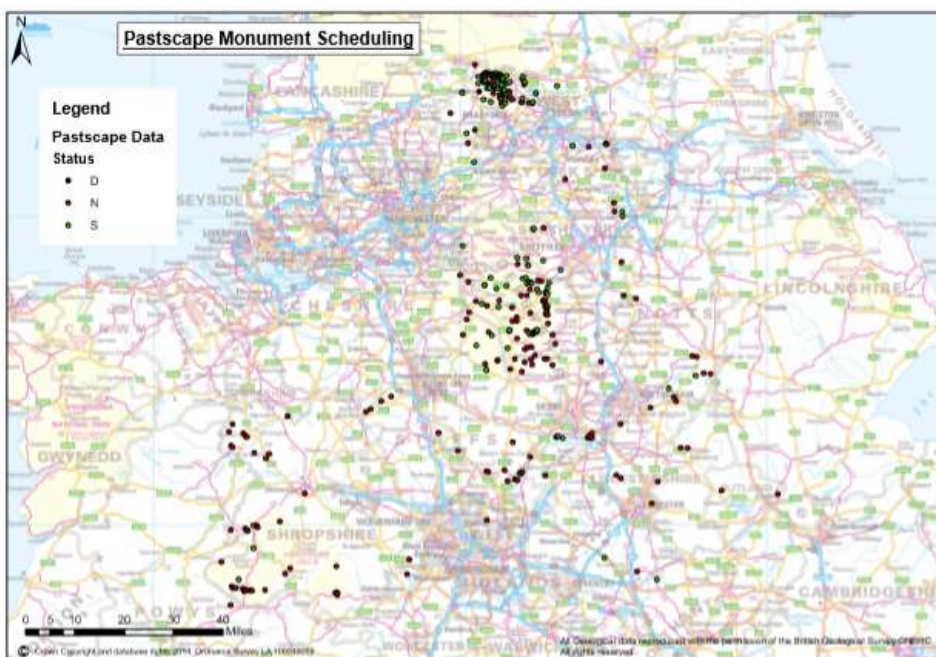


Figure 95 - Map of scheduled, not scheduled and de-scheduled monuments within north central England

In North Central England, the majority of the scheduled monuments are away from main population centres and to the north of the region (Figure 95).

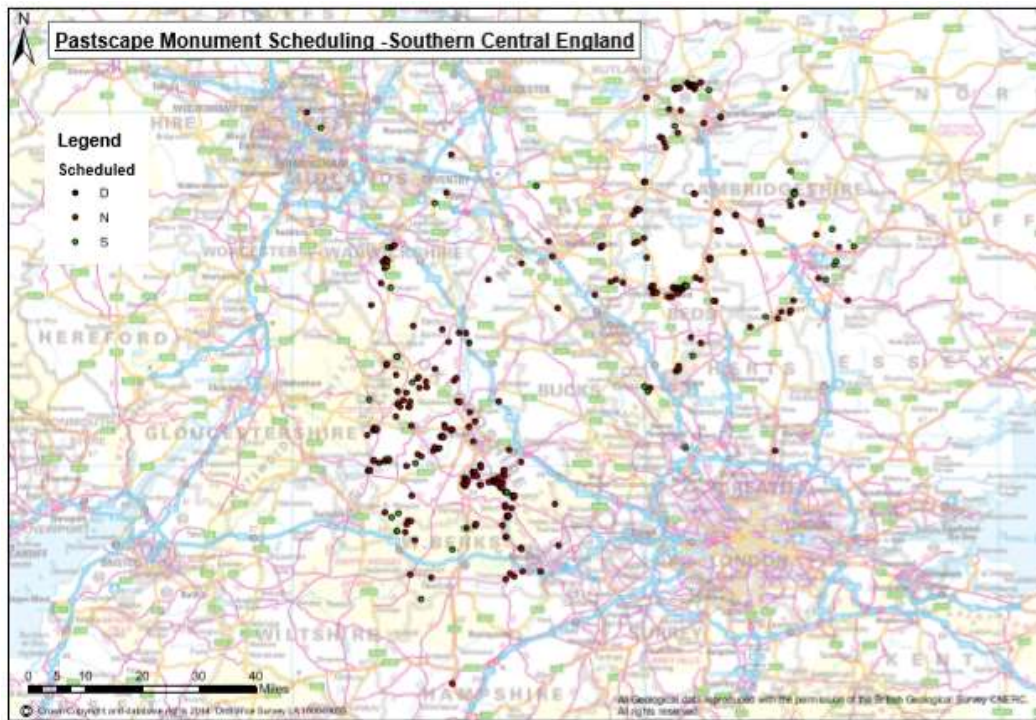


Figure 96 - Map of scheduled, not scheduled and de-scheduled monuments within south central England

In South Central England, there are few scheduled monuments at all (Figure 96).

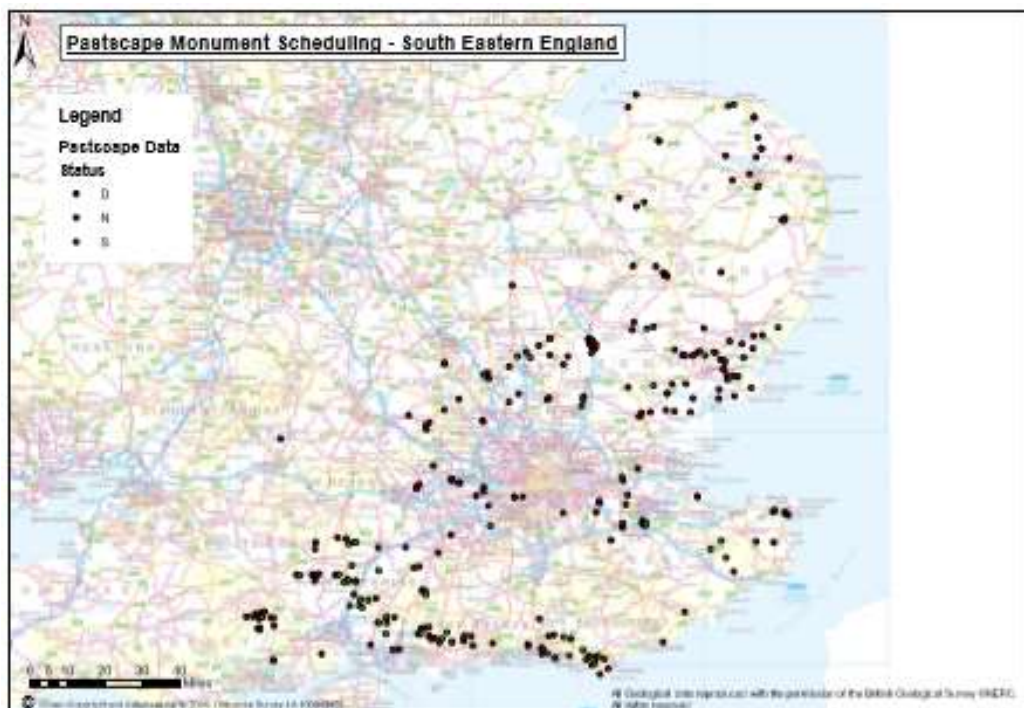


Figure 97 - Map of scheduled, not scheduled and de-scheduled monuments within south-eastern England

In south-eastern England, the majority of scheduled monuments are away from centres of population and to the south of the region, close to the south coast (Figure 97).

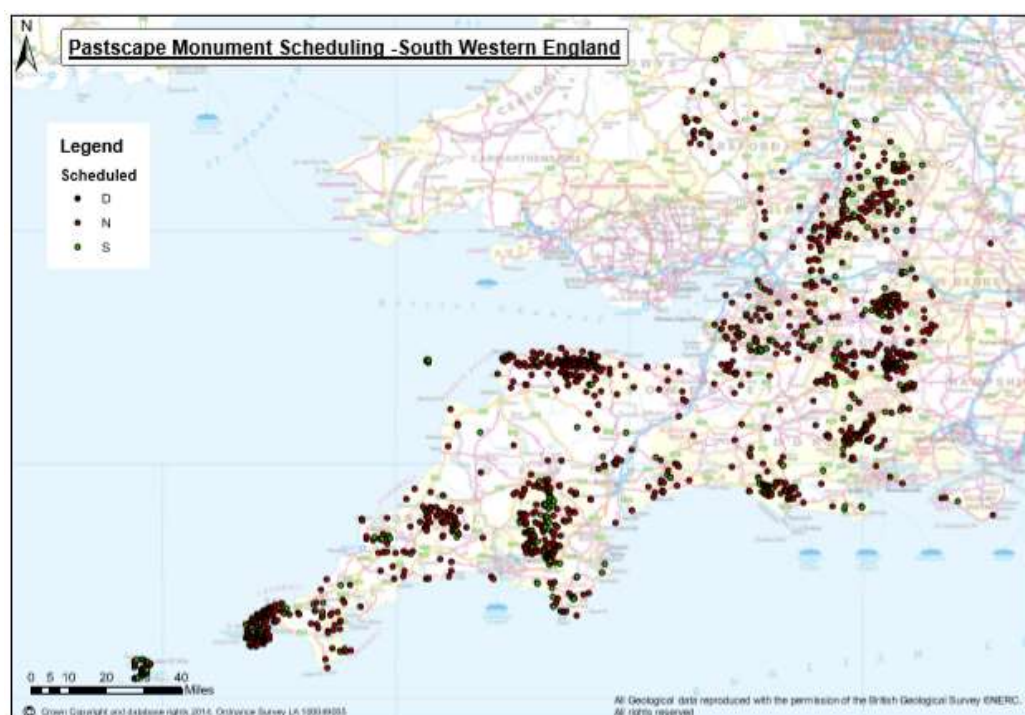


Figure 98 - Map of scheduled, not scheduled and de-scheduled monuments within south-western England

There are large numbers of both scheduled and non-scheduled monuments in south-western England (Figure 98), with both types interspersed throughout the region.

5.3.2 REF2014

The overall quality of submissions for all departments, in all universities for 2014, was judged. 30% of submissions were 'world-leading' (4*). 46% were 'internationally excellent' (3*). 20% were 'recognised internationally' (2*) and only 3% were 'recognised nationally' (1*). (<https://www.ref.ac.uk/2014/media/ref/content/pub/REF%20Brief%20Guide%202014.pdf>).

For Archaeology, the 29 universities which entered data for REF2014 provided results, all of which can be found within the Appendix A.

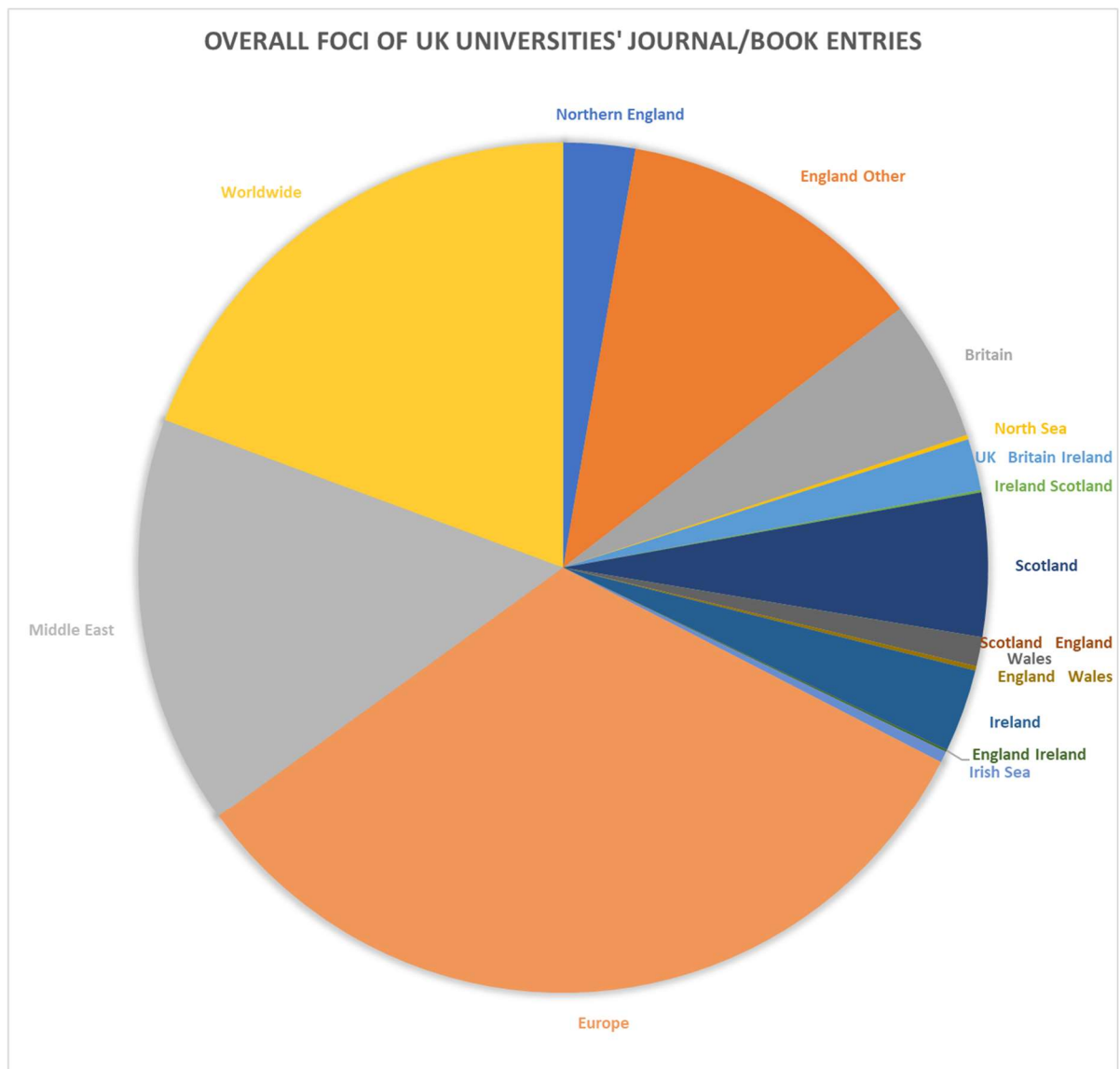


Figure 99 – REF2014 pie chart – locations of UK universities' journal and book entries

As has been discussed above, the REF criteria itself leads to a submissions' bias. However, those chosen should fairly represent all significant British projects.

From the total results from the 29 universities, the most references pertained to European locations (not including Britain and Ireland), followed by other worldwide sites and those in the Middle East. In fact, Middle Eastern locations were referred to almost as much as England's sites (with 183 references, compared with 171 for England), and much more than Scotland, Ireland and Wales' locations added together. There were 381 references for sites elsewhere in Europe and 227 sites referenced for the rest of the world (Figure 99).

Of those who entered journal articles or books on Britain, only 2 referenced the Neolithic and Bronze Age of northern England. On the other hand, this time period was referenced

39 times for sites elsewhere in Britain. In fact, when considering world entries, the N/EBA periods were referenced 276 times overall. However, northern England was referenced 32 times, in total, but for different time periods. Yet, many universities referenced few British locations at all. University College London had the most REF2014 entries (203). They referenced only 12 British sites, concentrating mainly on those in Europe, the Middle East and further afield (with 28, 48, and 45 references, respectively). Similarly, the University of Oxford referenced only 13/115 British locations. However, 22 European, 12 Middle Eastern and 24 worldwide locations were referenced. Of Cambridge's 145 REF2014 entries, again only 13 were UK-based entries; 38 were European; 25 Middle Eastern and a further 20 were worldwide references. Sheffield's, York's, Edinburgh's, Exeter's and Leicester's entries also favoured European and worldwide locations over British references. The University of Liverpool had more entries for the Middle East than for anywhere else. Aberdeen's only emphases were Scotland, Europe and further afield. Bournemouth, Cardiff, Nottingham and Durham all favoured both UK locations and an area further afield (for Bournemouth: other worldwide locations; for Cardiff, Nottingham and Durham: Europe). Queen's University Belfast had 28/129 Irish references, with 12 for other sites in Europe, and 23 Middle Eastern and other worldwide entries. Glasgow referenced 32 entries, of which 9 were for Scotland and 9 for European locations. Wales Trinity Saint David and Bradford referenced more sites in Britain than abroad. For Wales Trinity, there were 14 British locations, with 10 entries pertaining to places elsewhere in the world. For Bradford, there were 13 references to Britain and Ireland: and only 4 further afield.

Apart from the University of the Highlands and Islands of Scotland, institutions did not particularly serve their local regions, preferring far-flung locations for their entries. In this respect, this REF analysis was not hugely beneficial to this research. Cardiff University referenced only 2 Welsh locations, out of 33, i.e., only 6% of their entries. Similarly, the University of Edinburgh referenced only 2 Scottish out of 44 worldwide locations, that is, 4.5%. The universities of Newcastle, Durham and York all referenced locations in northern England (4/21, i.e. 19%; 9/79, i.e. 11%; and 3/40, i.e. 7.5%, respectively), but their references for locations elsewhere in the world far eclipsed these totals. Although there were 32 overall references for locations in northern England, as compared to 139 references for southern England, only one UK university referenced northern England's

Neolithic and Early Bronze Age (N/EBA) sites, that is, Newcastle University. It had two entries about Thornborough's henges within their Yorkshire landscape. However, the department also provided two entries for the Neolithic Raunds landscape of Northamptonshire and two of 22 references for the Neolithic and Early Bronze Age sites of southern England. There were 17 other entries for Neolithic locations elsewhere in Britain, compared with 169 Neolithic sites elsewhere in the world. Northern England was referenced by half of the UK universities; southern England by 22/29 institutions. Of those referencing northern England, only Durham, Chester, Newcastle and York had more than two articles or books on the subject (with 9, 4, 4 and 3, respectively). This perhaps demonstrates a continuing lack of interest in the region, from the REF perspective. However, as previously stated, the focus of the REF entries has been forced away from locally beneficial studies, towards globally significant results, so biasing the outcome.

This led to some universities avoiding UK entries almost completely, as compared to their other totals. Liverpool referenced 6 UK entries, 4 for Europe, and 31 for the rest of the world. Similarly, University College London referenced 12 entries for the UK, 28 for Europe and 93 for the rest of the world. Cambridge, Nottingham, Sheffield and Leicester favoured European entries over others (38/98, i.e. 39%; 19/36, i.e. 53%; 28/45, i.e. 62%; and 18/42, i.e. 43%; respectively).

Conversely, some universities were regionally-loyal. Queen's University Belfast cited 28 Irish sites out of 73 worldwide references, that is, 38%. Even more impressively, the University of the Highlands and Islands cited 18 Scottish locations in their journal or book titles, out of 29 worldwide references, that is 62%. Other institutions also favoured their regional locations. Glasgow referenced 1 British and 10 Scottish locations, with 9 European and 1 Worldwide entries. The University of Wales Trinity Saint David referenced 14 British locations, including 6 from Wales, with 4 European entries and 6 worldwide. The University of Chester had 1 Scottish, 1 European and 9 English entries.

5.3.3 ADS

English region	Total entries
M	295
NE	181
NW	21
SE	240
SW	520
Grand Total	1257

Table 34 – Results of the trawl through the Archaeology Data Service's database

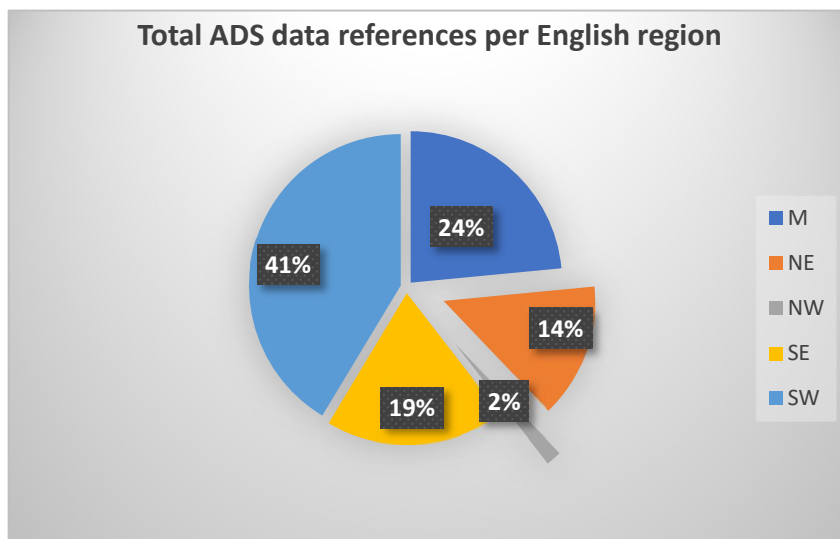


Figure 100 – Pie chart of the percentage of entries per English region

Of the 1257 ADS data entries (Table 34), only 21 of 1257 entries were for sites in north-west England, that is, 2% of the overall total. 14% (191/1257) entries pertained to north-east England; 295 out of 1257 (24%) related to central England; 19% (240/1257) referred to south-east England; and 520 out of 1257 (41%) of entries referenced sites in south-west England (Figure 100).

257 different agencies and 60 private individuals have provided data to ADS. Only 16 agencies had 10 or more entries (Table 35). Of these, three are national institutions, whereas the rest are companies whose archaeologists predominantly work in central or southern England.

Agency	Total entries
Ancient Monuments Laboratory Historic Buildings and Monuments Commission	38
Oxford Archaeological Unit	30
Wessex Archaeology	25
Ministry of Public Building and Works	24
Trust for Wessex Archaeology	23
Cambridge Archaeological Unit University of Cambridge	21
Cornwall Archaeological Unit	19
Ministry of Works	19
County Society Wiltshire	17
Bedfordshire County Council Archaeological Service	12
Oxford Archaeology (formerly OAU)	12
Canterbury Archaeological Trust	11
English Heritage Centre for Archaeology, Fort Cumberland	10
Museum of London Archaeology Service	10
Norfolk Archaeological Unit	10
Thames Valley Archaeological Services	10

Table 35 - Agencies providing reports to ADS, with 10 or more entries

As can be seen, only 202 of 1257 entries pertained to northern England; 295 to central England; and 760 to southern England (Table 34). This means that 60% of all entries referred to sites in southern England, that is, thirty times more than were referenced for the north-west of England. In fact, north-east and north-west England's totals combined only add up to 16% of the total entries, despite having 31% of the total land area of England. Agencies with more than ten entries were also principally based in central or southern England.

These two pieces of information can be interpreted in several ways:

- A) There are more Neolithic monuments in southern and central England, than in northern England;
- B) There have been more excavations in southern and central England, than in the north, either due to infrastructure and construction work; or thanks to an increased research interest in the central and southern regions of England;
- C) More articles, books and reports have been published about southern England, in particular, south-west England, followed by central and then south-east England;
- D) More data has been logged from southern, rather than northern, England;
- E) Perhaps, the archaeology units in southern England upload their results more frequently than those units in northern England.

These interpretations are, at face value, very basic. Certainly, according to PastScape, northern England has 919 N/EBA monuments, as compared to 1607 in south-western England and 354 in southern central England, which does partly support this bias. The results, however, do add to an overall picture of the current situation in England, which will be discussed further in the analysis and conclusion of this chapter and in Chapters 6 to 8.

5.3.4 COPAC

From the comprehensive list of 251 COPAC records, 176 entries were not relevant to this study; 45 references were directly relevant, in some form or another; and the title of thirty of the entries were loosely linked to British sites or regions (Table 36).

Relevant to British N/EBA monuments	Count of British site records
?	30
N	176
Y	45
Grand Total	251

Table 36 – COPAC records

Within these 45 references, certain sites or regions in England were specifically named. Nine of these are located within south-west England; seven in south-east England; six in central England; two within north-east England; and two in north-west England (Table 37).

English region	Total referenced
M	6
NE	2
NW	2
SE	7
SW	9

Table 37 – References with titles containing an English region within their titles

The titles of 75 of the 251 COPAC records linked them directly or indirectly to British sites or regions: 45/75 were linked through the topic covered in the title, and the other thirty are referenced below (Table 38).

Region	Count of British sites
?	29
Britain	1
Central England	5
Central Southern England	1
Channel Islands	1
N Ireland	1
NE England	2
NW England	2
Orkney	1
S England	1
Scotland	1
SE England	7
SW Britain	2
SW England	7
Y	15
Grand Total	75

Table 38 – COPAC records and their regional discussions

From the titles of these 45 records, 18 had no relevance to northern England's sites; 23 were of potential relevance; whereas the titles of 4 of the 45 records (and of 251 records,

Records pertaining to counties of northern England	Totals
?	23
N	18
Y	4
Cumbria	1
Isle of Man	1
Lincolnshire	1
Yorkshire	1
Grand Total	45

Table 39 – COPAC records pertaining to northern England

overall) showed a direct application to monuments in the counties of northern England, namely Cumbria, the Isle of Man, Lincolnshire and Yorkshire, each with one reference. Only one record specifically referenced a N/EBA monument, that is, Green How causewayed enclosure, in Cumbria (Table 39).

On the other hand, five sites specifically pertained to Wiltshire. These were over half of the total regional references for south-west England (nine in total). Seven records related to south-east England; five to the Midlands; one to central southern England and one to southern England (Table 40).

Specific Regional References	Total
Aberdeenshire	1
Cambridgeshire	
Flag Fen	1
Mill Lane, Sawston	1
Central southern England	1
Channel Islands	
Cumbria	
Green How causewayed enclosure	1
Devon	
Whitehorse Hill, Dartmoor	1
Dorset	
Hambleton Hill	1
East Anglia	1
Hampshire	
Ibsley Quarry, Ringwood	1
Itchen Farm, Winchester	1
Ireland Wales Cornwall	1
Isles of UK, including Wight, Man, Scilly etc.	1
Kent	
Cliffs End Farm, Isle of Thanet	1
Lincolnshire	1
Mendips	1
Middlesex	
Ashford Prison, Middlesex	1
Norfolk	
Arlington Way, Thetford	1
Seahenge	1
Northern Ireland	
Toomebridge	1
Orkney	
Bay of Firth, Mainland Orkney	1
Oxfordshire	
Mount Farm, Berinsfield, Dorchester-on-Thames	1
Peak District	1
Southern England	1
South-west Britain	1
Thames Valley	1
Wales	1
Wiltshire	5
Stonehenge Avebury Woodhenge Highbury Avenue, Salisbury	
Yorkshire	1

Table 40 – COPAC specific regional references per British and Irish region

	England	NE	NW	SE	SW	C	Scotland	NE	NW	SE	SW	C	Wales	NE	NW	SE	SW	C	Ireland	N Ireland	ROI
Portal Tombs - Wales, Cornwall and Ireland					X								X						X		
Irish Portal Tombs																			X		
Standing stones/ Megaliths - SW Britain					X												X				
Culture - Stonehenge to Baitic				X																	
Flag Fen landscape																					
Monument complex & landscape - Hambleton Hill, Dorset					X																
Pits/ Settlement/ Deposition - East Anglia				X																	
Flint Mines - S England				X	X																
Monuments/ Burial - Peak District						X															
Land use - S England				X	X																
Deposition - Thames Valley				X																	
Settlement - Ithen Farm, Hampshire				X																	
Archaeology - Mendips					X																
Landscape - Ashford, Middlesex						X															
Settlement - Thetford, Norfolk				X																	
Timber Monument - Seahenge				X																	
Change - Dorchester on Thames, Oxfordshire						X															
Woodhenge, Wiltshire					X																
Avebury, Wiltshire					X																
Other British Isles			X	X	X			X	X							X					
Causewayed enclosure - Green How, Cumbria			X																		
Ritual Complex - Nettleton & Rothwell, Lincolnshire		X																			
Caves/ Rock shelters - Yorkshire		X				X															
Settlement - Warren Field, Aberdeenshire								X													
Archaeology - South West Britain					X																
Sea/ Land - Channel Islands					X													X			
Pits - Salisbury, Wiltshire					X																
Settlement/ Burial - Ibsley Quarry, Hampshire				X																	
Wet/Dry interface - Cambridgeshire						X															
Burial - Dartmoor					X																
Mortuary & Ritual Activity - Isle of Thanet, Kent				X																	
Settlement, Toomebridge, Co. Antrim																				X	
Neolithic Orkney								X													
Stone Circles - Scotland							X														
Settlement - Orkney								X													
Prehistory - Wales													X								
TOTALS	0	2	2	11	14	5	1	4	1	0	0	0	2	0	1	0	2	0	2	2	1

Table 41 – Locations of and types of COPAC monument data per British and Irish region

Yet, when the titles of all relevant COPAC references were also studied, to ascertain the general topics covered within these entries, south-west England/ Britain gained even more references, as 14 entries could be linked to that region and 11 entries pertained directly or indirectly to south-east England (Table 41). The references for the rest of England remained unchanged. The titles of these entries also provided some interesting data. There were two entries for Irish portal tombs; one for Scottish stone circles; one for south-western Britain's standing stones; and 'monument' references for Hambledon Hill, the Peak District, Seahenge, Woodhenge, Avebury and Green How; i.e., three for south-west England, one for south-east England, one for central England and one for north-west England. North-eastern England's title entries pertained to Yorkshire caves and rock shelters and to a multi-period, ritual complex in the Central Lincolnshire Wolds. Lincolnshire is included as north-eastern England in this study, although geographically, it is on the fringe of the region.

5.3.5 BAR

The titles of all 641 British Archaeological Reports (BAR), from 1974 to 2018, were logged (Appendix A). The titles of 325 reports did not reference a particular location, so no further data could be gathered from their titles. As can be seen, central England and south-east England were the most frequently referenced regions, with 88/316 and 70/316 reports, respectively (Table 42). In fact, 254 BAR reports were written about the sites and/or landscapes and/or artefacts of central and southern England. This represents 80% of English place references. Only 62 out of 316 reports referenced northern England (Table 43), with a further 8 pertaining to northern Britain (Table 44).

England's BAR references	Total
Central Eastern England	1
Central England	88
Central N England	1
Central NE England	1
Central NW England	1
Central S England	2
Central SE England	3
E England	4
Ireland Wales SW England	1
Isle of Man	6
N England	10
N England S Scotland	1
NE England	34
NE England N Ireland	1
NE England SE Scotland	1
NW England	9
S Britain	10
S England	7
SE England	70
SW Britain	4
SW England	58
Wales SW England	3
Grand Total	316

Table 42 – England's British Archaeological Report locational references

<u>England</u>	<u>Total</u>
North	62
Central	101
South	153

Table 43 – Total BAR references per English region

Northern England region	Total No. of BAR Reports pertaining to the overall region of northern England
Central N England	1
Central NE England	1
Central NW England	1
Isle of Man	6
N England	10
N England S Scotland	1
NE England	34
NE England N Ireland	1
NE England SE Scotland	1
NW England	9
Grand Total	65

Table 44 – Total number of BAR reports pertaining to each region of Britain and Ireland

5.3.6 PPS

The Proceedings of the Prehistoric Society journal (PPS) published 1081 articles between 1935 and 2019, of which only 29 did not concentrate on a particular region or country. Of the 1052 articles, 659 pertained to Britain and Ireland (Figure 101).

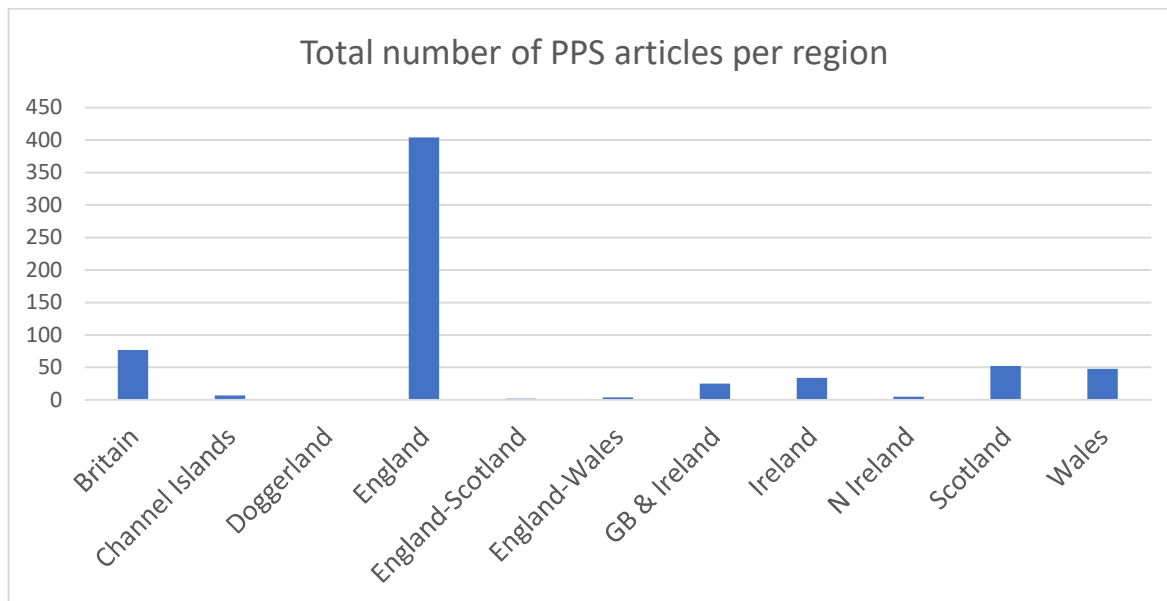


Figure 101 - Total number of PPS article references for Britain and Ireland

410 articles referenced England, or one of its counties or regions, within their title and of those, 386 reference a particular site or English region (Table 45).

English region	Total PPS journal articles referencing this region	%
M	55	14.25
NE	58	15.03
NW	30	7.77
SE	123	31.87
SW	120	31.09
Grand Total	386	

Table 45 - Totals and percentages of PPS articles per English region

As can be seen, whole articles on the prehistory of southern England far outweigh those for the rest of England, and of other British regions too, none of which gained more than 60 articles (Figure 102; Figure 101). In fact, both south-east and south-west England have had twice the number of articles than any other region.

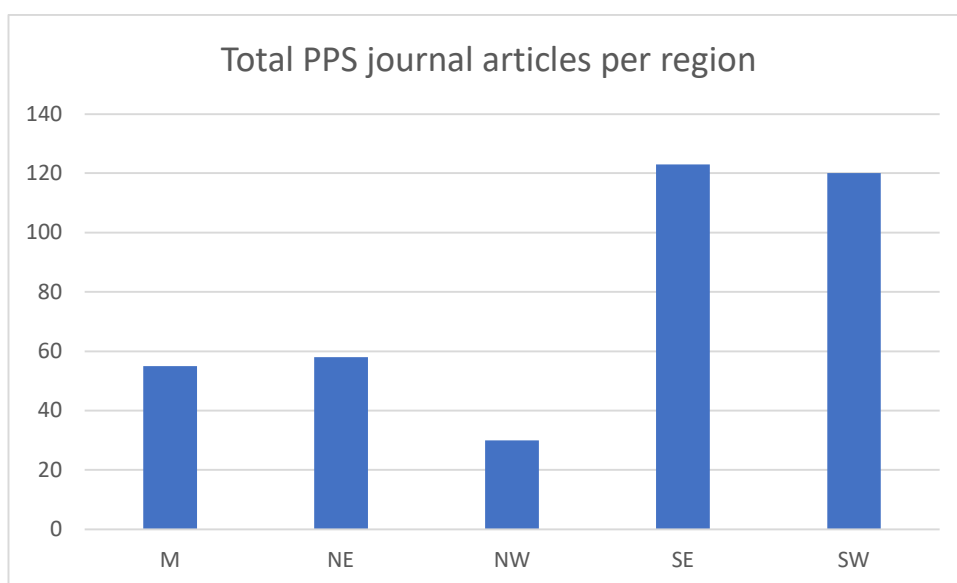


Figure 102 - Total PPS articles per region

This is most clearly shown in (Figure 103), where two-thirds of the ring is taken up with the totals for southern England.

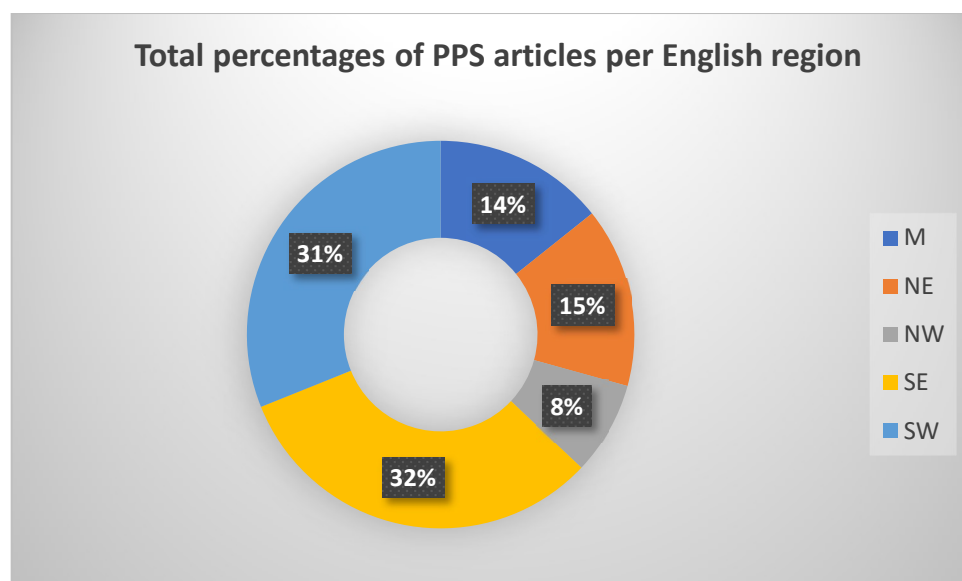


Figure 103 - Total percentage of PPS articles per English region

5.3.7 ANTIQUITY

Since its inception in 1927, the journal *Antiquity* has published approximately 13,080 articles, including 'front and back matter' for all issues (Deputy Editorial Manager, February 2019, pers.comm.). Of these, 1054 have had a place or site name in their title, which has triggered inclusion into this simple assessment, with the proviso that many more articles may have also focussed on British or Irish sites, but without reference to a specific location within their titles. Of the titles studied, 581/1054 reference locations or sites within England (not including the 42 English or 171 British totals). Of the English totals, 86% refer to central or southern England, with only 14% pertaining to locations in northern England (Table 46). This data is clearly demonstrated in Figure 104 & Figure 105.

<u>English Region</u>	<u>Total</u>	<u>%</u>
NE England	61	10.5%
NW England	20.5	3.5%
SE England	167	28.7%
SW England	217.5	37.4%
Central England	115	19.8%
<u>Overall Total</u>	581	

Table 46 – *Antiquity* totals and percentages per English region

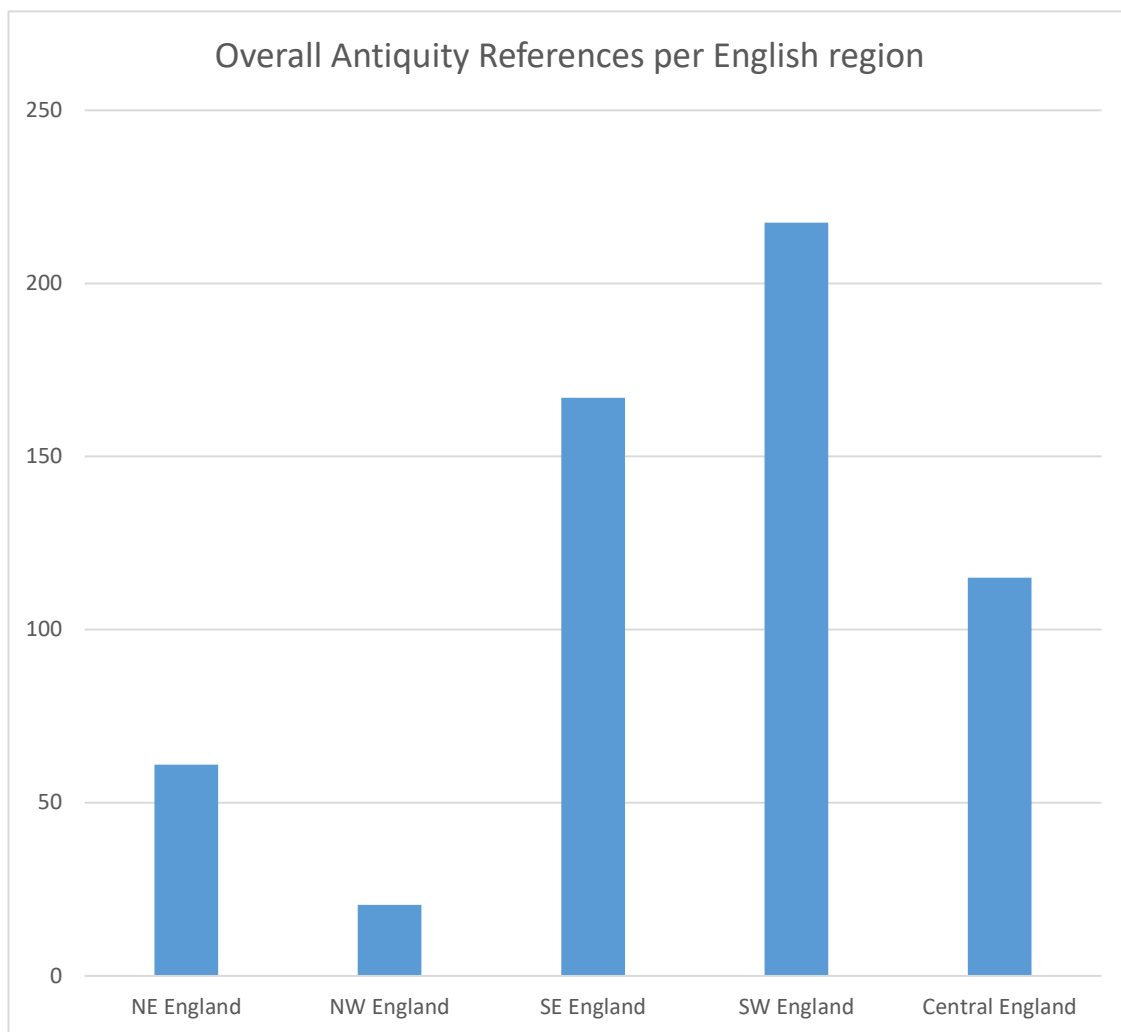


Figure 104 – Overall Antiquity references per English region

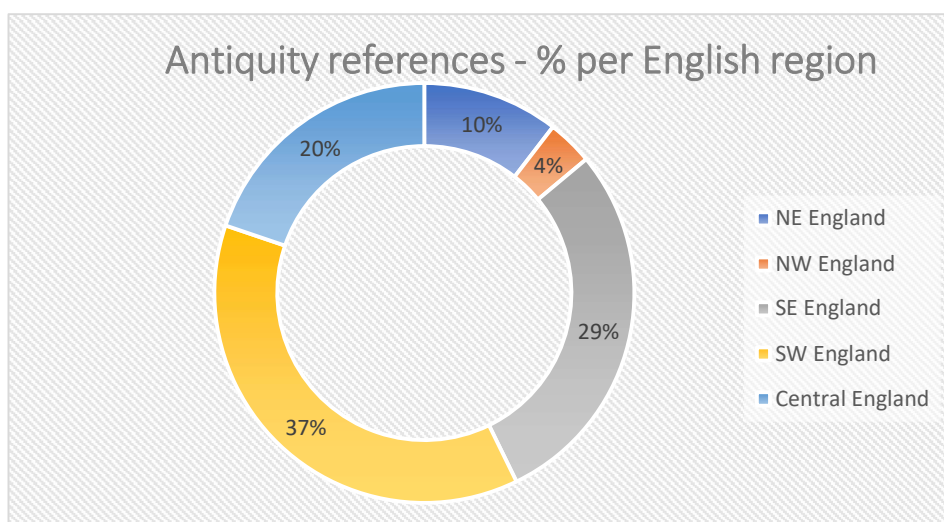


Figure 105 – Doughnut of the percentages of Antiquity references per English region

There were 876 references which pertained specifically to the countries of England, Scotland, Wales and Ireland (which includes the totals of Northern Ireland and the Republic

of Ireland). Of these, England was the most referenced, with 71% of references (620/876) (Table 47; Figure 106).

England	620
Scotland	111
Wales	64
Ireland	81
Countries' Total	876

Table 47 – Total Antiquity references per country

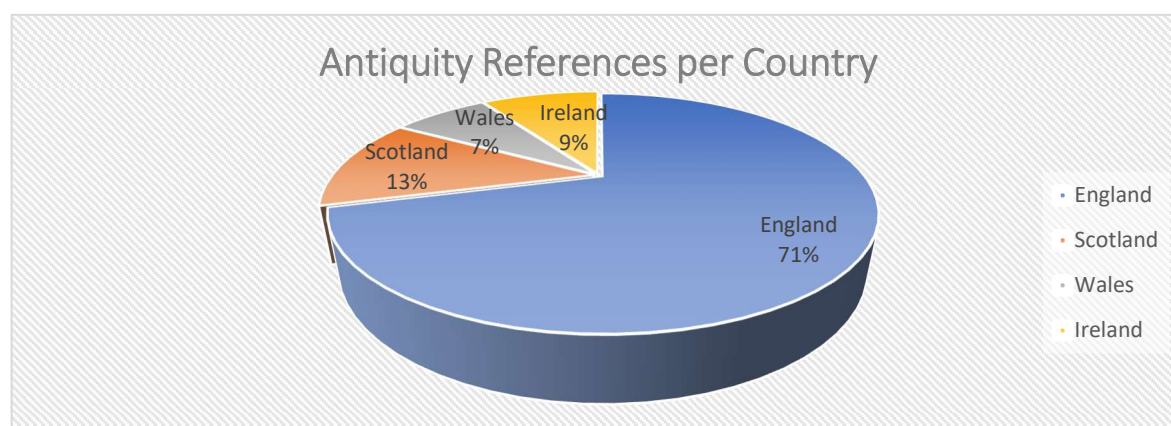


Figure 106 – Pie chart of the total Antiquity references per country

Comparison of Results

	Total Entries	Total N England N/EBA	Total Other England N/EBA	Total Other GB N/EBA
REF2014	1803	2	22	17
ADS	1257	202	1055	—
COPAC	251	4	27	14
PASTSCAPE	3866	1573	2293	—

Table 48 - Comparison of the results from REF2014, ADS, COPAC and Pastscape

As can be seen from a compilation of the available data, northern England's entries, whilst significant within Pastscape (41% of all entries) (Figure 107; Figure 111), fail to make an

impact within the other three dataset areas (Table 48). REF 2014 referenced northern England twice, compared with 22 entries for other English N/EBA sites (9%) (Figure 108). ADS referenced 202 entries in northern England, compared with 1055 other English entries for this period (19%) (Figure 109). COPAC referenced 4 entries for northern England, compared with 27 entries for elsewhere in England for the Neolithic and Early Bronze Age periods (15%) (Figure 110).

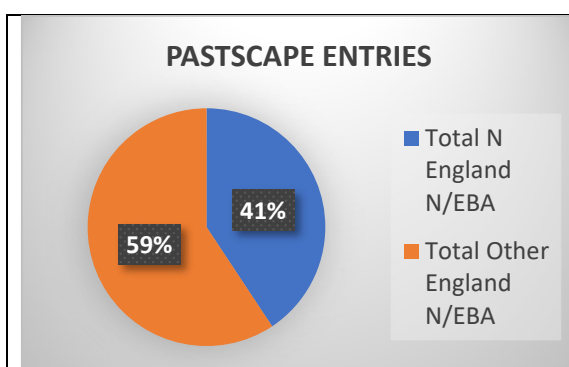


Figure 107 – Pie chart of the percentage of PastScape totals for northern England, as compared to the rest of England

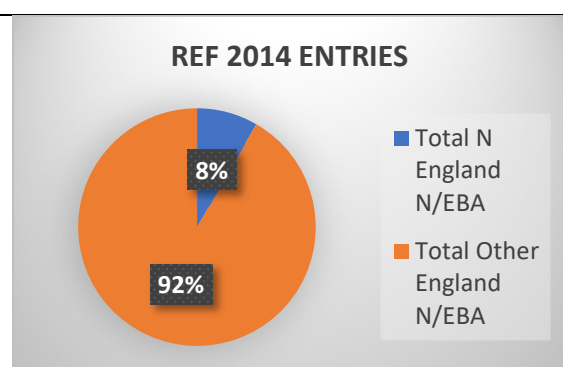


Figure 108 - Pie chart of the percentage of REF2014 totals for northern England, as compared to the rest of England

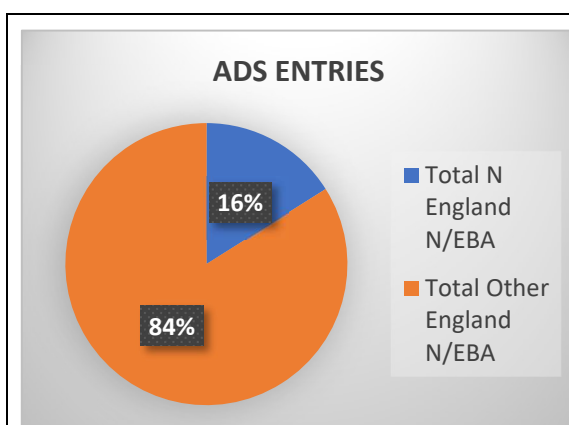


Figure 109 – Pie chart of the percentage of ADS entries for northern England, as compared to the rest of England

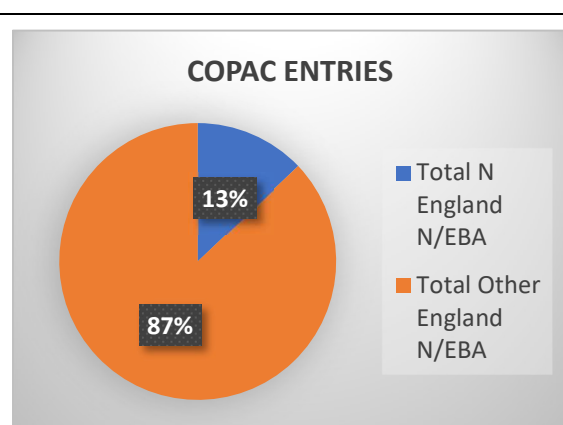


Figure 110 - Pie chart of the percentage of COPAC entries for northern England, as compared to the rest of England

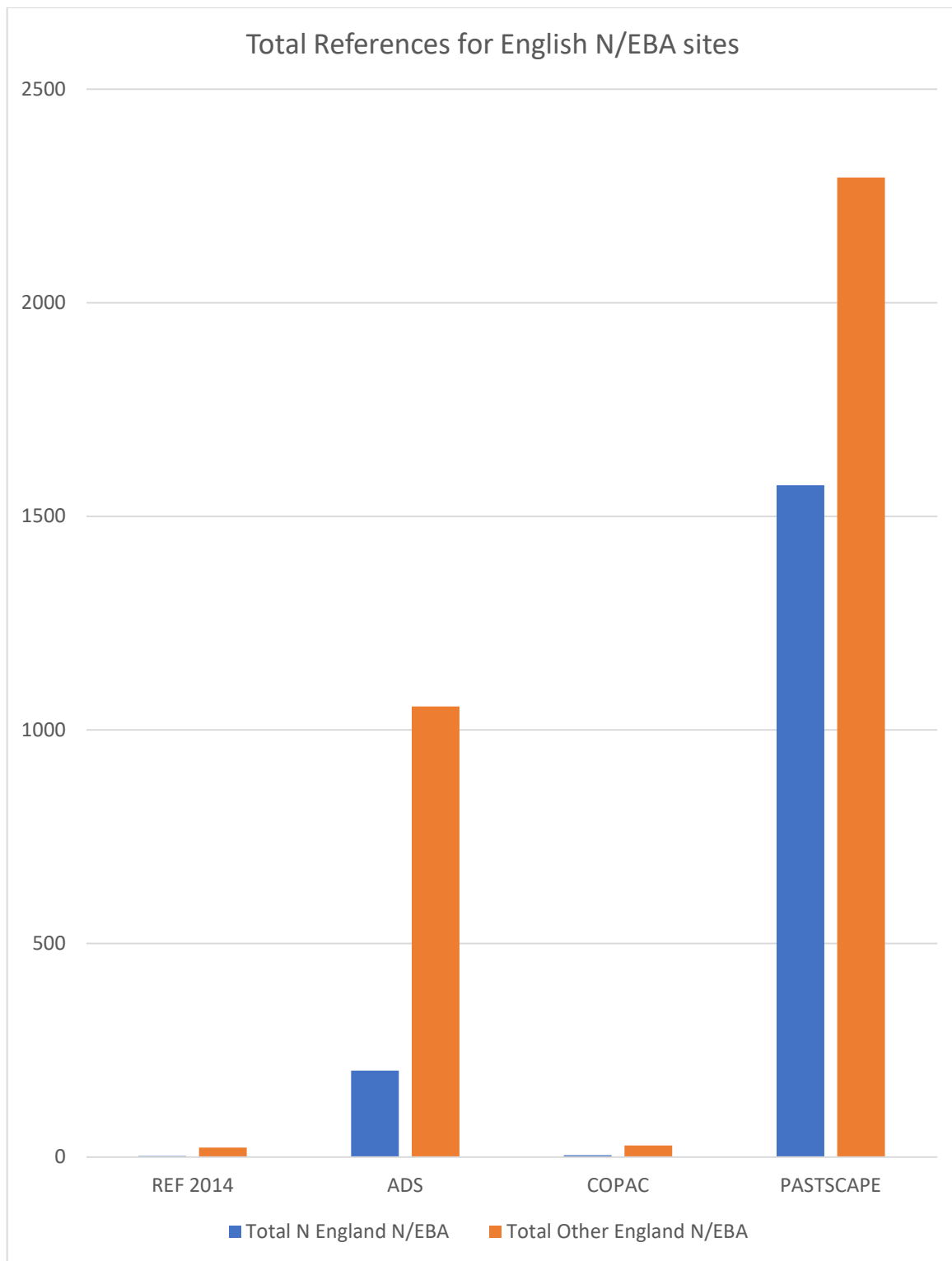


Figure 111 – Comparison of Pastscape monument totals versus the total references in REF2014, ADS and COPAC

Regarding PPS and Antiquity, once again, both reference the rest of England far more than the whole of northern England (Figure 112).

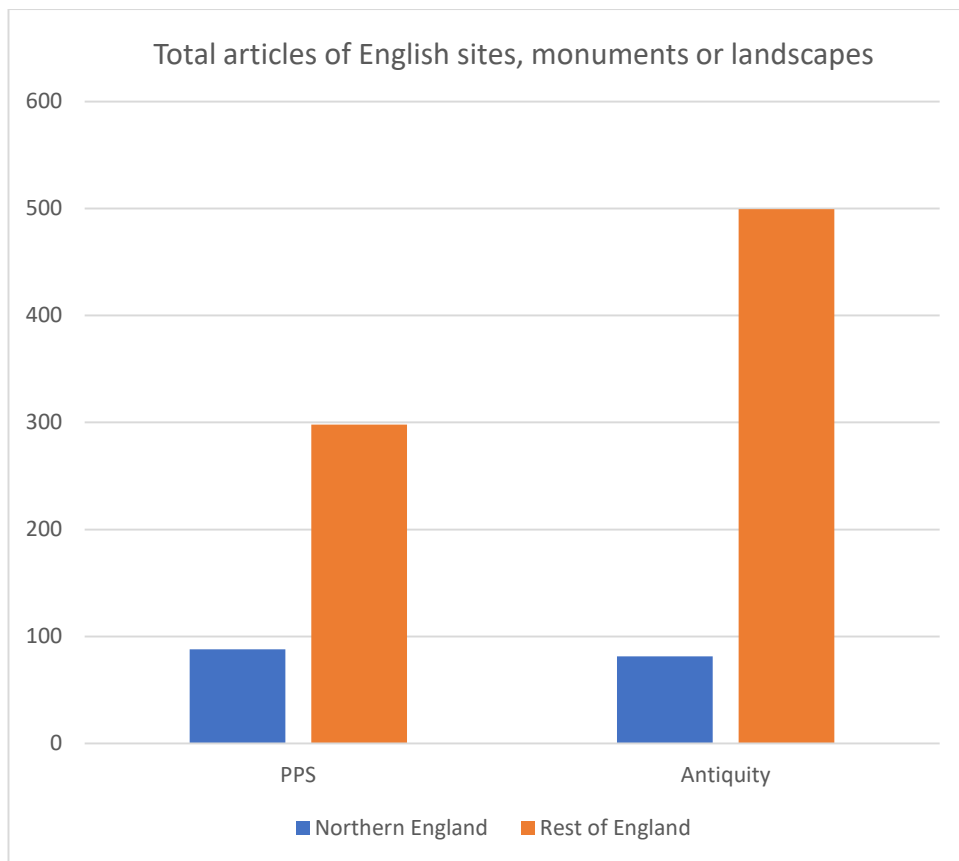


Figure 112 - Total articles about sites, monuments or landscapes in northern England, as compared with the rest of England

5.4 ANALYSIS OF THE RESULTS

5.4.1 PASTSCAPE

Pastscape was, initially, seen as an extremely useful resource for uncovering the total number of monuments within each county in England. The descriptions provided could be used to ascertain the last interest in the structure, as well as whether or not it is/was scheduled and/ or extant. However, issues soon arose due to the nature of such a vast resource of data and the inflexibility of the database. As acknowledged by Cooper and Green, this is normal as ‘many archaeological data are not just ‘fuzzy’, they are also fluid’ and never ‘black and white’ (2016, 281).

Names of monuments change over time, such as, Uley long barrow and Hetty Pegler’s Tump, both of which refer to the same Gloucestershire monument. Slight spelling differences meant that monuments might be missed, such as Hasting Hill or Hastings Hill, in Sunderland. The variability of entries was also very dependent on the person who had entered the data. Had they chosen to term a Neolithic round barrow simply a Barrow, or a

Mound, it might not have been included in this study. These simplifications were often regional but very frustrating. Had the whole site not crashed, I might have missed many of the poorly described structures, which is difficult, when you are trying to build up a comprehensive picture of the variety and location of N/EBA monuments throughout England. Hopefully, over the next 5 years, the NRHE to HER project will, if completed, be able to provide more accurate monument totals from all the HERs around the country.

Pastscape's database is extremely inconsistent, depending on the county or region in which the monuments are located. Examples occur particularly with the difficulties in monument grouping, especially rock art, burnt mound and cairn clusters. Pastscape 19763, on Barningham Moor, County Durham, for example, includes, 'a stone circle, three cairns, 44 carved rocks, a complex unenclosed settlement, a burnt mound, an enclosure and a boulder wall'. This means that total monument numbers per type per county could not be accurately ascertained. Moreover, this is problematic, as these structures have no particular link with one another, other than their location and may have been constructed hundreds, if not a thousand years apart. On the other hand, in Devon, numerous examples of triple stone rows, associated cairns and cairn circles all appear as one complex monument on the Ordnance Survey map (<https://digimap.edina.ac.uk/>), yet have multiple entries within the Pastscape database. With so many inconsistencies, how can the dataset therefore be trusted? The main issue is that one data entry system needs to be enacted for all regions, so that cross-comparison can be achieved. Even then, issues would arise from a more exact data entry process. Should each cairn in a cairnfield have a separate entry, or each barrow in a barrow cemetery? Each stone within a stone circle may have been erected years, or even generations apart. There is no evidence that earthen monuments around England were completed in one season, although often within a generational cycle of, say, 30 years. Mayburgh henge, for example, could not be broken up into its constituent parts, even though its sheer size and complexity suggests that it may have been constructed over a very long period. In Chapter 7, East Yorkshire's Neolithic and Bronze Age round and long barrows are discussed. When compiling the total number of monuments, Pastscape's database provided 578 prehistoric 'barrows', whereas when assessed, there were actually 1,127 separate structures (Chapter 7). Another example is in County Durham. Durham

County Council has 316 rock art panels within its Historic Environment Record database, whereas Pastscape only has 80 entries (24/9/2018).

The grouping of certain monument types in some regions and not others prevents comparison and complete analysis between regions. It would be useful, for example, to compare the total number of rock art panels and their exact locations with nearby individual Early Bronze Age cairns, for example. One might then be able to ascertain whether the two are directly linked. Viewshed analyses from the burial cairns might include or exclude these panels. They may have been created, however, at a completely different time. Specific analysis of these monuments, along with any other nearby structures, such as stone circles, long mounds, burnt mounds, causewayed enclosures, settlements or farming activity might also shed further light on this issue.

On the other hand, there are huge problems with separating individual structures within an overall monument. Hambledon Hillfort is labelled solely as a Fort. Yet, it has 6 separate entries of 4 causewayed enclosures and 2 long barrows. The Priddy Circles, which comprise 4 aligned henges, have 5 Pastscape entries.

A main issue with Pastscape is the variability of the entries, based on the visitor, viewer or excavator's commentary at the time of seeing the monument. If they offered various possible explanations for, for example, a mound, then the site was referenced several times and came up under various searches. If very little speculation was made, and the monument was labelled Prehistoric, it was missed through the more specific searches made of the data. If a potential standing stone, holed stone or stone row was labelled as either Neolithic or Bronze Age and/or given a specific name, rather than just 'Stone', then they could be found and referenced within the data. It is not clear how many other structures were missed due to the way in which they were labelled within the Pastscape database. As a result of the computer problems, mentioned above, Pastscape provided 2 CSVs, one for Neolithic entries and one for its Bronze Age entries. This hugely aided the search for a truly comprehensive dataset, at least of the Pastscape information.

It was a relief that the scheduling information did not seem to favour any particular region of England. In some areas, monuments along major routeways were favoured, whereas in

other cases, the scheduled monuments were away from centres of population, within hillsapes. Monument type clearly affected its location and preservation. From these basemaps and accompanying statistics, it is unclear as to whether more impressive, upstanding monuments were favoured for scheduling over less monumental structures.

Nevertheless, PastScape was limited as a database. Scheduling data should have been listed within the 'More Information and Sources' section, along with the date. However, the data was sometimes within the general 'Description', with no reference elsewhere (such as, Litton Cheney stone circle, Dorset). This provided further time-wasting. Another example is Castlehowe Scar stone circle in Cumbria (PastScape 11775). In this case, there was a scheduling reference:

(4) General reference

English Heritage SAM Amendment 21.8.92.

However, the data did not state if the monument is still scheduled or now de-scheduled, as with two Broomrigg stone circles, B2 & N, also in Cumbria (PastScape 12390 & 1090755, respectively). Similar issues occurred with Mudbeckside (Arkle Beck) and Yockenthwaite stone circles, both in North Yorkshire, as well as Meayll stone circle on the Isle of Man.

In other cases, there seemed to be a scheduling of the general area around a monument. However, individual structures within the area were not clearly identified as scheduled, such as at Crickley Hillfort, causewayed enclosure, bank barrow and stone circle. In a similar way, one of Stanbury Hill's rock art panels (PastScape 619055) had no scheduling data, despite the fact that all other panels on the Bingley hilltop in West Yorkshire, are protected.

Yet, this issue could have been easily rectified. Durham County Council's HER data entries have an 'R' number, if the site is also scheduled, so they are much easier to identify. This addition to the top of each entry page within PastScape would allow the user to know whether or not a monument is protected, which would be useful for planning and investigatory applications.

PastScape is clearly the ongoing product of the last fifty years, or so, of data gathering and entry. It would be impossible to maintain an exactness in its data, with 420,000 entries,

entered and amended by teams of people all over the country. Yet, there is a process, currently underway, to combine all of the current NHLE (National Heritage List for England) and HER (Historic Environment Record) data. This costly procedure will eventually create more accurate and informative entries. It will mean that ultimately, there will be the possibility of completing more reliable cross-comparisons across counties or regions.

5.4.2 REF2014

This investigation revealed the wide interests in worldwide archaeology demonstrated by the 29 universities who provided data for the REF2014. As REF2014 ranks universities globally, based on these results, it is clear that these aforementioned universities were keen to exhibit European or Worldwide archaeological investigations and their interest in local or regional UK sites and landscapes was therefore marginalised. However, the lack of references to northern England's sites and landscapes of all periods was still noticeable, as universities attempted to present work from the more universally-known landscapes of southern England, to attempt to gain the highest possible rating for their entries. Certainly, many institutions barely referenced UK sites, compared to the amount of references they provided for global locations. As Barclay & Brophy emphasise, the role of the UK Research Excellence Framework (REF) encourages 'over-claiming research significance and impact within academic archaeology' (2020, 4). Certain areas and projects might be overstated, to 'demonstrate the 'reach', 'relevance' and 'impact' of externally funded, overhead-bearing research, particularly to funding bodies and mindful of the REF process' (Ibid., 14). UK academics are under increased pressure to produce 'transformational', 'gold standard' academic work for the REF process, of international significance. This may be having 'a deleterious effect on academic writing and, particularly, on the way that the results of research are disseminated beyond the academy' (Ibid., 24).

5.4.3 ADS

ADS is a repository for the safekeeping of unpublished, or grey, literature. Although the above results clearly favour southern England, there is no way of knowing if the uploaded data on the ADS site is comprehensive or partial. Nor is it apparent as to whether there are regions where its adoption is considered best practice as a data storage tool. Other areas may, perhaps, have their own independent repositories, such as storage by their local county council.

However, from the uploaded data, there is a definite dearth of investigations into the N/EBA monuments, sites and landscapes of northern England. This is likely to be due to the lack of improvement in northern infrastructure networks, as well as less housing and planning applications for large-scale projects.

5.4.4 COPAC

Once again, this research feels incomplete. As with ADS, it is unclear what percentage of books, articles or reports came under the search criteria used above, despite access to 90 specialist libraries. Perhaps the process of searching narrowed the criteria too greatly. The way the data was originally entered may also have affected these outcomes. Themes or key words may have been omitted. Certainly, the 75 relevant result entries from my search must represent a tiny percentage of the available material, which pertains to Neolithic monuments in England, over the last 17 years. Further work could be done on different periods in future.

5.4.5 BAR REPORTS

Of the 316 England-focussed British Archaeological Reports, British Series, 80% focussed their attention on southern England, with only 65/316 reports about northern England. This uneven representation of northern England within this series demonstrates a wider issue of a lack of research into the counties of northern England, which needs to be addressed.

5.4.6 PROCEEDINGS OF THE PREHISTORIC SOCIETY

PPS' journal provided 1081 articles, of which over half (593/1081) offered research on the sites and landscapes of Britain. It is a shame, therefore, that only 23% of the articles about England actually wrote about northern England's prehistoric past. Of the top 10 named site locations, the region of south-west England was referenced in over half of the articles, with south-eastern England gaining a fifth. However, Star Carr Mesolithic site in North Yorkshire had the most articles (8/1081), with Wessex, Stonehenge and Shaugh Moor, Devon gaining 6/1081, 5/1081 and 5/1081, respectively.

5.4.7 ANTIQUITY

Like the other mediums studied, *Antiquity* has demonstrated that over the last 90 years, it has provided more articles on the sites and landscapes in southern England, rather than

the north. Whether this is due to the number of articles being submitted, or to do with an unintended bias, is unclear. However, 'Stonehenge always was *Antiquity's cause favorisée*', featuring regularly in its pages, since the first volume (Scarre 2014, 645, 647). Stonehenge's name was present in 54 titles, almost as many as in the whole of northern England and 2.5 times more than those for north-west England (including the Isle of Man). Surprisingly, the other locations which were frequently referred to within the assessment of general books pertaining to the prehistory of Britain, were not often individually referenced within *Antiquity*. Orkney only gained 10 references, Anglesey 6 mentions and Wessex 8 entries, overall. The overwhelming focus on Stonehenge therefore came as a surprise. 54 references to one site seems excessive and works out as over one every two years. From a different perspective, north-western England was not referenced at all between 1936 and 1969. Barclay and Brophy discuss the mythos of Stonehenge and its surrounding archaeological landscape which, they believe remains central to the thinking of many archaeologists (2020, 23), and the evidence above appears to add further weight to this argument.

Regarding both PPS and *Antiquity*, even though PPS accepted slightly more articles about the northern England, it is clear that both journals could consciously try to improve their coverage of regions beyond the south of England.

5.5 OVERALL DISCUSSION AND CONCLUSION

These analyses have highlighted the in-built potentials and biases of any dataset. These sources can be drawn upon to provide information about the Neolithic and Early Bronze Age sites, monuments and landscapes of northern England. However, due to search engine issues, the variety of entry personnel and the age of the data, the information gathered may be an incomplete picture. As the search engines within the ADS, COPAC and PASTSCAPE websites were difficult to negotiate and yet do not offer this caveat within their website, this partial view may be accepted as reality.

The results for the six investigations, REF2014, ADS, COPAC, BAR, PPS and *Antiquity*, demonstrate a valid, current-day disparity in the level and intensity of archaeological research into the N/EBA monuments and landscapes of northern England, as compared with those elsewhere in Britain and further afield. This is reinforced with the recent EngLald

project which covers the next period in British prehistory/history (1500BC-AD1068) (<https://englaid.wordpress.com>). The redder the regional map colouring, the more recorded excavations have occurred. It is only in the west, the north of England and Devon/Cornwall that a paucity of excavations have occurred demonstrating that our current-day understanding of these regions lacks the up-to-date dating and environmental data analysis, which are altering the picture elsewhere (Figure 113). John Hodgson and Mark Brennand reinforced this for the Neolithic and Bronze Age periods by stating that a 'dearth of extensive modern excavation and analysis' and 'little secure dating evidence' has effectively left the archaeology of north-west England out of current debates (2006, 41). Northern England, as well as other neglected regions could and maybe should be the focus of upcoming archaeological research projects, to fill in knowledge gaps.

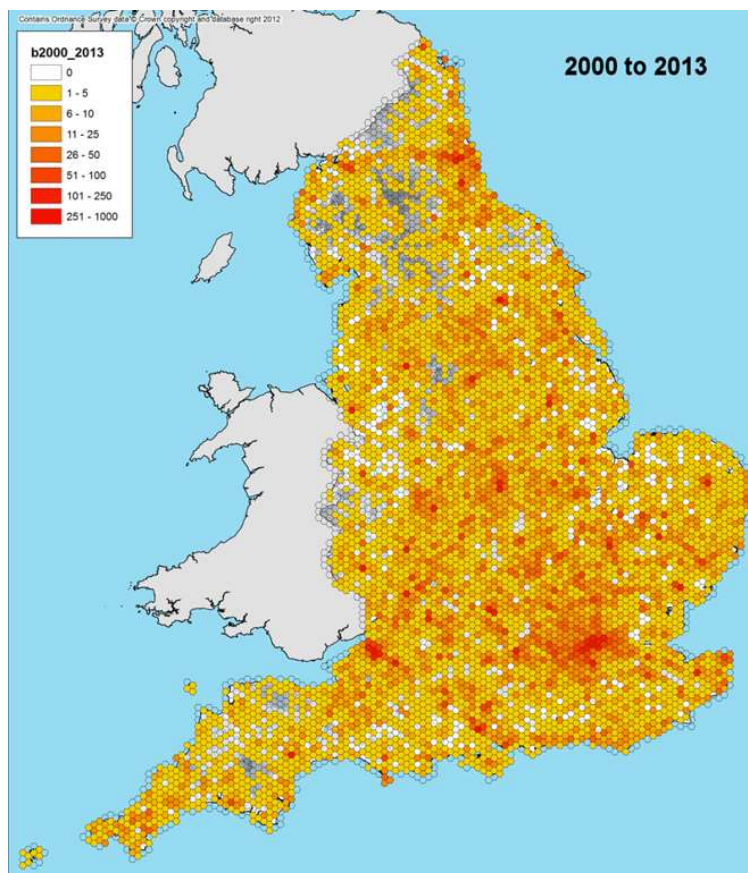


Figure 113 - Recorded excavations for the period 2000-2013, for the period 1500BC-AD1086 (<https://englaid.wordpress.com>)

These analyses competed in this chapter therefore provide only a superficial picture of the current situation of archaeological research in Britain and more specifically, England. International work, even by the REF2014 standards, has more weight than local studies.

The results from grey literature and research-based archaeology provide evidence of the broader situation of archaeological fieldwork and research in England over the past few years. Antiquity, however, is clearly proud of its 'cause favorisée', Stonehenge. Nevertheless, over 50 articles in 90 years does seem excessive, a bias and a promotion of one site over and above the potential endorsement of so many other monuments and landscapes. Gordon Barclay and Kenny Brophy consider this the 'omphalos mythos', the promotion of projects round Stonehenge, with generous state funding. This aggrandises 'the status of this particular core area, by extending its influence throughout the whole of 'Britain'' (2020, 22-23).

The results from this analysis are partial and work may have been completed in local or regional spheres, which may not have been represented as part of these six analyses. It is true that while the results do demonstrate neglect, the reasons for this lack of attention are not explained. Yet, PastScape's dataset, which might have helped us to understand the complete picture of the numbers and types of monuments throughout Britain also failed to provide a full and comprehensive picture of the situation.

This chapter has queried how and why the Neolithic and Earlier Bronze Age monuments of northern England have been marginalised in recent national discussions through an evaluation of current national research and publications. The data has revealed N/EBA monument numbers throughout England. Despite the importance of the monuments in northern England, with 41% of England's total monuments (Figure 107), their site and landscapes are not receiving the attention they deserve (Figure 111; Figure 112) and the issue of the 'Wessex-centred perspective' continues to dominate Britain's prehistory (Barclay & Brophy 2020, 2). The preceding set of three chapters have researched the past, at the origins of this situation and how it has developed, to answer the overall thesis questions.

The following two chapters have been completed to produce an analysis of the specific monuments and landscapes of northern England, to attempt to better understand these issues, whilst also considering the survival of earthen monuments within intensively cultivated landscapes. Chapters 6 and 7 are a pair of chapters, containing case studies, about the Yorkshire Wolds in East Yorkshire. Chapter 6 will consider books written about

British barrows over the last 80 years, with reference to East Yorkshire. Chapter 7 will then analyse the Neolithic and Bronze Age landscape of East Yorkshire and the Yorkshire Wolds, to ascertain how a detailed, in-depth desk-based assessment of available data can provide unexpected results.

6 CASE STUDY 1: BARROWS OF THE YORKSHIRE WOLDS IN 20TH CENTURY PUBLICATIONS

This chapter further evaluates current research and publications from a national perspective through a short literature review of general introductory accounts of Neolithic and Bronze Age barrows in England or Britain. The intention is to assess levels of interest in the barrows of northern England over the last 60 years, from an Index assessment of these books.

6.1 INTRODUCTION

Chapters 2 and 3 discussed the efforts taken by early antiquarians to visit and log England's prehistoric monuments, as well as the barriers which prevented this. Through Kinnes' work (1979, 1992), the interest in non-megalithic monuments throughout England was also discussed (Chapter 4). This chapter was therefore conceived as an opportunity to consider one region of northern England more closely. The non-megalithic Neolithic and Early Bronze Age (N/EBA) monuments of the Yorkshire Wolds were chosen, as they were mentioned so favourably by Kinnes (1979 and 1992) and yet their names, apart from Duggleby Howe, were mainly unknown to me, despite years of studying the region. This case study, therefore, focussed on references to these monuments, within national syntheses on barrows. The following chapter will provide a close assessment of each Neolithic and Bronze Age barrow, from legacy and Pastscape data.

6.2 GEOGRAPHICAL AND CULTURAL INTRODUCTION

The Yorkshire Wolds is located in north-east England, to the south-east of York, south-west of Scarborough and north-west of Hull (Figure 114). It is now a managed agricultural landscape of chalk downs, with numerous valleys and scattered villages. With the sea to the east and the many accessible bays along the coastline, the region has riverine access via the Gypsy Race, Derwent and Hull rivers. Within this landscape are numerous Neolithic round and long barrows and Bronze Age barrows. There are a further eleven long barrows in the Great Wold Valley just to the north, which have also been included in this discussion (Figure 115).

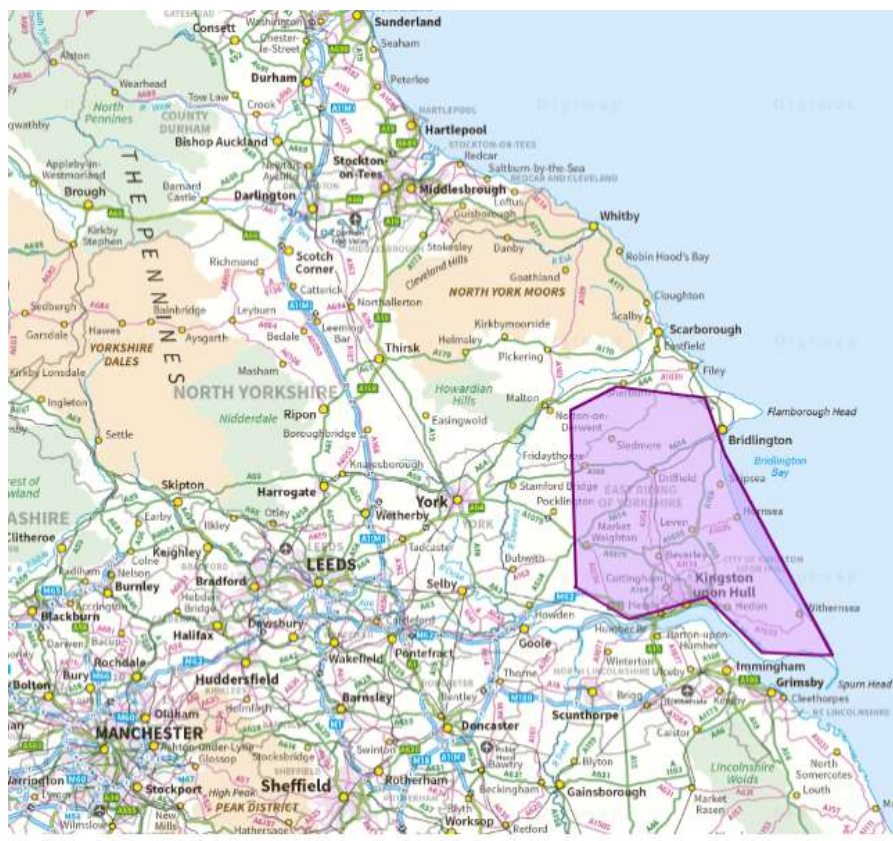


Figure 114 - The location of the Yorkshire Wolds in England

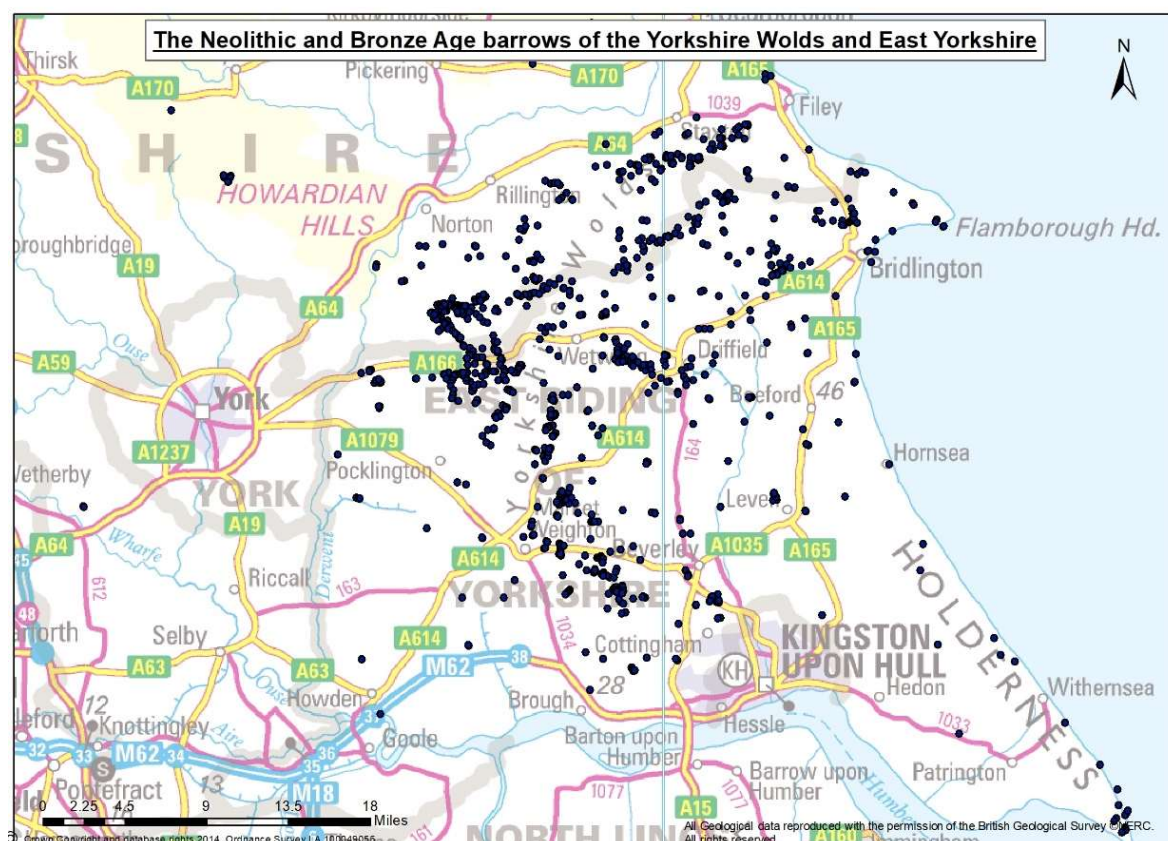


Figure 115 - All barrows, extant and lost, in East Yorkshire (and Gypsy Race Valley, North Yorkshire)

The Pastscape data, from Chapter 5, provided the following set of results for East Yorkshire's Neolithic monuments (Table 49).

County	Total Neolithic monuments
East Yorkshire	69
Barrow	1
Cursus	6
Hengiform enclosure	14
Long barrow	20
Mortuary enclosure	2
Neolithic Round Barrows/Ring-ditches	22
Oval barrow	2
Rock art	1
Standing stone	1
Grand Total	69

Table 49 – Neolithic monument totals for East Yorkshire

Added to this, Pastscape's totals demonstrated the following numbers of Bronze Age barrows, as noted in a previous study (Table 50).

TOP 10 COUNTIES in ENGLAND	Causewayed enclosure / ring ditch	Cursus	Barrow	Chambered tomb	Henge	Rock carving	Standing stone	Stone circle	Timber circle	Total -including barrows
Wiltshire	9	4	2733	13	26	1	12	13	10	2821
North Yorkshire	1	3	1570	3	17	126	70	21	0	1811
Dorset	7	3	1678	6	17	3	12	10	5	1741
Cornwall	2	0	989	48	6	37	130	47	0	1259
Hampshire	1	1	1032	0	1	0	1	0	3	1039
Devon	5	1	742	15	5	4	140	44	0	956
Oxfordshire	13	15	691	5	26	0	12	4	2	768
Gloucestershire	9	4	598	34	8	3	20	2	0	678
Lincolnshire	2	1	662	0	11	0	1	0	1	678
East Riding Yorkshire	0	6	572	1	16	1	1	0	1	598

Table 50 - Results of a Pastscape Search, July 2015 (E Watson, MA Thesis, 2016)

The Neolithic and Early Bronze Age (N/EBA) monuments of the Yorkshire Wolds commanded huge interest and respect from antiquarians. In their heyday, in the later nineteenth century, the Wolds' Neolithic round and long mounds, and Early Bronze Age barrows, in particular, were visited, excavated and recorded, and their results published and nationally appreciated (Greenwell 1877, Mortimer 1905). Yet, today, these monuments have been almost forgotten. From my previous research, the Neolithic and Early Bronze Age monuments of the region were poorly referenced in national syntheses on Great Britain, despite the monument totals mentioned above (Watson 2016). While this may be improving (see below), the region has also been left out of recent discussions about these particular monument types (for example, Whittle, Healy & Bayliss 2011) and still fails to be the focus of attention in recent work (such as, Cummings 2017, 123, 162, 193), where individual sites and recent radiocarbon dates are referenced but the overall monumentality of the landscape is not acknowledged; or Thomas (2013) where the whole of north-east England is only referenced 78 times out of 1631 possible references within his book (Watson 2016, MA Dissertation).

This chapter therefore provides a comparison of data from key books on British Neolithic and Bronze Age barrows, with regards to the monuments of northern England and those elsewhere, through a Literature Review of the available data. References to Neolithic and Bronze Age barrows were analysed, using books on the subject of barrows and ancient monuments written over a period of 60 years.

6.3 METHODOLOGY

The following authors and their books were used for this review:

V. Gordon Childe (1940) *Prehistoric Communities of the British Isles*

Glyn E Daniel (1950) *The Prehistoric Chamber Tombs of England and Wales*

Leslie Grinsell (1953, 1975) *The Ancient Burial Mounds of England*

Paul Ashbee (1960) *The Bronze Age Round Barrow in Britain*

Paul Ashbee (1970, 1984, 2nd edition) *The Earthen Long Barrow in Britain*

Frances Lynch (1997) *Megalithic Tombs and Long Barrows in Britain*

Ann Woodward (2000) *British Barrows. A Matter of Life and Death.*

To begin, the Indexes of these books were analysed. The Indexes were chosen, as they would be ‘an obvious starting point’ (Insoll 2004, 2) of reference for most archaeologists, if searching for a region or monument of interest. The number of pages referenced and total sites per county within England were logged from the Index of each book, to gain an overview of the main interest of the author and the on-site locations of images and figures were also noted (Appendix B). If the site of one image was referenced but not the site of another image on the same page, neither were referenced. Then, each author’s own introductory statements were documented, to provide a reasonable basis for data analysis and for this chapter’s later investigation and discussion.

6.4 RESULTS

6.4.1 V. GORDON CHILDE (1940) PREHISTORIC COMMUNITIES OF THE BRITISH ISLES

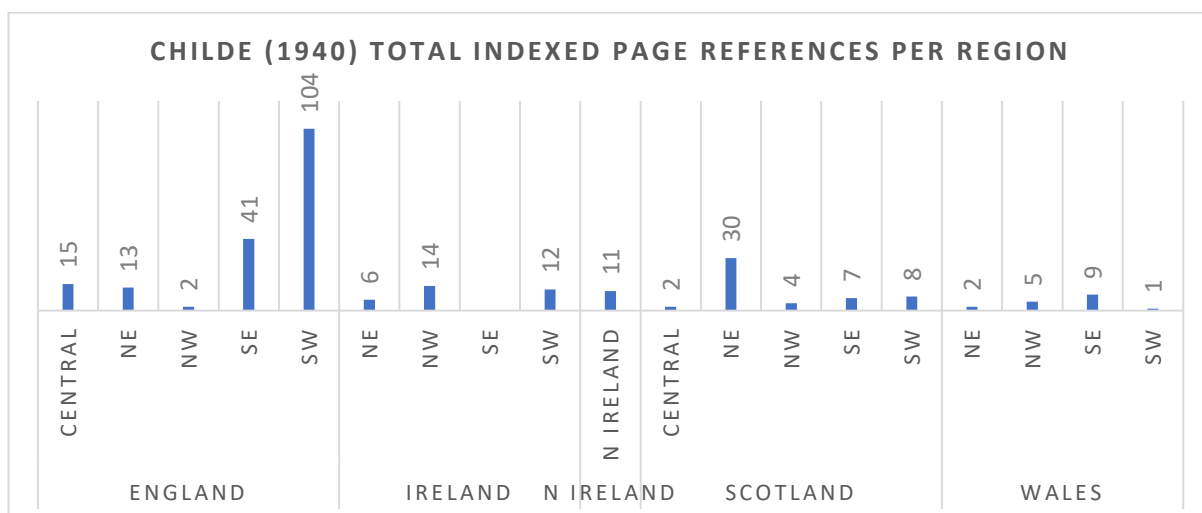


Figure 116 – Childe (1940) Total indexed page references per region

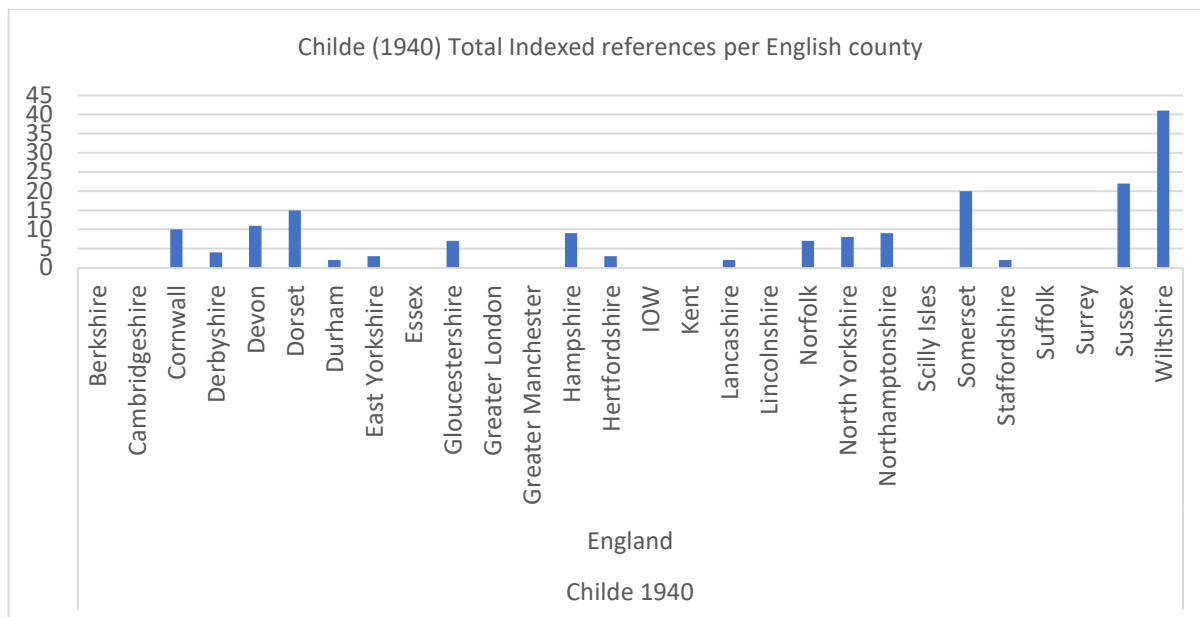


Figure 117 - Childe (1940) Total indexed page references per English county

V. Gordon Childe's 1940 book, *Prehistoric Communities of the British Isles* indexed results demonstrate a focus on the N/EBA monuments of England, with 175/286 references (Figure 116). Of these, south-western England had the highest total with 104 out of 175 specific county or monument references within the Index (1940, 268-274). Of those, Wiltshire's monuments were referenced 41 times; Sussex 22 and Somerset 20 times, respectively (Figure 117). East Yorkshire was referenced three times, on one page only and there were two pages with details about North Yorkshire's monuments on them, which amounted to eight references overall for the county.

Of the Neolithic or Bronze Age site plans (Figures, Plates or Illustrations) within the book's Neolithic and Bronze Age chapters, III to VIII, south-west England's counties once again had by far the most references (Figure 118), with Wiltshire, followed by Somerset as the most referenced counties. Orkney, in north-east Scotland, had the third-highest number of figures, images or illustrations (Figure 119).

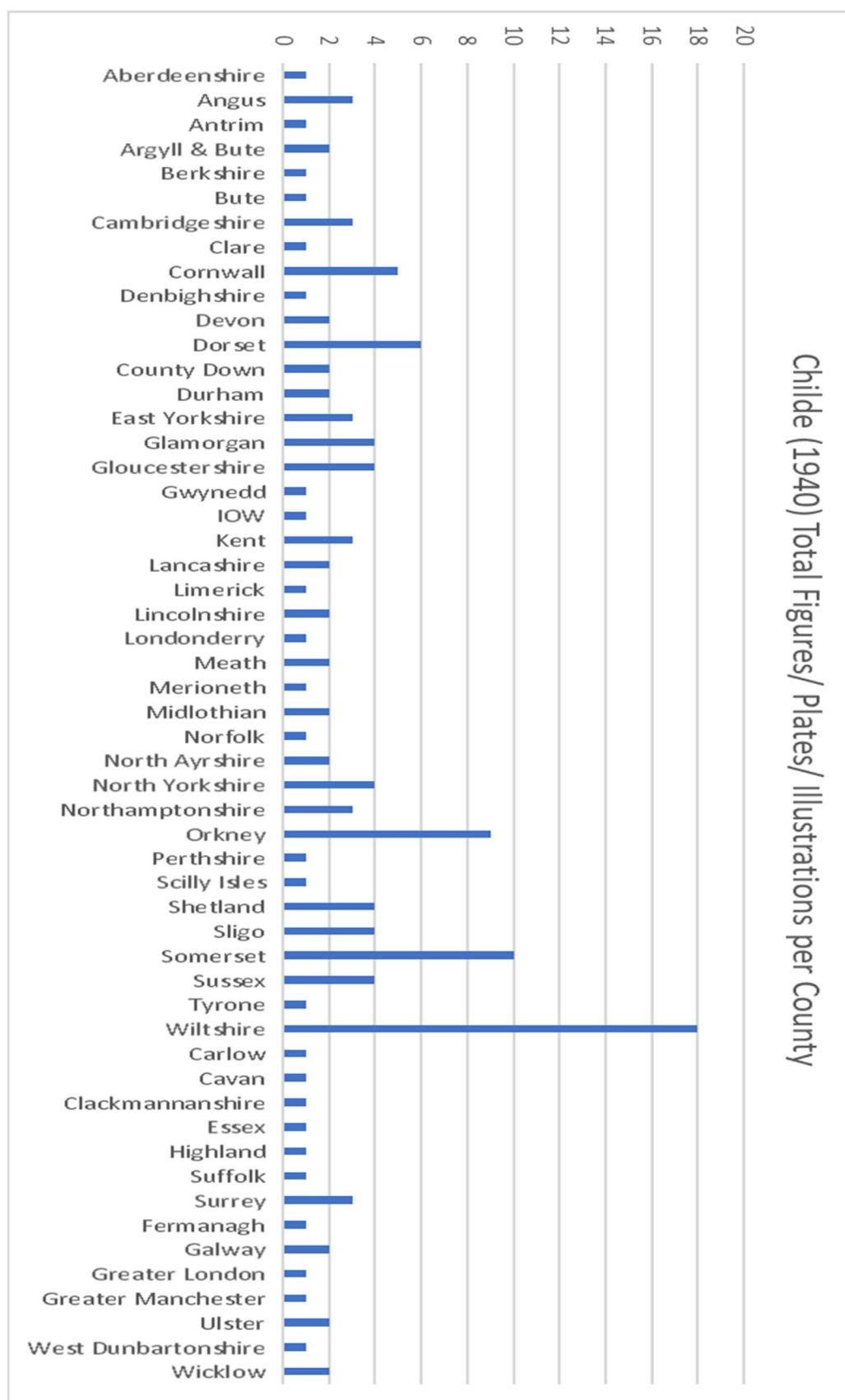


Figure 118 – Childe (1940) Total Figures, Plates and Illustrations per county

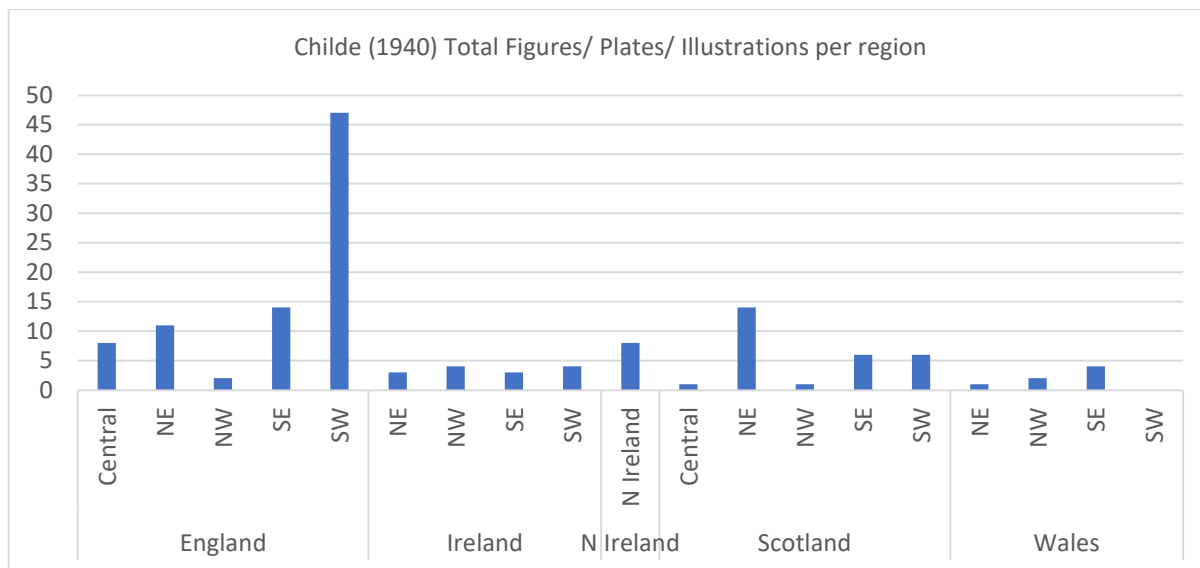


Figure 119 - Childe (1940) Total Figures, Plates and Illustrations per region and country

6.4.2 GLYN DANIEL (1950) THE PREHISTORIC CHAMBER TOMBS OF ENGLAND AND WALES

Glyn Daniel's book, *'Prehistoric Chamber Tombs of England and Wales'*, published in 1950, held 1244 references to sites or counties within the book's Index (Figure 120) (1950, 251-256). Of these, the majority of references pertained to English locations (722/1244) with 461/1244 mentions for sites in Wales. Scotland and Ireland were barely mentioned, as per the title. The English references were weighted towards south-west England, with 254/722 pertaining to sites in Gloucestershire and 100 Wiltshire references. North and East Yorkshire failed to receive any references within Daniel's Index (Figure 121).

Of the Neolithic or Bronze Age site plans (Figures, Plates or Illustrations) within the book, south-west England's counties had the most references (45/114) (Figure 122). Yet, of the individual county totals, Anglesey, followed by Pembrokeshire and then Gloucestershire were the most referenced, with 20, 18 and 15 references, respectively (Figure 123). None of the monuments in North or East Yorkshire were included in Daniel's book.

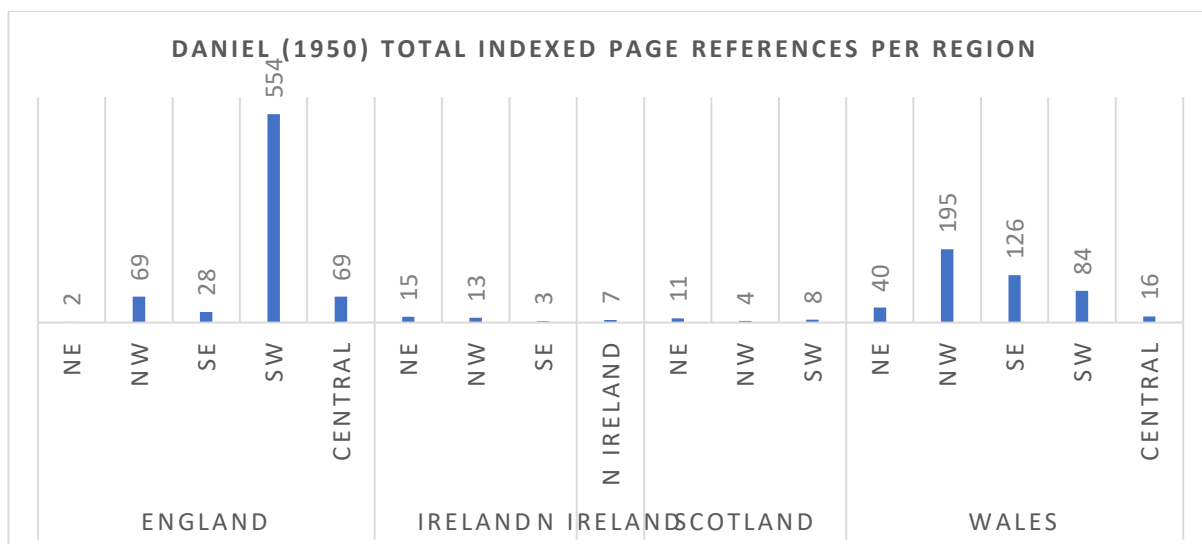


Figure 120 - Daniel (1950) Total indexed page references per region

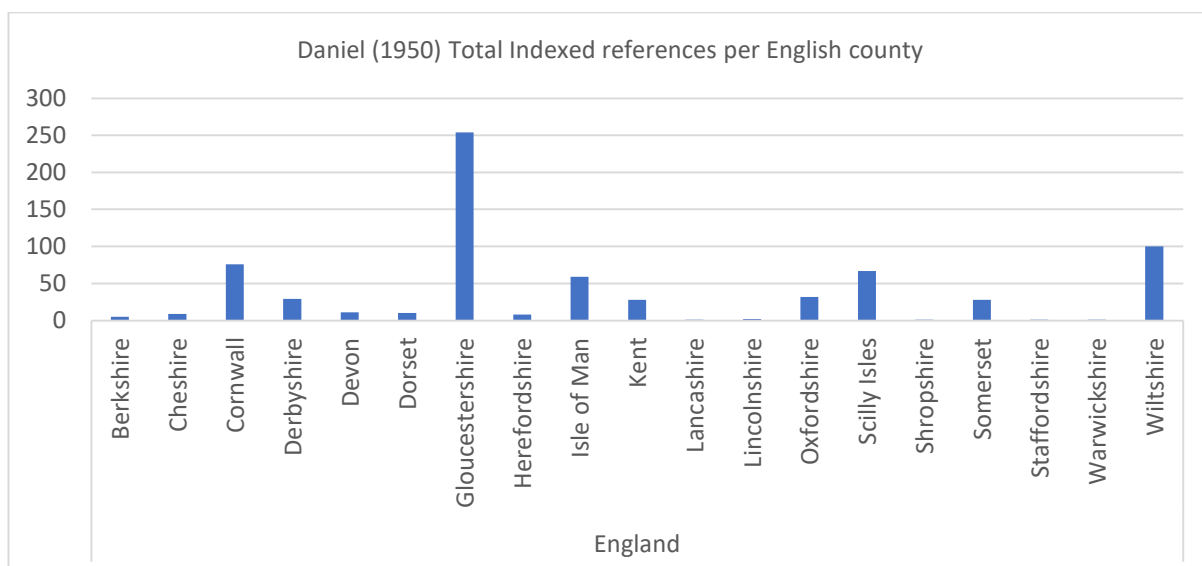


Figure 121 - Daniel (1950) Total indexed page references per English county

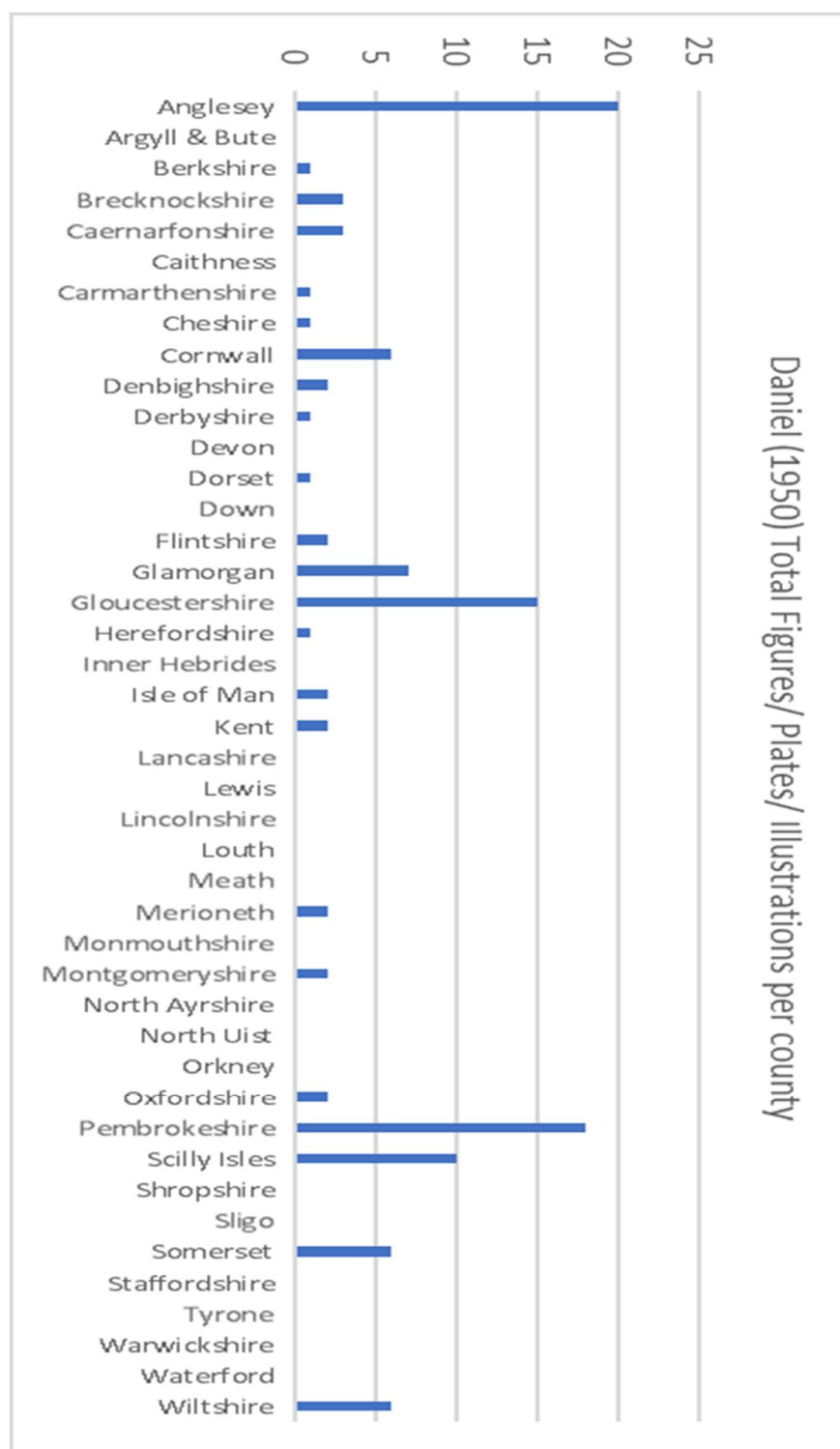


Figure 122 - Daniel (1950) Total Figures, Plates and Illustrations per county

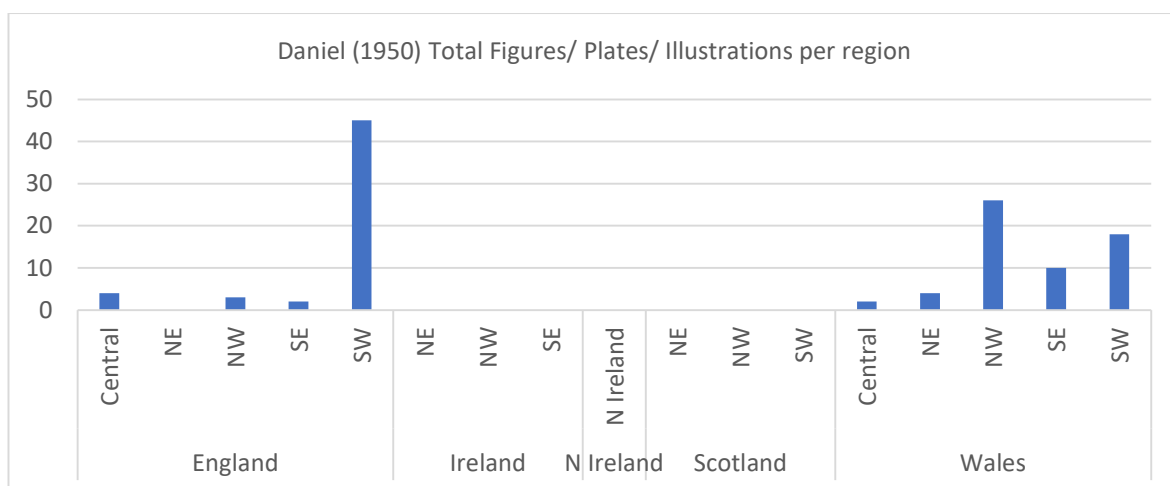


Figure 123 - Daniel (1950) Total Figures, Plates, and Illustrations per region and country

6.4.3 LESLIE GRINSELL (1953, 1975) THE ANCIENT BURIAL MOUNDS OF ENGLAND

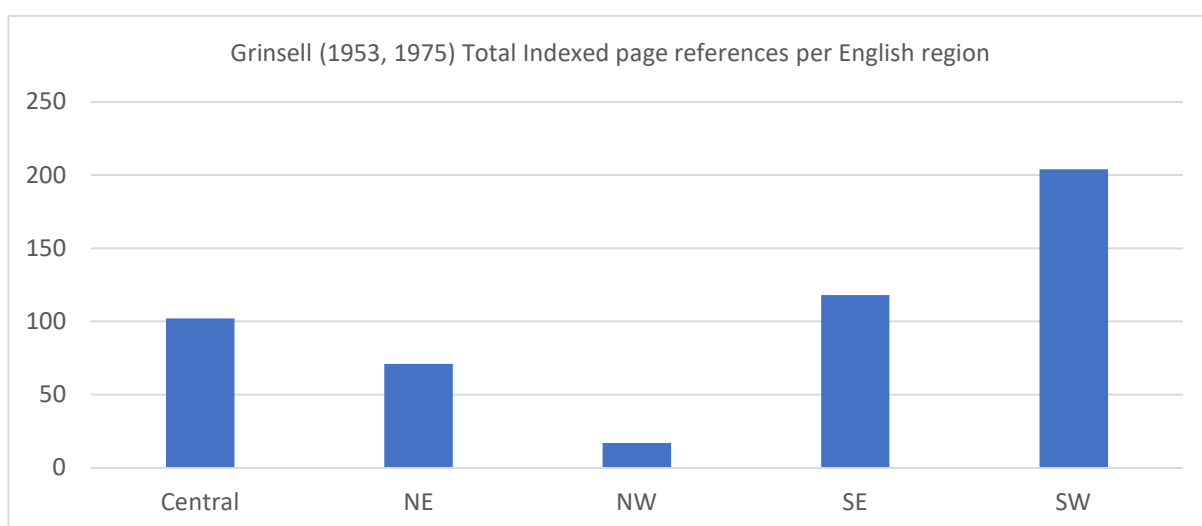


Figure 124 - Grinsell (1953, 1975) Total indexed page references per region

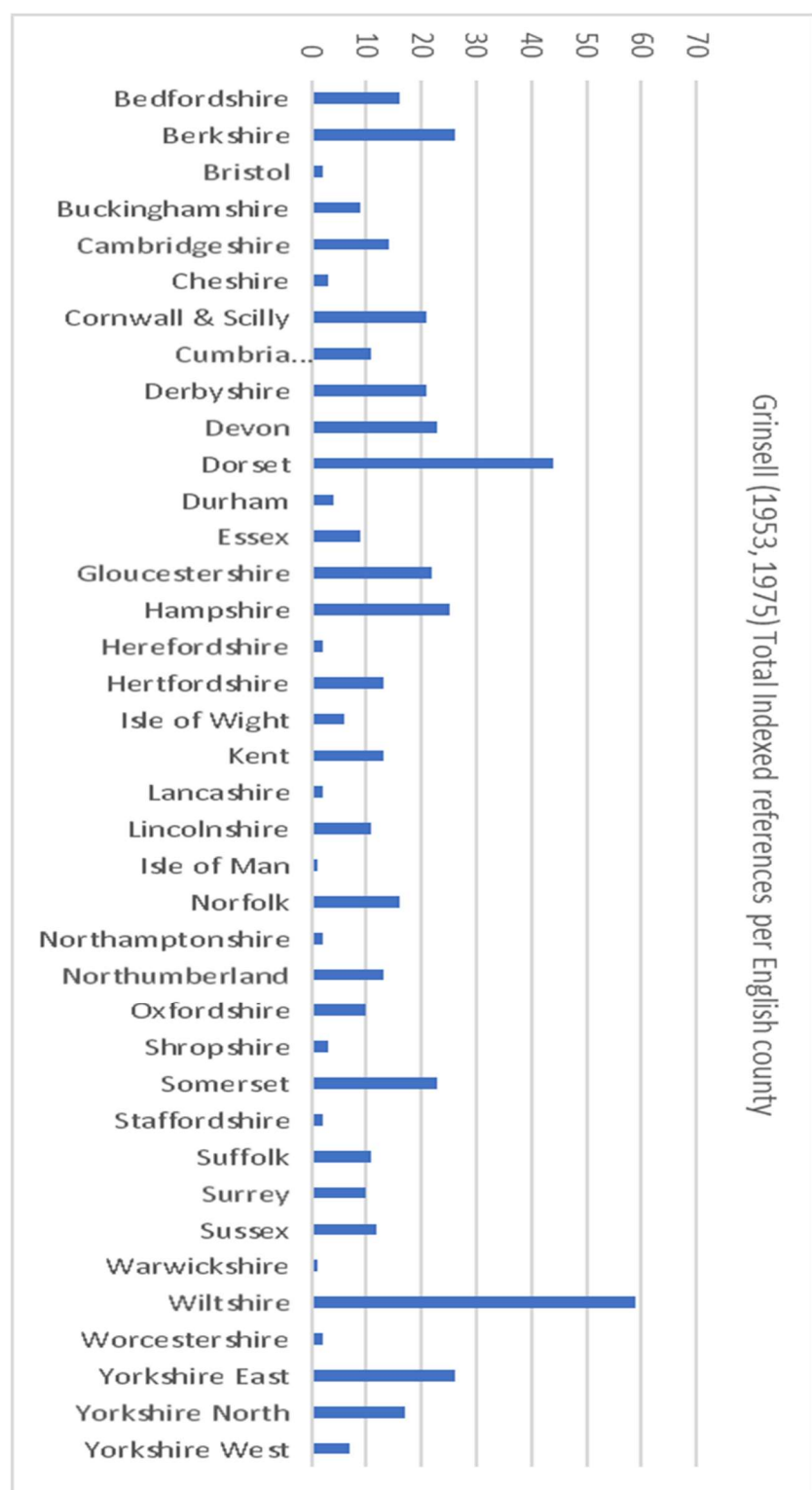


Figure 125 - Grinsell (1953, 1975) Total indexed page references per English county

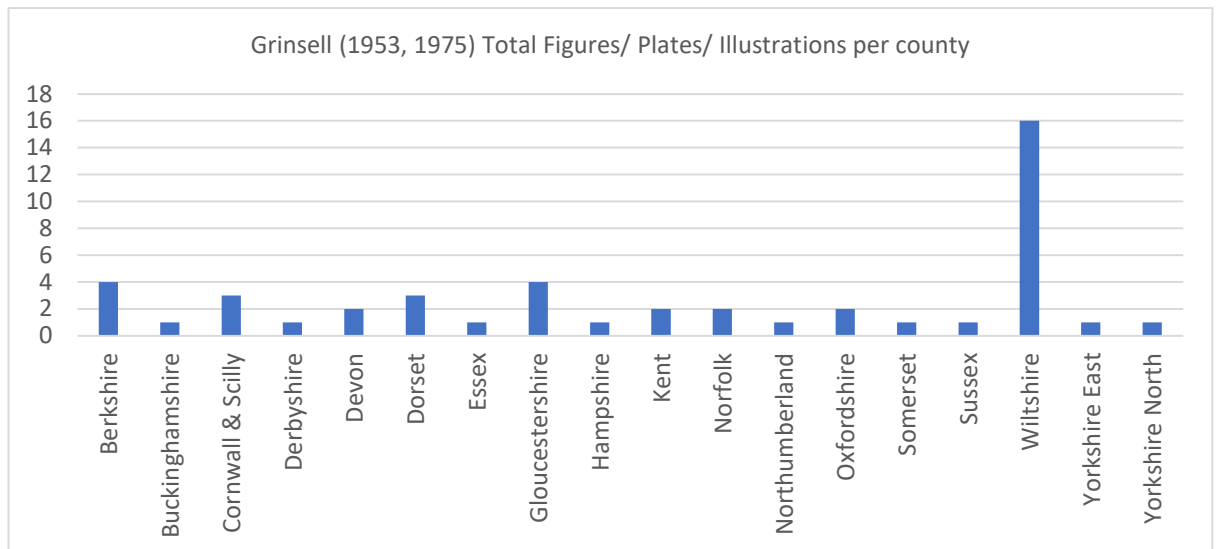


Figure 126 – Grinsell (1953, 1975) Total Figures, Plates and Illustrations per county

Leslie Grinsell's 1953 book, with a second edition in 1975, *'The Ancient Burial Mounds of England'*, contained three separate indexes. Index III pertained to 'English Counties' and listed 512 sites and locations in total (1975, 270-278) (Figure 124). Of these, 204 pertained to the south-west, 118 to the south-east, 102 to central England, 71 to the north-east and only 17 references were made to north-west England (Figure 125). Index III contained 59 page references to Wiltshire sites and 44 to those in Dorset. Berkshire had 26 references, and there were 25 for Hampshire. East Yorkshire was referenced on 26 separate pages and North Yorkshire had 17 mentions.

Grinsell included 47 images in his book on English burial mounds (Figure 126). Only 3/47 pertained to northern England, one for each of Northumberland, East and North Yorkshire; 15 images were of sites in south-eastern and central England; whereas 16/47 referenced locations in Wiltshire and a further 13/47 were of other south-western England locations. These images, along with an account which, although re-written 20 years after its first edition, continued to provide an overwhelming focus and fascination of Wiltshire's monuments.

6.4.4 PAUL ASHBEE (1960) THE BRONZE AGE ROUND BARROW IN BRITAIN

Ashbee's 1960 book *The Bronze Age Round Barrow in Britain* referenced 616 locations within its Index (Figure 127). England gained 501/616 references (85%). Of these, south-west England was mentioned 298 times within the Index, with Wiltshire receiving the

majority of these references 172/298 (Figure 128). North and East Yorkshire were referenced 27 times within the Index.

Wiltshire’s sites and monuments also gained 43 out of 93 total images used within the book (Figure 129) 61/93 of the images also pertained to south-west England (Figure 130).

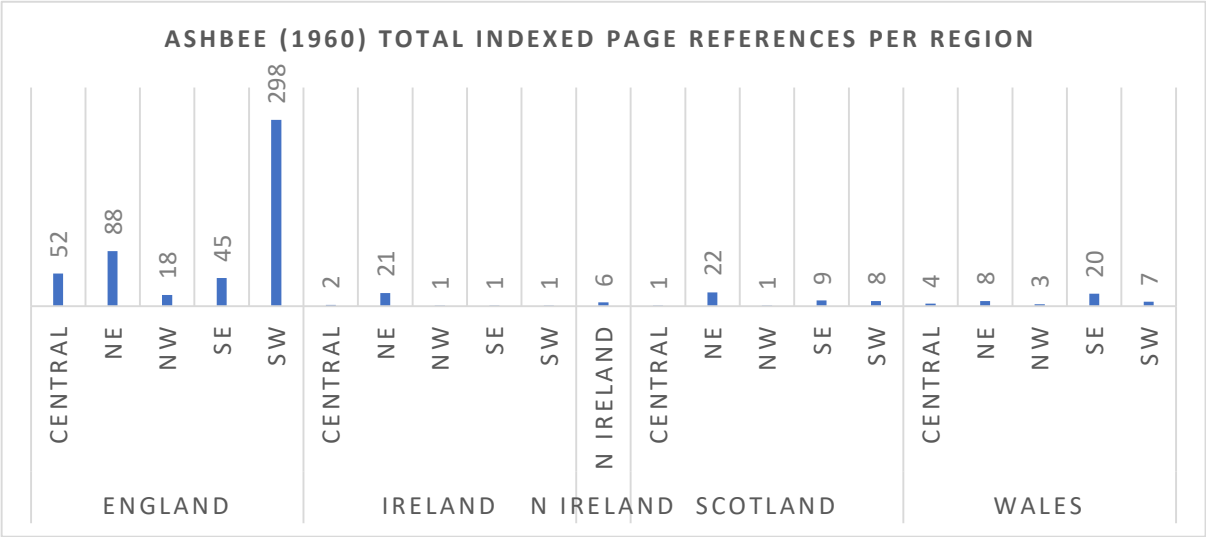


Figure 127 - Ashbee (1960) Total indexed page references per region

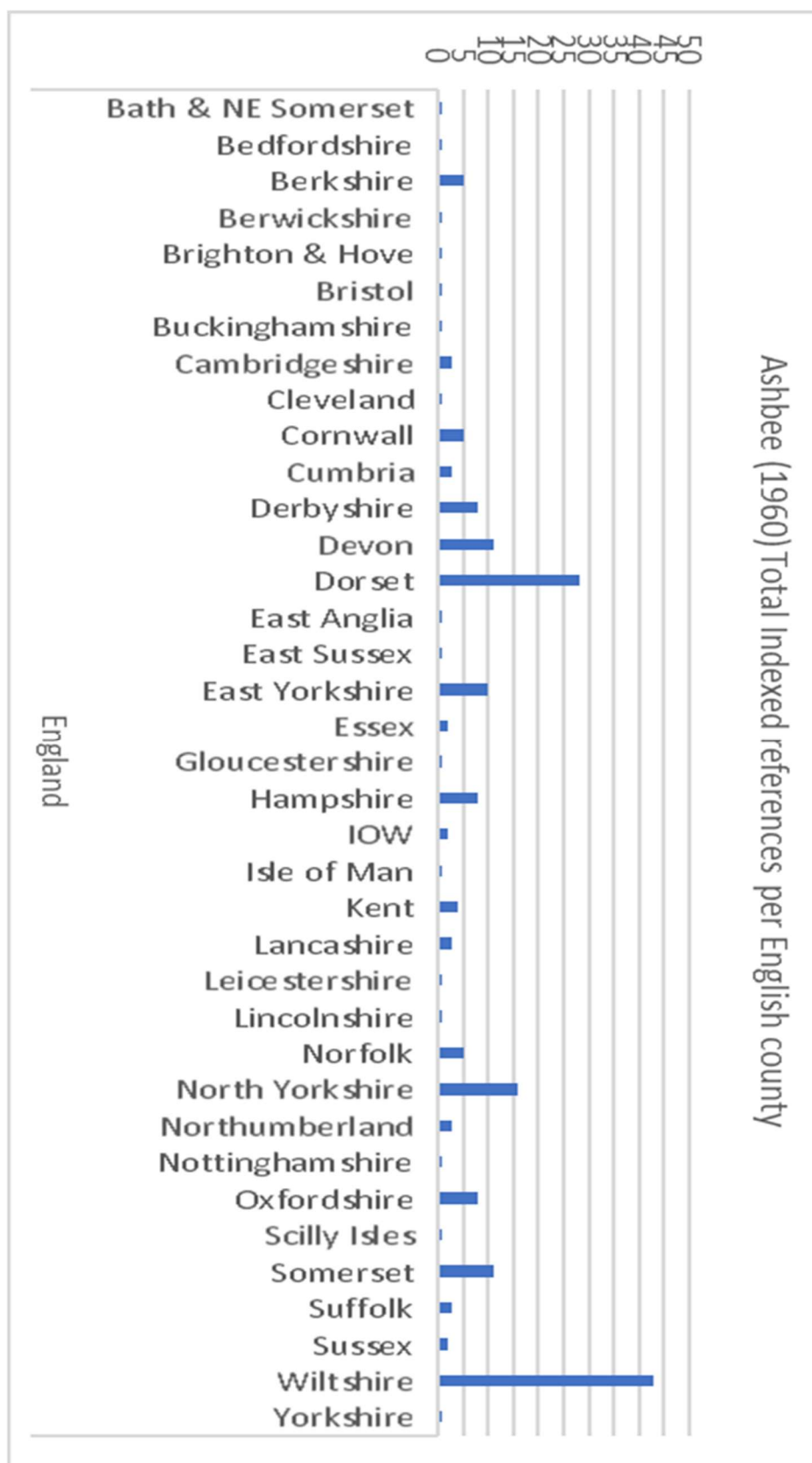


Figure 128 - Ashbee (1960) Total indexed page references per English county

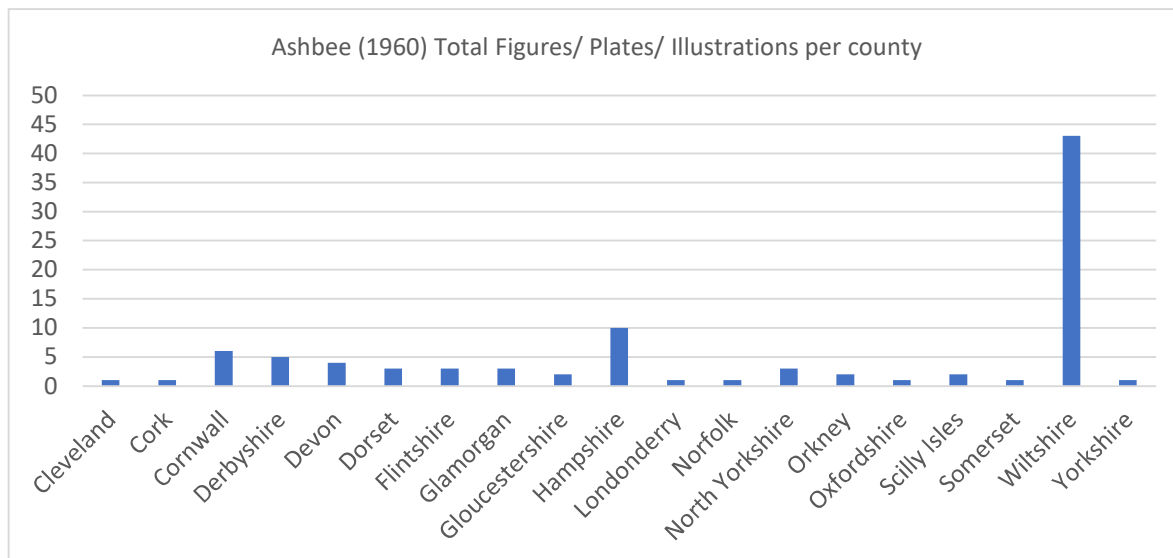


Figure 129 - Ashbee (1960) Total Figures, Plates and Illustrations per county

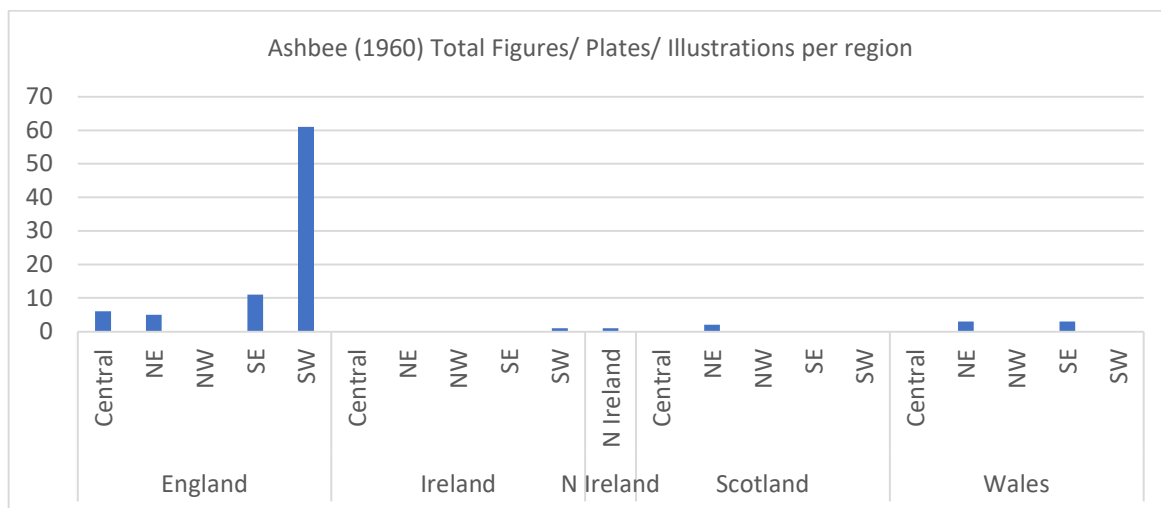


Figure 130 - Ashbee (1960) Total Figures, Plates and Illustrations per region and country

6.4.5 PAUL ASHBEE (1970, 1984, 2ND EDITION) THE EARTHEN LONG BARROW IN BRITAIN

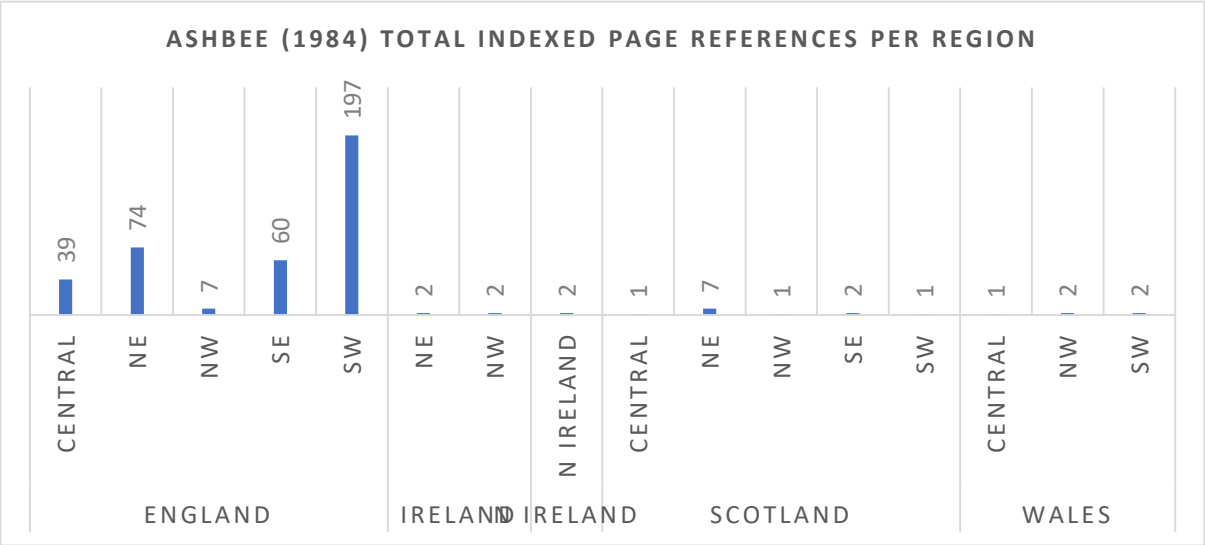


Figure 131 - Ashbee (1984) Total indexed page references per region

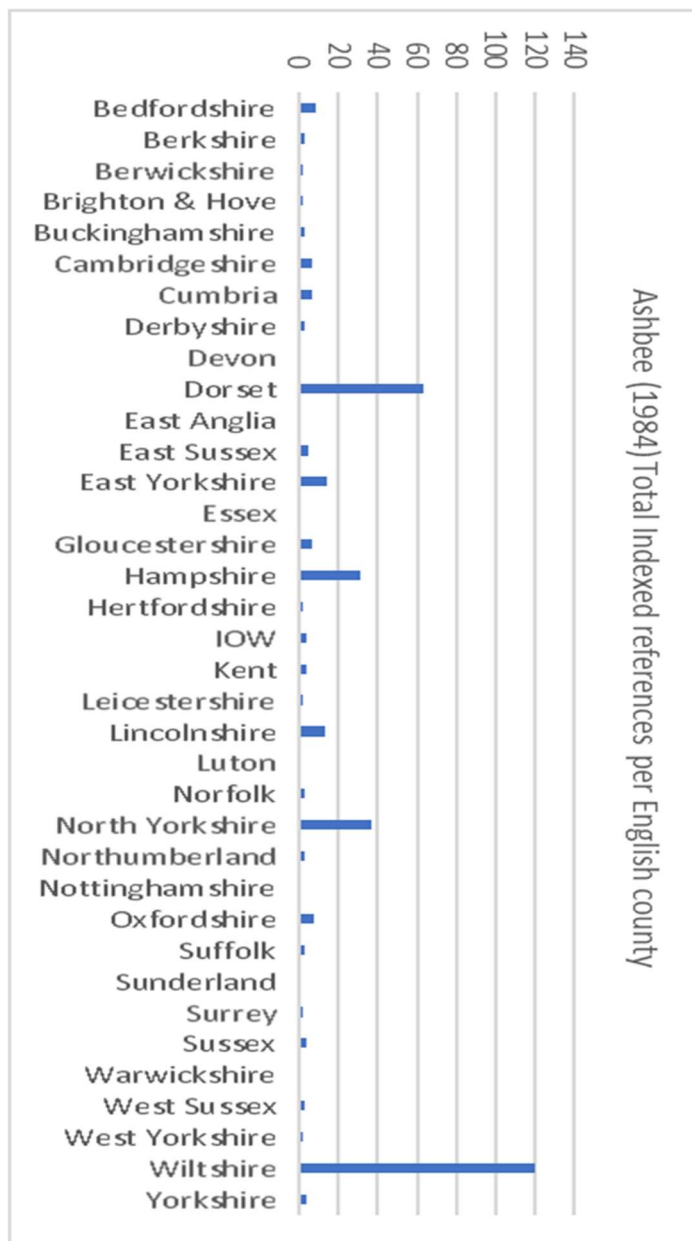


Figure 132 - Ashbee (1984) Total indexed page references per English county

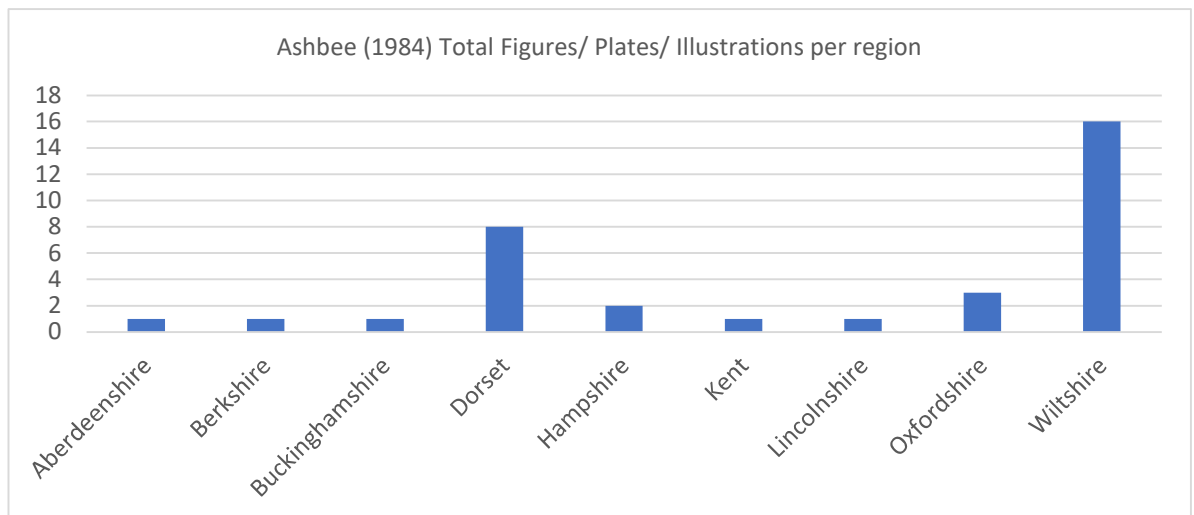


Figure 133 - Ashbee (1984) Total Figures, Plates and Illustrations per county

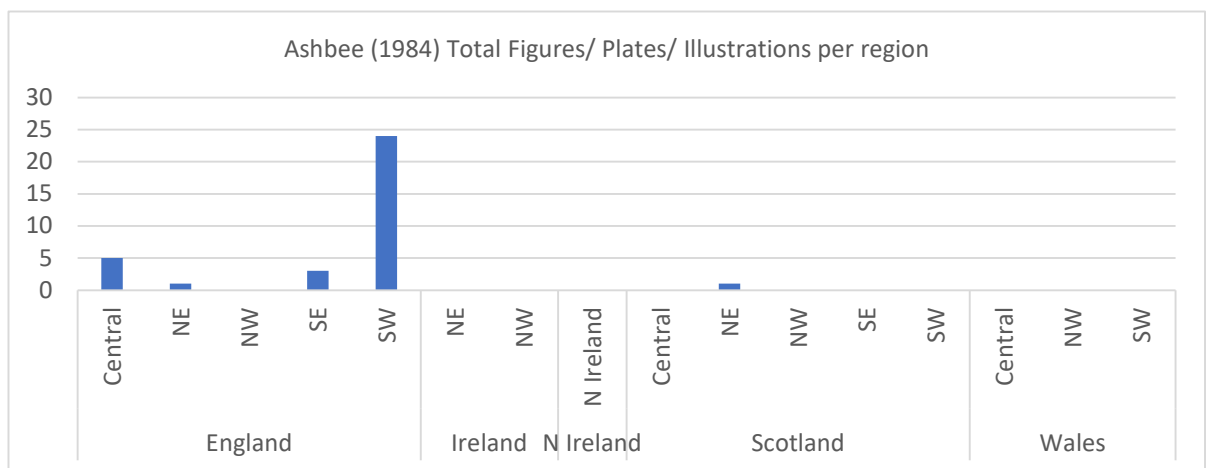


Figure 134 - Ashbee (1984) Total Figures, Plates and Illustrations per region and country

Paul Ashbee's 1970 book *The Earthen Long Barrow in Britain*, for which I used the second (1984) edition, contained 400 country, county or site references within its Index. Of these, 377/400 pertained to England (Figure 131), and of those, 197/377 referenced south-west England. The county of Wiltshire had 120 references, with a further 63 assigned to Dorset. East and North Yorkshire had 14/377 and 37/377 references, respectively (Figure 132).

Ashbee included 34 figures, plates or illustrations in his 1984 book. Of these, all but one reference sites in England. There were 16 images of sites in Wiltshire and 8 images for Dorset's sites (Figure 133). As 24/34 pertained to south-west England, this meant that only these two counties were represented in image form within the book. There were also 5 images of sites in central England and three for those in south-east England. North-east England had one image within the book and there were no images for north-west England's sites (Figure 134).

6.4.6 FRANCES LYNCH (1997) MEGALITHIC TOMBS AND LONG BARROWS IN BRITAIN

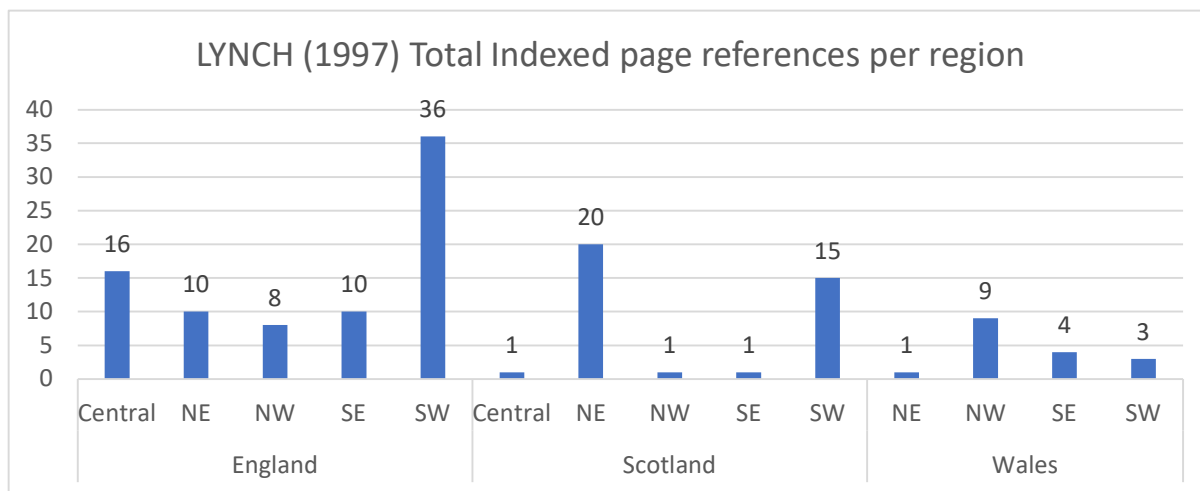


Figure 135 - Lynch (1997) Total indexed page references per region

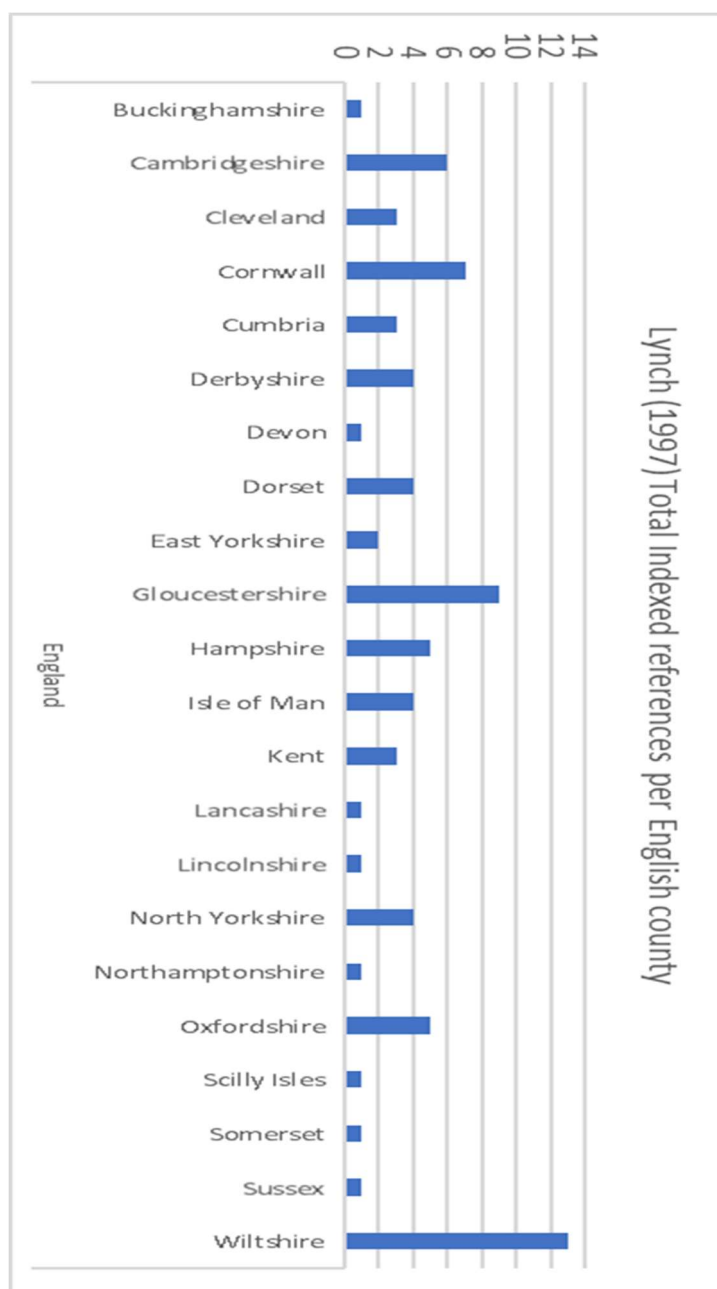


Figure 136 - Lynch (1997) Total indexed page references per English county

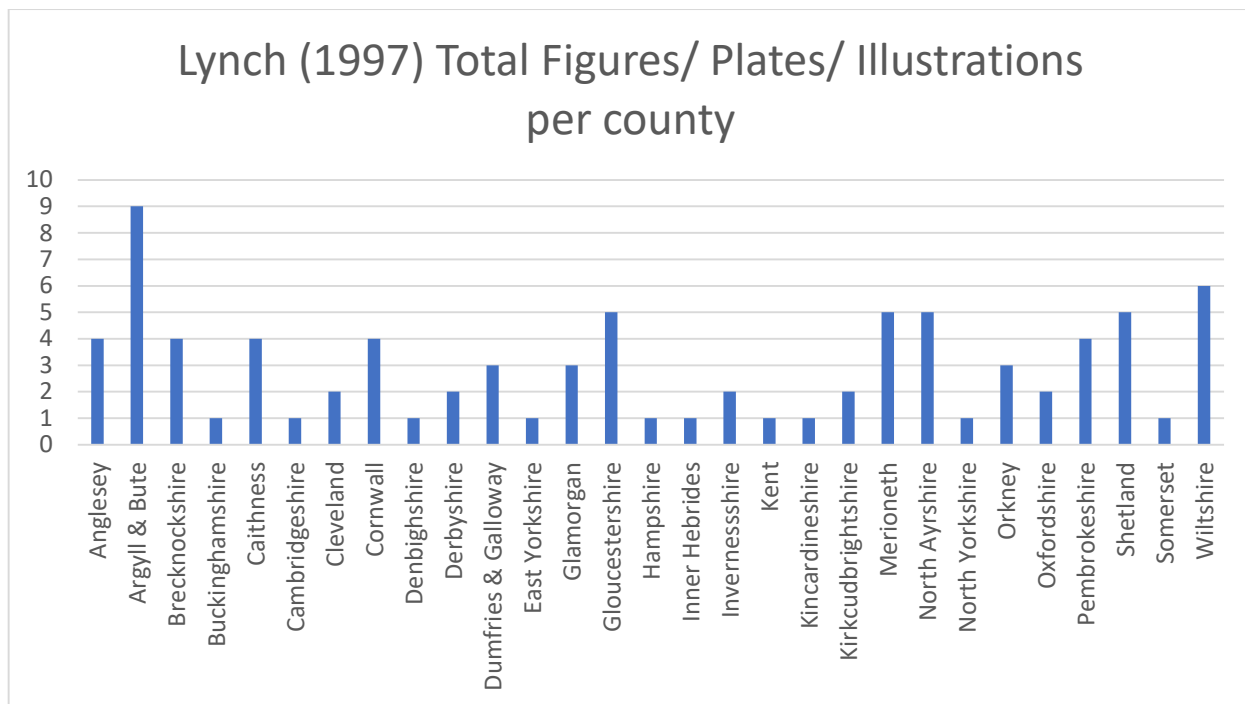


Figure 137 - Lynch (1997) Total Figures, Plates and Illustrations per county

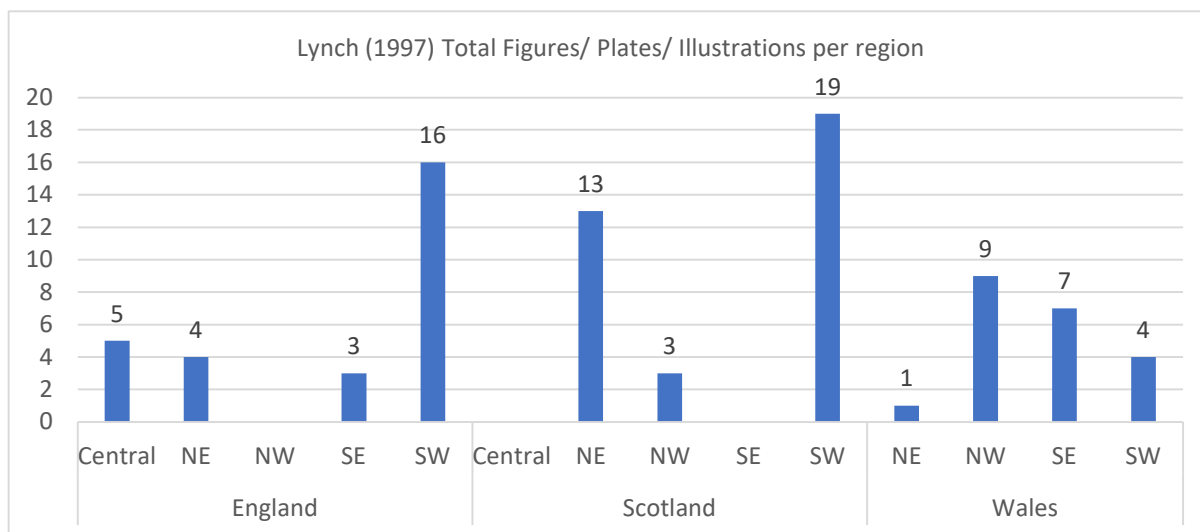


Figure 138 - Lynch (1997) Total Figures, Plates and Illustrations per region and country

Frances Lynch's short book, *'Megalthic Tombs and Long Barrows in Britain'*, nevertheless held a total of 113 specific site or county references within its Index (1997, 71-71). 36/113 referred to sites in south-west England, with a further 20/113 to north-east Scotland; 16 to central England and 15 to south-west Scotland. In total, there were 80/113 Indexed references to England, 38/113 for sites in Scotland and 17/113 references for Wales' monuments or sites (Figure 135). Of the English totals, 13 pertained to Wiltshire; 6 to Gloucestershire; and 5 references to Cornwall. There were 2 references for East Yorkshire and 4 for North Yorkshire (Figure 136).

There were also 84 referenced images. Of these, Argyll & Bute gained 9 references, with 6 for Wiltshire and 5 a-piece for Gloucestershire, Merionethshire, North Ayrshire and Shetland. North and East Yorkshire had one image reference each (Figure 137). Regionally, south-west Scotland had the most images assigned to its monuments (19/84). South-west England gained 16/84 images and there were 13 images for sites in north-east Scotland. North-east England had 4 images in the book and there were none for north-west England (Figure 138).

6.4.7 ANN WOODWARD (2000) BRITISH BARROWS. A MATTER OF LIFE AND DEATH

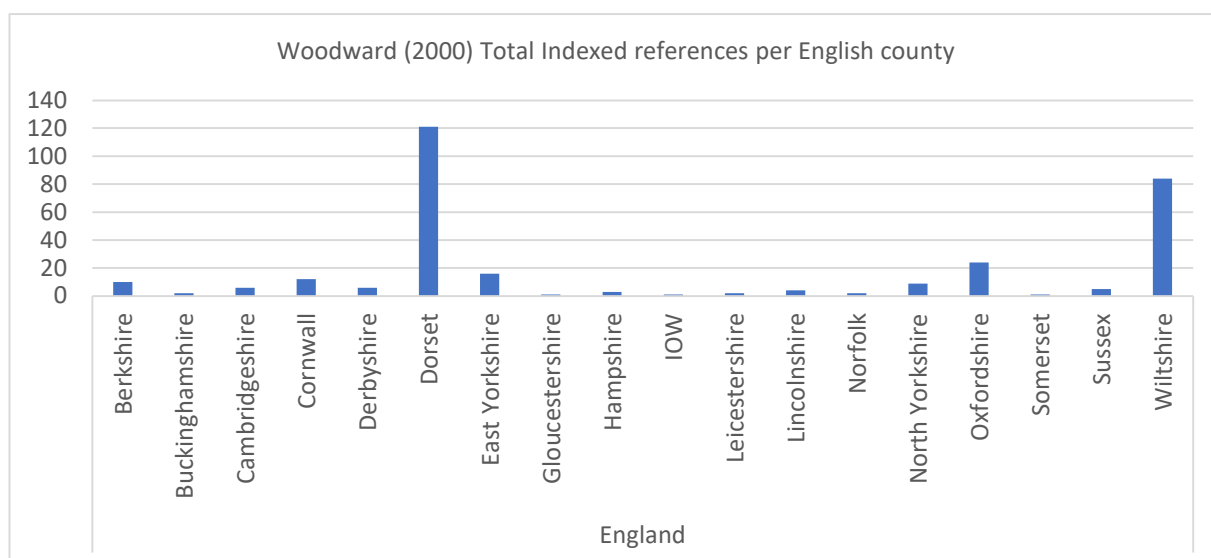


Figure 139 - Woodward (2000) Total indexed page references per English county

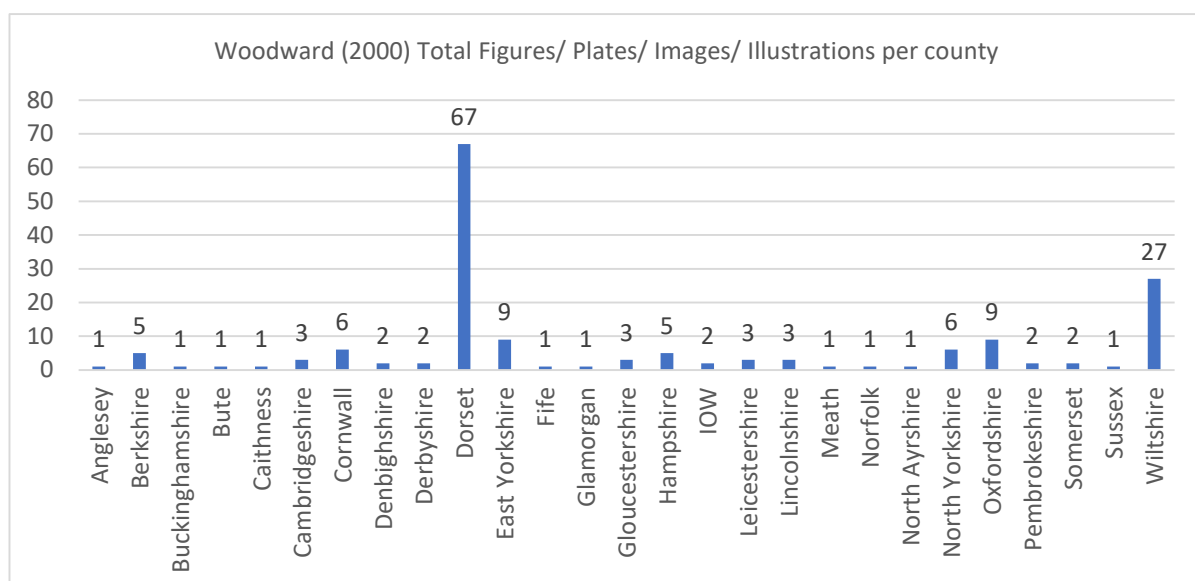


Figure 140 - Woodward (2000) Total Figures, Plates and Illustrations per county

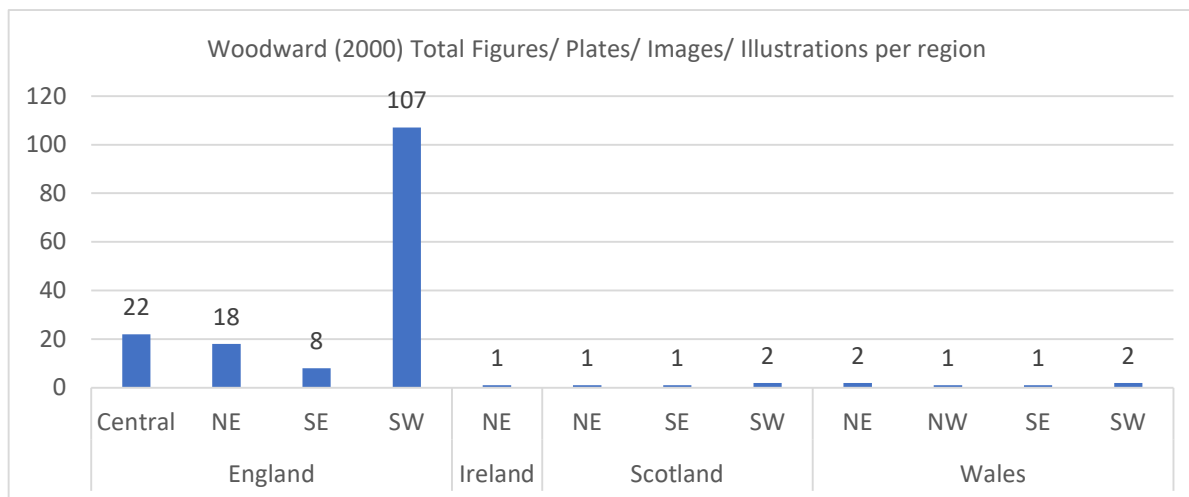


Figure 141 - Woodward (2000) Total Figures, Plates and Illustrations per region and country

Ann Woodward's book, *'British Barrows. A Matter of Life and Death'* contained 325 site or county references within its Index (2000, 156-160). 309 references referred to sites in England, 9 to Wales, 5 to Scotland and 2 to Ireland. Of the English references, 220 were for locations in south-west England, 48 for central England 12 for south-east England and 29 for north-east England. North-west England was not referenced. Within English county references, two counties dominated the references. 121 pertained to Dorset and 84 to Wiltshire. East and North Yorkshire had 16/325 and 9/325 page references, respectively (Figure 139).

For the images used throughout the book, south-west England gained 107/166 references. Of those, Dorset and Wiltshire, once again, had the most references, with 67/166 and 27/166, respectively (Figure 140). East and North Yorkshire had 15 image references in total (Figure 141).

6.4.8 TOTAL RESULTS

Authors and Year of Publication	Total Indexed page references
Ashbee 1960	616
Ashbee 1970 (1984)	1383
Childe 1940	286
Daniel 1950	1244
Grinsell 1953 (1975)	512
Lynch 1997	113
Woodward 2000	325
Grand Total	4479

Table 51 – Total number of Indexed page references per author

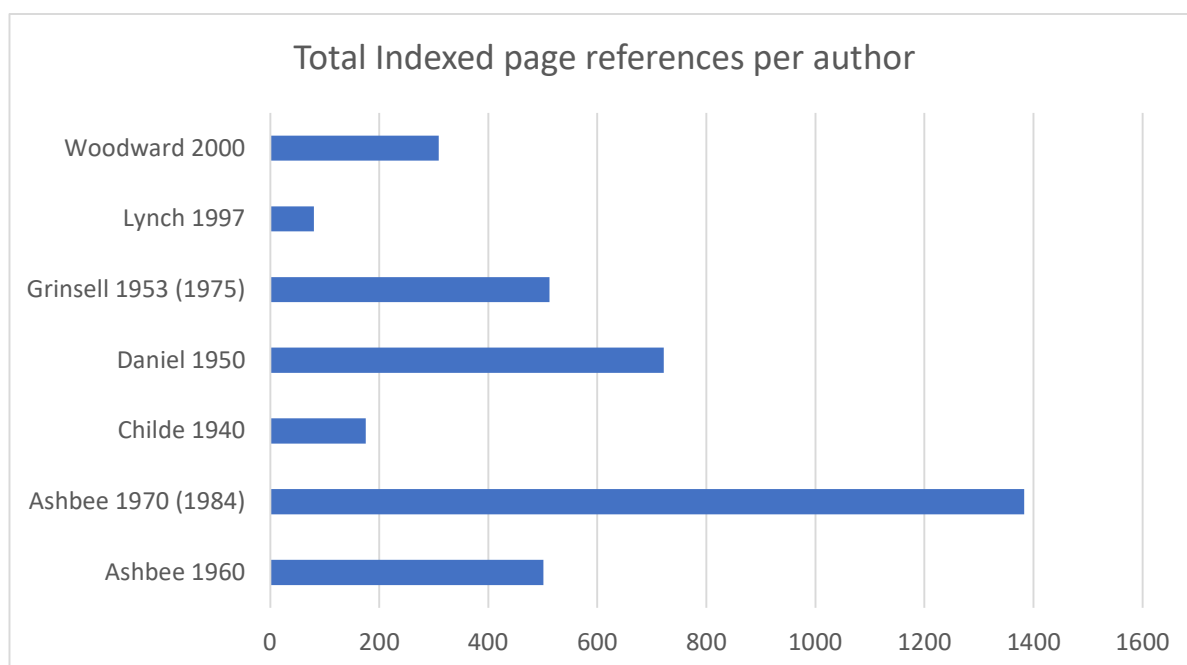


Figure 142 – Bar chart of total number of Indexed page references per author

In total, the book indexes provided 4479 referenced pages of Neolithic or Bronze Age sites. When all Indexed references are considered together, the overall totals for England show an overwhelming interest in Wiltshire, followed by Dorset (Table 51), with 237/989 and 142/989 references, respectively. East Yorkshire, on the other hand, is thoroughly under-represented (35/989), despite its total monument numbers, mentioned above (Figure 142; Figure 143; Table 52).

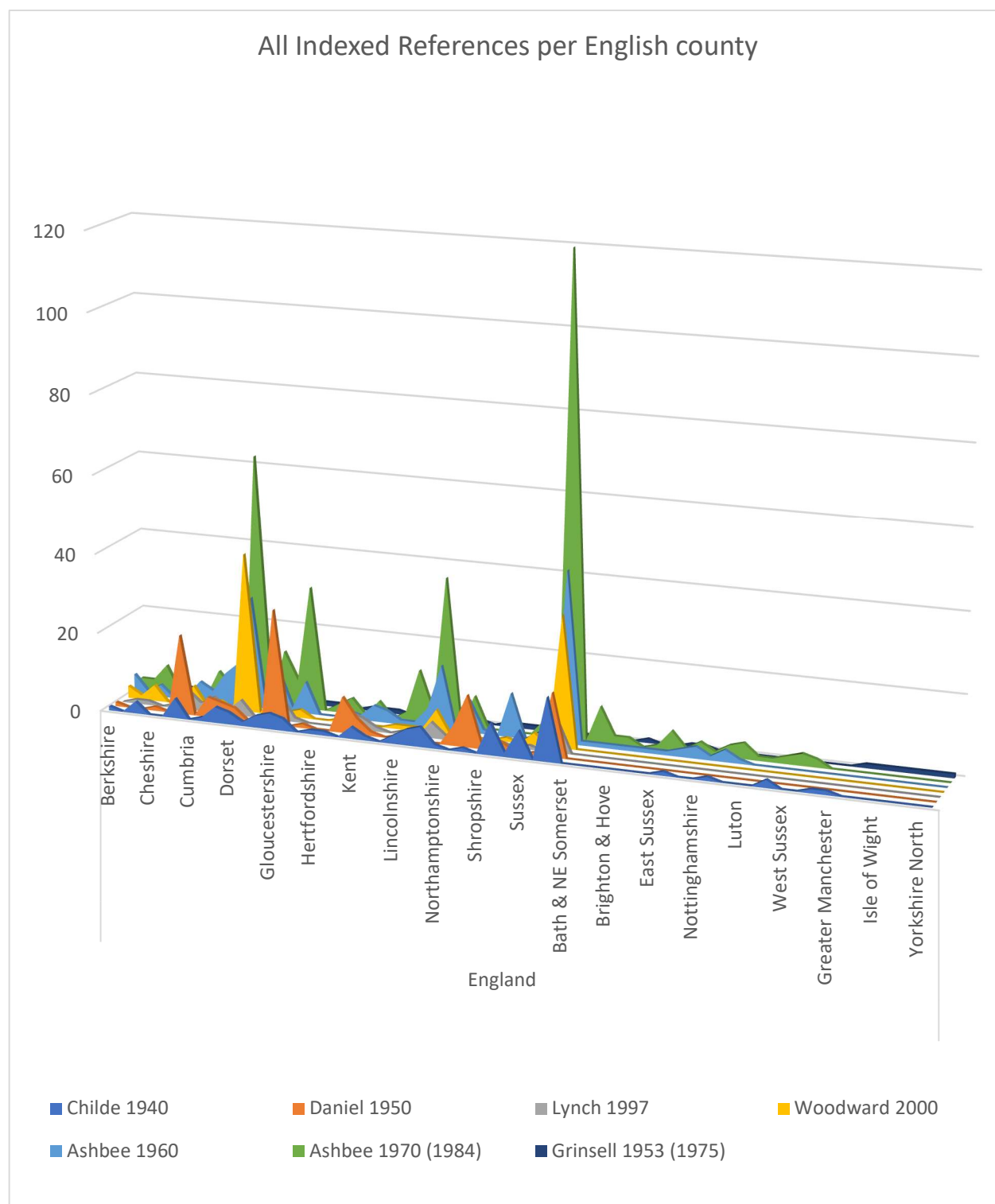


Figure 143 – Chart showing peaks of interest in some English regions over others, per author

Region	Childe 1940	Daniel 1950	Lynch 1997	Woodward 2000	Ashbee 1960	Ashbee 1970 (1984)	Grinsell 1953 (1975)	Grand Total
England	85	119	55	116	199	377	38	989
C	8	14	8	16	27	36	10	119
NE	11	1	8	12	33	74	5	144
NW	1	11	7		9	7	4	39
SE	23	4	6	7	27	63	9	139
SW	42	89	26	81	103	197	10	548
Grand Total	85	119	55	116	199	377	38	989

Table 52 - Total Indexed references per English region per author

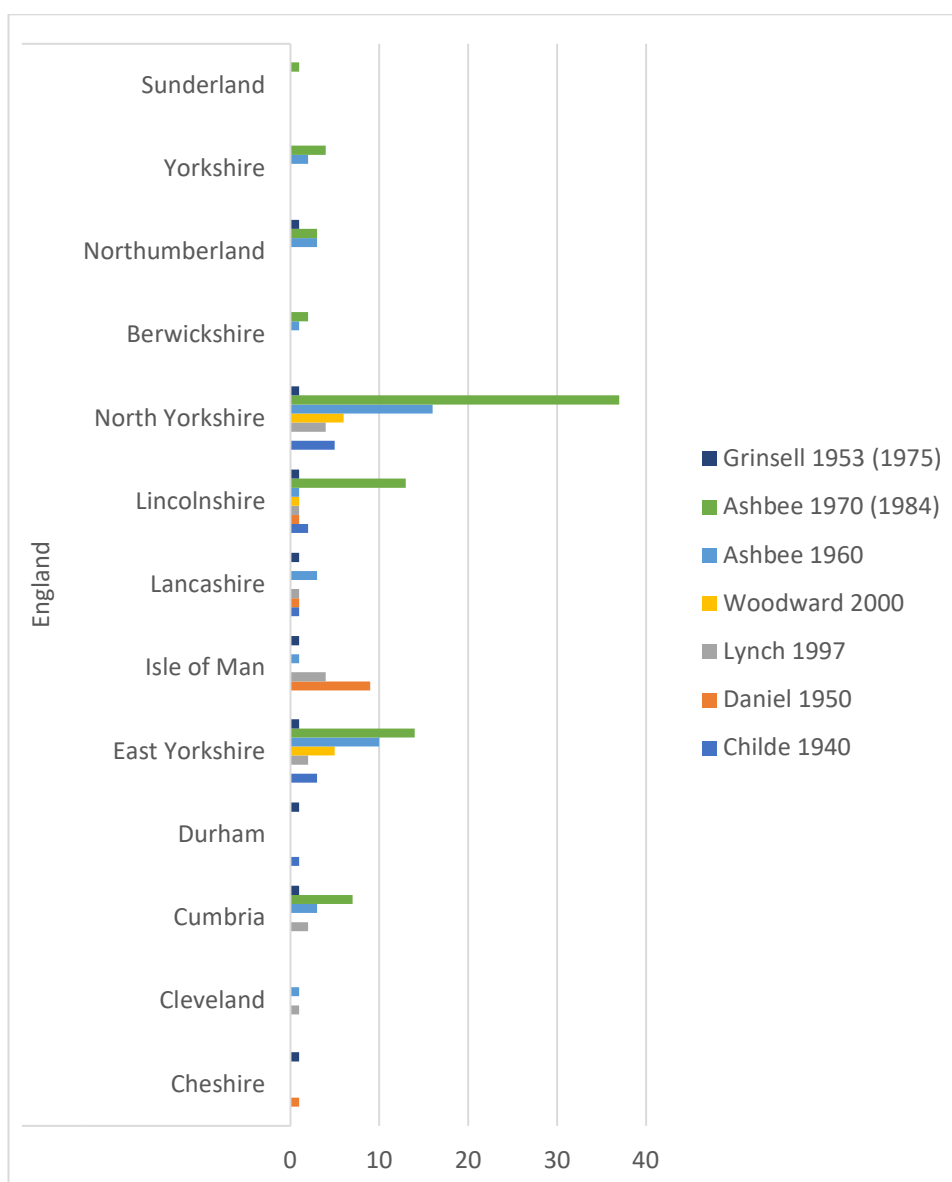


Figure 144 - Chart showing all indexed references per author for northern England's counties

Country	Sum of Number of Indexed page references	Sum of Figures/ Plates/ Images/ Illustrations
England	3682	352
Central	374	43
NE	537	34
NW	141	5
SE	461	31
SW	2169	239
Grand Total	3682	352

Table 53 – Sum of Indexed page references and sum of total number of figures, plates and illustrations per English region

Within England, the total page references and the total number of images for all books together demonstrated overwhelming focus on the south-west over other regions, with 59% and 68%, respectively. North-eastern England gained 537/3682 (15%) and north-western England had only 4% of all Indexed page references and 1% of all images within the books. North-eastern England's locations were viewed in less than 10% of the overall number of images (Table 53).

As seen from Table 50 - Results of a PastScape Search, July 2015 (E Watson, MA Thesis, 2016) Table 50, this emphasis is not reflected in the regional totals for England. It is true that, from an earlier study, Wiltshire had 2,733 barrows but North Yorkshire also had considerable numbers, barely less than Dorset. It is therefore surprising its barrows are so under-represented in these books. Hampshire, with 1032 barrows and Cornwall with 989 barrows, were also poorly referenced in the books studied above (Figure 144).

6.5 ANALYSIS OF FINDINGS

The findings above overwhelmingly demonstrate the marginalisation of the Neolithic and Early Bronze Age monuments of northern England within the tomes studied. The authors often acknowledged this, stating within their introductions that the data used within their book mainly came from sites in southern England, despite having *England*, *Britain* or the *British Isles* in every one of their book titles (such as, Ashbee 1960, 15; Grinsell 1975, Part II; Ashbee 1984, xv; Lynch 1997, 9, 11; Woodward 2000, 10).

V. Gordon Childe frequently referred to Yorkshire, Cumberland and Northumberland but many specific site references were confined to Wessex (such as 1940, 125). He mentioned several Yorkshire sites within the footnotes of his book, such as Hanging Grimston and Garton Slack, (Ibid., 51 & 125, respectively). The latter was noted with Lanhill, yet only Lanhill of the three was referenced in the Index, with no mention of the two Yorkshire locations.

Glyn Daniel, in his Introduction, acknowledged the confusion surrounding archaeological terms used to describe prehistoric chamber tombs. He described *burial chambers* as ‘any structure which contains a burial chamber’ (1950, 3), yet he did not include non-megalithic monuments within his work. His distribution map demonstrated this (Ibid., 13).

Leslie Grinsell also wrote about England’s burial mounds (1953, 1975). However, this was again a partial discussion. Between the 1930s and the 1970s, Grinsell ‘visited, measured and recorded every barrow in most of the southern English counties’ (Woodward 2000, 12). Almost all of Grinsell’s specific examples of barrows are from southern England, mainly from the south-west. As he lived in Bristol, though, this is unsurprising. Often, Yorkshire or northern barrows are referenced as a group, rather than individually, even for specific examples, such as, ‘as in one or two instances in Yorkshire’ (1975, 57).

Within Paul Ashbee’s 1960 book, he did recognise the bias of knowledge at that time and attempted to bring together regional data, to provide a wider picture of Bronze Age barrow distribution (such as, 1960, 30). Yet, he frequently offered examples of specific references to individual barrows within the landscapes of southern England, whereas for those on the Wolds, in North and East Yorkshire, he mainly referenced only single word(s) for the entire barrow group, such as Blanch, Aldro, Acklam Wold (1984, 200); Calais Wold (Ibid., 201); Cowlam (Ibid., 202); Flotmanby, Ganton, Garrowby Wold, Garton Slack, Hanging Grimston (Ibid., 203), Normanby le Wold, Painsthorpe (Ibid. 205); Towthorpe (Ibid., 207); Wharram Percy (Ibid., 208). With 1,127 N/EBA barrows in this region, a description of the ‘Wolds group’ is not hugely enlightening. An example is his reference to Huggate Wold, where there were burned burials and Early Neolithic pottery within its landscape. It would have been of far better use to a researcher, had Ashbee specifically referenced the barrow numbers excavated by Mortimer in the nineteenth century, in this case, as M.230 and

M.224. With over forty barrows within Huggate Parish, it was incredibly time-consuming to ascertain which barrow was under discussion.

This meant that for a researcher,

- 1) Prior knowledge was needed of these locations to realise their value;
- 2) It would not be clear as to which of these barrows were being referenced. Often the locations contained the sites of multiple burial mounds, which if not individually referenced, would be impossible to find;
- 3) Numerous sites in southern England were referenced under each of their names, such as: Adam's Grave (Alton 14/ Alton 14 (Adam's Grave); Beckhampton Road (Bishop's Cannings 76); Chilbolton Down (Chilbolton); Child Okeford 1 (Hambledon Hill); Deadmen's Grave I (Claxby by Alford), which led to an unintended bias towards those specific details.

Whilst one might argue that this is reasonable, against the alternative of a single reference for multiple sites, it seems obvious that the southern region was much better known by Ashbee and therefore favoured over those barrow locations in northern England.

In his later 1970 (1984) book, Ashbee discussed the relationships between long mounds and causewayed enclosures as a solely southern English phenomenon (1984, xxix). He added that the association between long barrows and causewayed enclosures in 'middle England' was 'unclear' (Ibid., xxxiv) and made no attempt to explain how the situation in northern England differed from these other regions. This meant that, once again, the reader was bombarded with examples from Wiltshire, which was referenced 575/1383 times in under 200 total pages (42%). North Yorkshire gained just over 11% of the total overall references. Surprisingly, Gloucestershire, with at least 109 long barrows (Pastscape data, February 2019), gained only 7 pages of reference from Ashbee, indicating that there is partiality within south-west England too. In Gloucestershire's case, however, Glyn Daniel had made over 250 page references to its prehistoric chamber tombs, so the omission was minimised in the overall county totals for this study.

Ashbee was keen to advance knowledge of northern long barrows but he did this through an explanation of the excavation of Nutbane long barrow, Hampshire (1984, 106), originally

excavated in 1957 by Faith de Morgan Vatcher. Having found a burned and collapsed building within it, Ashbee used this evidence to re-examine northern sites, concluding, 'These can now clearly be seen as having within them structures which had burned and collapsed with incidental burning of the burials' (1984, 106).

Frances Lynch's publication (1997) included 84 images within only 70 pages, a great achievement. It is the only publication studied where Scotland's sites had the most illustrations, with 35/84. Despite the shortness of the book, 113 sites or locations were referenced too. Whilst North and East Yorkshire were poorly represented, with only 5% of references (6/113), 36 references were made to south-west England.

Ann Woodward's 2000 book focussed almost exclusively on English sites and locations, with 95% of all Indexed references (309/325). Of these, 220 pertained to south-west England. There was a similar regional focus for the images used within the book, with 107/166 of locations in south-west England and the majority of those for sites in Dorset and Wiltshire.

Maps too had unintentionally demonstrated inconsistencies in the data. In *The Bronze Age round barrow in Britain*, Paul Ashbee's barrow map only covered the area of southern England, along the line between Bridlington and the North Lancashire coastline (1960, 61). In *British Barrows, A Matter of life and Death*, Ann Woodward's map of major sites only referenced 4 monuments in the whole of northern England; 4 for Scotland; 1 for Ireland (technically, not part of Britain); 5 for south-east England; 11 for central England; and 9 for south-west England. In England, the majority of these structures were located south-east of the Wash-Severn line (2000, 10). Woodward then discussed barrows from northern England, not labelled on her map, such as, Round Hill Barrow, Little Ouseburn, Yorkshire (Ibid., 14). This was frustrating as it was not therefore clear to the reader where exactly this monument is located within England's largest county.

6.6 DISCUSSION

The Neolithic and Early Bronze Age monuments of the Yorkshire Wolds commanded huge interest in the nineteenth century. Yet it is clear from the above analysis that between 1940 and 2000, the wealth and variety of these barrows and their contents had been virtually

forgotten. The monuments and their surrounding landscapes have also been poorly referenced in some wider British compilations since then, such as, Whittle, Healy & Bayliss (2011).

It is only in the last few years that the value of and interest in the Wolds' barrows has begun to be appreciated. In 2013, Neil Wilkin completed his PhD on the significance of Food Vessel pottery and burial in Northern England during the Early Bronze Age using a comprehensive and critically assessed dataset of radiocarbon determinations. He considered specific barrows in East Yorkshire in Chapter 7, with illuminating results. The importance of children in funerary contexts with Food Vessels was clear, as was the elaborate decoration and form of Food Vessels and their primary position within complex monuments and the cross-regional links to Ireland, with Irish Food Vessel form and decoration examples in the Wolds, such as at Rudston 62 and West Heslerton (2014, 311, 238).

2016 and 2017 were red-letter years, with 'big picture' projects, which are beginning to help to redress the imbalance in the archaeological narrative (Bradbury & Scarre 2017, 217). The *Beaker People Project* (Parker Pearson *et al.* 2019, 508-534; 2016, 261) included 264 radio-carbon dates, including some from sites in the Yorkshire Wolds. In fact, 89 of 373 individuals studied came from north-east England, more than any other British region. This includes 83 Chalcolithic or Early Bronze Age 'Beaker People' from East Yorkshire.

Chris Fowler and Neil Wilkin used typology to study mortuary practices using records from 400 circa 2500-1500BC graves, cists or burial pits from east-central Scotland, north-east Scotland, and eastern Yorkshire in their chapter in *Prehistory without Borders* (Fowler & Wilkin 2016, 112-135). The study considers the changing patterns of mortuary practice and artefact usage for 200-400-year chronological time slots, with cremation and burial architecture becoming more prominent over time. However, although burials in East Yorkshire are compared with those further north, no specific examples from the Wolds are supplied and the maps only reference sites in the east between the rivers Tees and Forth. This means that similarities and differences between the regions can unfortunately only be implied, not substantiated. Also in 2016, Cooper & Green included the Yorkshire Wolds in their adventurous study of 'big data' analysis, using numerous datasets, including County Council records, the Portable Antiquities Scheme and the National Record of the Historic

Environment, for the English Landscape and Identities project (EngLalD) (2016, 271-304) (<https://englaid.wordpress.com/portal-to-the-past/>). Although this only covered the period from 1500BC to AD1086, it nevertheless demonstrates how useful such a study can be, in data collation from such a wide variety of sources. It is hoped that the Neolithic and Early Bronze Age periods will be in receipt of such an endeavour in the near future.

The *Invisible Dead Project* (2017) provided a further 22 radio-carbon dates from 10 different long and round barrows in the region (Mandy Jay, pers.comm.). However, as the project only dealt with secure radio-carbon dates, much of the Wolds was not represented, which is a shame. However, the project is an excellent baseline for future research projects, which could look at areas which have been under-represented by large-scale narratives and focus on Bayesian analysis of skeletal collections, to further redress the balance. There is also an upcoming full publication from the recent project, *Grave Goods*, which also includes the barrows of East Yorkshire (Melanie Giles, pers.comm.). All of these analyses and investigations are beginning to change and improve the current situation and the quality, quantity and variety of prehistoric monuments in northern England are starting to gain in value as a national resource.

Michael Thompson's book, *Rubbish Theory* (1979), wrote about objects and how far they could be assigned to the categories: 'transient' (ibid. 17), 'rubbish' or 'durable' (ibid. 18). He explored the question of how items become transient, 'Does the category membership of an object determine the way we act towards it, or does the way we act towards an object determine its category membership?'

This discussion will consider the Neolithic and Early Bronze Age monuments of the Yorkshire Wolds, and to what extent they have slumped from the 'durable' to the 'rubbish' categories of objects, since their antiquarian heyday.

Thompson's work revolved around the biographies of portable objects; their physical properties and the values assigned to them by society. He considered all objects to start life as 'transient', with their initial value decreasing over time. The object then transferred to the 'rubbish' category, where its value was effectively zero. This would account for the majority of made objects. For an object to move into the 'durable' category, the object

would need to acquire some value, for example, through promotion and therefore increased demand, helped by being in the right place at the right time. This value would then hopefully continue to increase over time (ibid. 17-18). Thompson's ideas are still pertinent and hold weight in the modern era and his concept can be used to understand other types of artificially created objects, such as Neolithic chambered tombs and Early Bronze Age earthen round mounds. An example of an N/EBA monument which could definitely be considered as 'durable', would be Stonehenge, in Wiltshire. Having been accorded World Heritage Site status (with the Avebury landscape) in 1987, it is considered within the world's 'mega-class' of monuments (P Fowler 2004, 109). In fact, so much support and attention has been given to many of the other Wessex monuments that their well-known names and status could also be categorised as 'durable' too. Items within this category are considered so valuable, as to be effectively 'priceless' (Thompson 1979, 104). Can anything be done to re-instate the Yorkshire Wolds' group of monuments as valued? At present, they are either virtually 'valueless' or even 'negatively valued' (ibid. 2, 116). The British archaeological focus has generally moved both southwards to Wessex and northwards to Orkney. Despite many smaller-scale attempts to acknowledge the importance of the monuments of East Yorkshire and to reinvigorate interest about these monuments in the archaeological world over the last 80 years, interest in the structures has fluctuated over time, never quite achieving permanent, long-term interest but often seemingly abandoned as rubbish and forgotten.

Yet, this need not be the case. The Yorkshire Wolds' region is visually very impressive, and not an area which one might consider prone to rubbish, of any kind. It is a chalk landscape of green rolling hills and lush valleys, with the North Sea never more than twenty miles to the East. The area would have been easily accessible in Neolithic and Bronze Age times via the Derwent, the Hull or the Gypsey Race rivers. There are accessible, sandy North Sea bays, where now exist the towns of Scarborough, Filey and Bridlington.

In the later nineteenth century, the monuments of the Great Wold Valley were in great demand by antiquarians. The work they completed is much appreciated, as many of their excavations were in ploughed areas. William Greenwell and John Mortimer, in particular, focussed much of their careers in the research and excavation of Neolithic and Early Bronze Age barrows. In 1877, Greenwell published a large volume on British barrows, including

sections on both Bronze Age round barrows and Neolithic long barrows. The volume mostly related to barrows in northern England, including those in the North and East Riding (1877, 132-357; 484-510; 550-6). In his publication in 1905, Mortimer recorded forty years of he and his brother, Robert's barrow excavations. They lived in East Yorkshire and were responsible for the excavation of 288 barrows in the Yorkshire Wolds. They had many workers digging for them. John Mortimer recorded the excavations and finds. In fact, Mortimer and Greenwell catalogued all the extant round and long barrows in the North and East Ridings of Yorkshire. Mortimer compiled a thousand detailed illustrations of Yorkshire barrows, drawn by his daughter, which he considered more numerous in Yorkshire than in most other locations (1905, Introduction).

Since then, Kinnes has published two gazetteers on Britain's non-megalithic Neolithic monuments, one on round barrows and ring-ditches in 1979 and another on long mounds in 1992. Kinnes highlighted the Yorkshire Wolds as the location of the most prolific concentration of Neolithic round barrows in Britain, with 26 monuments in southern England, 16 in the Midlands, 48 in northern England and 4 in Scotland (1979, 40, 42, Figures 4.4a & 5.2). He demonstrated that the region is also second, after Wessex, in the regional concentrations of British Neolithic long barrows (1992, 8-19). In fact, the Yorkshire Wolds is one of only three areas in Britain with large numbers of non-megalithic long barrows (1979, 43, Figure 5.3). Yet, in 2003, there were only 54 principal Neolithic, excavated sites within the whole, huge region of Yorkshire (Manby *et al.* 2003, 40). Agricultural operations had destroyed many others, before they could even be excavated.

Duggleby Howe Neolithic round mound is one monument which continues to have an 'iconic status' within the Wolds' barrows (Gibson, Bayliss *et al.* 2009, 41), probably because of its extant nature. It 'bulks large in the Neolithic' period (Loveday 2002, 135). It is a huge Earlier Neolithic round barrow, from which Mortimer excavated 62 burials (1905, 23-42). These included 46 cremations, 10 inhumations (of people of every age) and evidence of excarnation, with both dismembered and partial bodies. With these were a number of magnificent artefacts, including a red antler macehead, a 'glass-like' flint knife and a 'most beautiful' Duggleby-type adze (*Ibid.*). It was further investigated in 1983 by Kinnes *et al.* and then the macehead and eleven human bones were subjected to radio-carbon dating by Ogden in 2009. 17 measurements provided dates between 3500-2500 cal BC (Gibson,

Bayliss *et al.* 2009, 61-66). Yet, surprisingly, none of the assessed eleven inhumations possessed a 'chalk dweller signature', so they are unlikely to have grown up on the Wolds (Ibid., 73). Where might they have come from? The writers felt that the bodies themselves could have been part of a gift exchange or that people were coming to the Wolds specially to bury their dead. Only new dating and isotopic bone evidence of other bones can answer these queries. The main issue with the excavated antiquarian material is that the bones and other materials came out of the ground over 100 years ago and are 'disintegrating' (Ibid., 56). Many have been heavily restored using plaster, wire and fire-clay. Much bone has been lost since the antiquarian excavations. Even then, Mortimer was 'less than rigorous in the collection and retention of bone'. Greenwell only kept the skulls and 'even these cannot now be located' (Ibid., 74) and has been accused of incompletely exploring the features he excavated (Manby 1963, 192).

Around Duggleby Howe is an interrupted ditched enclosure, which was partially excavated in 2009 (Gibson *et al.* 2011). The 30m by 5m trench provided seven samples of hazelnut shell and animal bone and antler for Bayesian analysis (Hamilton 2011, 27). All the dates consistently provided radio-carbon determinations of between 2550-2200 cal BC (95%) (Ibid., 27, 29), at the end of the Duggleby Howe burial sequence. This implies that the monument was used episodically, with substantial periods of activity, inactivity and renewed activity (Gibson *et al.* 2011, 39).

Another nearby landscape, on the edge of the Wolds, is of great importance. This is the Rudston monolith complex, encased by its associated cursuses, with long and round mounds and hengiform enclosures nearby. The standing stone is over 7.6 metres tall, with a further estimated 3 to 4 metres below the ground. It is constructed of non-marine Middle Jurassic sandstone, which probably originated from the Ravenscar group of coastal outcrops, between 20 and 30 kilometres away from its present location (Thorpe & Williams-Thorpe 1991, 68). Transporting such a huge stone, from sea level to 38 metres altitude, over uneven ground, must have been daunting. Following the Gypsy Race stream would have meant a minimum of ten kilometres from Rudston to the sea at Bridlington. Yet, contra to this theory, Thorpe and Williams-Thorpe posit that the monolith may have been transported to Rudston through glacial movement, despite being two kilometres outside the glaciation limit (Ibid., 69). However it arrived there, it must have been present

at the start of the Rudston sequence as all four cursuses are aligned and centre on it. It would have been too challenging to drag the stone once the cursuses were in place. Roy Loveday even considers the stone to have a Mesolithic origin (2009, 45). The monolith and five cursuses (A, B, C, D & E) are located along the dog-leg section of the Gypsey Race stream, related to water risings to the north and east of the linear earthworks (Manby *et al.* 2003, 51), connected westwards by a sixth cursus (F) in Burton Fleming Parish. The cursuses appear to cut off or curtail access through the area from east to west, as they cross the stream in several places. They also seem to be deliberately placed to create pathways across the low-lying valley from upland to upland (Woodward 2002, Figure 51). Cursuses A and C are also aligned to keep earlier monuments within their viewshed (H Chapman 2005, 168). There are no radiocarbon dates for the Rudston cursuses, although a pit cutting through the primary silts of Cursus A provided a flint laurel-leaf arrowhead, a similar type to those found with Towthorpe Ware in Early to Middle Neolithic contexts elsewhere in the region. Roy Loveday dated the cursuses to the Middle Neolithic period (3600-3300BC) (*Ibid.*, 165), which ties in with the Cumbrian Langdale quarry dates of 3800 to 3300BC (Bradley *et al.* 2019, 1). Yet, the picture is complex, as Kilham, Rudston and Denby long barrows are part of an Earlier Neolithic placing of monuments in the Great Wold Valley and Cursus D appears to be a later addition, with 'a different architecture, being more in harmony with the landscape' (H Chapman 2005, 168). How long, therefore, was this landscape in use? As cursuses are usually accepted to be of Middle Neolithic date, this wider landscape issue needs further work, to understand the wider sequence. Were they placed to provide physical links between the long barrows and the megalith? For such a stone to remain upstanding since the earlier Neolithic period is impressive and for so many structures to have been built to deliberately surround the monument demonstrates its value. Yet, the absence of all six cursuses and associated long mounds today can diminish their importance and may have led to a lack of interest over time. The cursus features have been levelled by agricultural practices, so that the landscape can only be explored virtually (*Ibid.*, 162).

Archaeologists may continue to be unaware of the effect of ploughing in the Wolds. Jay and Scarre noted the absence of extensive industrial and post-industrial development of these landscapes but failed to take the destructive effects of agricultural processes into

account (2017, 19). In fact, many of the Neolithic long mounds and Bronze Age barrows have been ploughed out, which makes interest in their remains so vital. A programme of excavation is crucially needed, as buried features close to the ploughed surface will continue to disintegrate.

The Yorkshire Wolds landscapes are of considerable importance to the understanding of the Neolithic in northern England, yet their 'meaning and nature...is far from clear' (Carver 2011, 111). We need to re-see these monuments, possibly using Thompson's 'seeing plus knowing' concept (1979, 77). Monuments, although not invisible, need to be made visible (ibid. 87) through deliberate, renewed on-going programmes and genuine interest. Until the Gibson and Bayliss analysis in 2010, the Wolds had not been the recipient of a locally focussed radiocarbon-dated monuments project within the modern era, despite interest in the region from Manby *et al.* (2003) and others. This is surprising, given that the region has such favourable soil conditions and good skeletal preservation (Mizoguchi 1993, 224). Catherine Stoertz felt that future studies of the Wolds might seek to integrate all known archaeological information from aerial reconnaissance to fieldwork, in order to refine site classifications, confirm interpretations and assess the condition of surviving features and those levelled by the plough (1997, 84). Bradley stated, 'We need to 'section the country from east to west, combining surface collection with sample excavation, ceramic studies and radiocarbon dating' (2002, 40). To my knowledge, this ambitious project has not yet been managed. Yet, Bradley's idea would certainly help to place the N/EBA monuments of the Yorkshire Wolds firmly within the British debate. Until recently, the lack of recent radiocarbon dates for these monuments allowed for commentary, such as Thomas', 'There will doubtless be other very early monuments so far unidentified elsewhere in Britain, but on the basis of the sample investigated to date one can hazard a guess that they will probably remain a minority of the whole' (2013, 316) and, therefore, 'discussion is necessarily somewhat provisional' (ibid. 320). 'Speculation' (Kinnes *et al.* 1983, 103) and 'secondary referencing' (Gibson & Bayliss 2010, 99) are no longer acceptable and much more work is required. A detailed radiocarbon study in the style of *Gathering Time* (2011) is therefore hopeful for the Neolithic monuments of this region, as also stated by Gibson & Bayliss (2010, 101), in order for chronologies of a similar resolution to be completed. This has recently been partially achieved by Olade *et al.* for the Bronze Age, through an inclusion

of the Yorkshire Wolds' Bronze Age barrows within their Beaker phenomenon investigations (2018, 190-196) (Figure 145). Further N/EBA Bayesian analysis of all available data will provide hard evidence from which further discussions about the Yorkshire Wolds' rightful place within the wider Neolithic and Early Bronze Age context of Britain can be commenced.

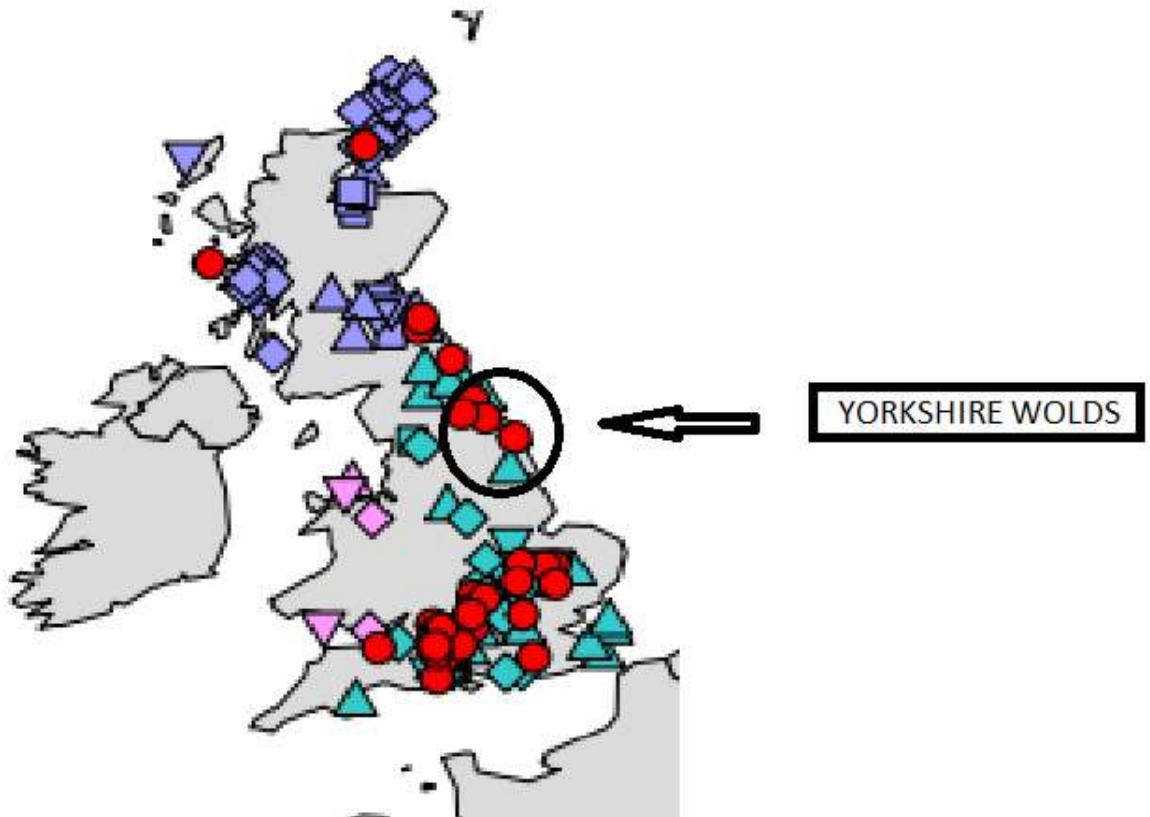


Figure 145 - Geographic distribution of samples used for the Beaker phenomenon study (Olade et al. 2018, 191). Extra annotation by E Watson.

6.7 CONCLUSION

The analysis of these early and mid-twentieth century texts was necessary to demonstrate neglect of the Neolithic and Early Bronze Age monuments of northern England, which was clearly proven in Figure 143 and Figure 144. The discussion explored the theory that the Neolithic and Early Bronze Age round and long barrows of the Yorkshire Wolds have, since the 1940s, been condemned by some as 'rubbish', despite renewed interest. The area is not 'little more than an impoverished hinterland of small intrinsic importance', as the study of Wessex has suggested (Petersen 1972, 40), nor a 'derivative' of the Neolithic period in

southern England (Brophy 2005, 2) and the concept of what is rubbish needs to be re-thought.

The introductory, general texts studied for this chapter will have been scrutinised by generations of budding archaeologists. I believe that they hold a great importance in the reasons why certain monuments, landscapes and regions have been fully investigated, whereas others have been forgotten. Childe frequently referenced Yorkshire, Northumberland and to a lesser extent, Cumberland, within his *Prehistoric Communities of the British Isles* but yet failed to mention its monuments specifically. Hanging Grimston, North Yorkshire and Garton Slack, East Yorkshire, were referenced within his footnotes (1940, 51, 125), yet did not appear within the book's Index. Skendleby long barrow, Lincolnshire, even had an accompanying drawn image and yet failed to be mentioned within the Index (Ibid., 62). These minor exclusions might have led to the conclusion that the Yorkshire and Lincolnshire monuments were less important than those in the south. The books referenced above have, albeit subconsciously, implanted or confirmed the view that the monuments of northern England are less relevant; that, in fact, they are not worth referencing and that their omission will be unnoticed. Surely, it is the responsibility of the writer to fairly appraise all monuments within the region discussed, in this case, the whole of England; and then to offer discussions accurately and fairly regarding regional similarities and differences. Bradley (2007, xvi, 27-28) specifically emphasised this in his work and, while he might not have entirely succeeded, he can be applauded for his attempts to alter the status quo. Ashbee (1970, 1984) recognised this point well throughout his book, although he then produced an account which was primarily of south-west England's monuments, with some references to structures elsewhere.

Writers often remark about the unique qualities of the burial tradition in Eastern Yorkshire, which makes these monuments so 'durable', defined by their 'intrinsic physical properties' (Thompson 1979, 8). The long and round barrows of the Yorkshire Wolds are thought to contain both inhumations and cremations, as well as collective and individual burial rites. Megaw & Simpson highlighted the uniqueness of the two distinct burial types found within the Yorkshire long barrows (1979, 140). Harding emphasised that the 42 long and 43 round barrows in Eastern Yorkshire were very important. The co-existence of these two burial rites, both 'collective' and 'individual', within both the Yorkshire Wolds and on the North

Yorkshire Moors, was complex, challenging the long-held view that long and round barrows had opposing rites, with different treatments of the human body (1996, 67-9). Russell also noted that the Neolithic round mounds of northern England demonstrated similar features and deposits to those recorded beneath linear mounds, thus making them unusual within the overall British sequence (2002, 30). In fact, the 'individual-enhancing trajectory' appears to have been initiated in East Yorkshire (Loveday 2009, 35). Yet, the relationship between the two types of burial and the two types of Neolithic monument has been largely unexplored (Harding 1996, 67-9). Petersen offered a re-examination of the 425 antiquarian excavation accounts on the Yorkshire Wolds but, as so few 'recent' (1950s-1970s) excavation reports had been published, he had to compare his findings to 'modern barrow excavation elsewhere in southern and eastern Britain' (1972, 25). Bradley, perhaps partly from these comparisons, commented that the Yorkshire Wolds' sites contain the highest proportion of Neolithic single burials within Britain and found the contrast between Wessex and the Wolds striking (1984, 78). Frances Lynch noted that the custom of constructing round mounds and of leaving objects with the dead emerged in northern England (1997, 34). She also tackled the issue of the relationship of long mounds and causewayed enclosures. Discussing the concentration of long barrows within the Great Wold Valley in Yorkshire, Lynch stated, 'the region appears to lack the higher level of co-operative institution represented by the causewayed enclosures in the south', adding that the Neolithic round mounds which are so prominent in the Wolds are 'an acceptable variant' of those in the south. 'It is difficult to know whether they represent independent local manifestations or far-flung 'satellites' of groups more firmly established elsewhere' (Ibid., 30, 33-34). What was the focus monument type for the groups of northern England? Did they congregate around Neolithic round barrows, such as Duggleby Howe or Callis Wold 275? This issue continues to be unanswered today and further investigation is needed to provide new evidence for this discussion.

There are even more unusual features within the barrows of the Wolds. Kinnes debated the unusual 'crematoria' found within the Yorkshire Wolds' long mounds, for example, Market Weighton long barrow, East Yorkshire, or Willerby Wold long barrow, North Yorkshire (1992, 84), and Neolithic round mounds, such as Ayton East Field, North Yorkshire (1979, 58), stating that northern England's monuments, in general, were unique as they

contained both these 'crematoria', and inhumation burials. These monuments contain evidence that, at the end of the use life of the monument, a flue had been created within some of the Neolithic mounds, to create a type of pyre to burn the dead. Despite the fact that the mounds' earlier stages were comparable with chamber format and inhumation mortuary practice found elsewhere, the final stage and the deliberate firing of the chamber is an exceptional phenomenon of northern England's monuments (1992, 85). Manby *et al.* concurred that this practice can be proven at several sites in the Yorkshire Wolds, such as Heslerton, North Yorkshire, with other sites requiring further investigation (2003, 44-6; Manby 1988, 44). Grinsell had also noted this 'flue- or trench-cremation' (1953, 217), as had Ashbee, who wrote about 'burned burials' (1984, 65). He had specifically noticed that the human bones within the Yorkshire chambers were also 'set in more circumscribed groups, namely the bones of individual bodies, rather than in sorted assemblages', for example, at Rudstone long barrow, East Yorkshire (ibid. 67). Wooden avenues up to the monuments were also recorded at Kemp Howe, East Yorkshire (Kinnes 1979, 61), with a deliberate forecourt, possibly used as a ceremonial space, for example, at Willerby Wold, North Yorkshire (Lynch 1997, 30). Certainly, the long mounds' forecourts often revealed a richness of finds, such as at Kilham, East Yorkshire, and at Hanging Grimston, North Yorkshire (1992, 109). Ashbee, in his earlier barrow study, made specific and detailed references to a number of prominent and 'remarkable' Yorkshire round barrows, including Kellythorpe (1960, 73) and Duggleby Howe (ibid.74).

It is not only the Neolithic monuments which have such unique qualities. Bronze Age barrows are also a major feature of the Wolds. Elgee saw the Yorkshire Wolds landscape as 'one of the greatest centres of the beaker culture in England' (1930, 80-1). Ashbee, in particular, was very impressed with the high status of the Wolds' Bronze Age barrow burials, such as his interest in the remarkable organic preservation within the Gristhorpe timber coffin burial and the Loose Howe canoe burial, plus their associated organic assemblages (1984, 88-91). This was corroborated in 2010, when the Gristhorpe 'local big man' was re-analysed using 21st century scientific investigations and proven to have been a high-status individual, 2200-2020BC, who had 2 healed ribs and evidence of a brain tumour, who died with a superbly preserved set of grave goods (Melton *et al.* 2010, 796, 803-804, 805-808, 809-810).

So, how have these monuments lost their durability and how can they be moved back, from a dilapidated eye sore to an effective 'sight for sore eyes' (Thompson 1979, 26)?

According to Thompson's model, if an object achieves 'durability', then it will not, later transfer to the rubbish category (ibid. 45, Figure 5). Yet, this seems to be exactly what these monuments have done. The structures may be subject to cyclical fluctuations (ibid. 194), created by shifting cultural values (ibid. 215). The Neolithic long and round mounds of the Yorkshire Wolds are, as explained above, considered to be unique within the British Neolithic sequence. The Wolds landscape contains one of the largest concentrations of these monuments within the UK. However, despite their numbers and uniqueness, they have failed to draw specific, regional interest and funding from modern-day archaeological endeavours, such as a widespread field survey. Without the *benefit* (if it can be called that) of rescue excavations, which might have revealed new and exciting information about these monumental structures, the interest in them has waned and they have been neglected.

This chapter has demonstrated that the Neolithic and Early Bronze Age monuments of northern England have been marginalised in recent national discussions. From this brief analysis of publications over the last sixty years and from my longer previous study (Watson 2016), it is clear that writers have, perhaps inadvertently, or subconsciously, promoted the Wessex monuments over those in other regions.

This frequent lack of inclusion has certainly led to later omission. Earlier emphasis on these monuments might have helped to avert this issue. These were well-respected, ground-breaking studies which unfortunately have had widespread, long-term consequences. In fact, it was not until 1979 and 1992 that Ian Kinnes filled in these gaps with his seminal works about the Neolithic long and round mounds (and ring-ditches) in the whole of Britain and Catherine Stoertz added to this with her report of the RCHME's aerial survey of the Yorkshire Wolds (1997).

To look more closely at the monuments under discussion, a primary analysis has been completed in the following chapter, firstly, of Greenwell and Mortimer's excavations and

findings, and secondly, of a Pastscape trawl to uncover every referenced Neolithic monument and Bronze Age barrow of East Yorkshire.

7 CASE STUDY 2: THE BURIAL MOUNDS OF THE YORKSHIRE WOLDS IN EAST YORKSHIRE

This chapter will demonstrate how in-depth research of a landscape in northern England can yield ground-breaking results, through a case study of the Neolithic and Bronze Age structures of the chalk wolds of East Yorkshire. Using antiquarian excavation data, an analytical assessment of the structure, burials and artefacts of long and round barrows will be made, to ascertain their exceptional qualities and worth. It will be shown that fragmentation was part of everyday practice within burial rituals in East Yorkshire, as 64% (1392/2161) of bodies were found in barrows with incomplete, disarticulated or disturbed burials and/or cremations. Taphonomic damage and later disturbance aside, these results emphasise that the burial picture in East Yorkshire is far more complex than previously understood. The discussion will then evaluate how further research in this region can provide a more balanced perspective of our overall understanding of British prehistory.

Driving through the Yorkshire Wolds' landscape is picturesque! A day trip there by bike, by car or on foot displays rolling hills, delicate dales with carefully manicured fields, deep green valleys and attractive villages...a painter's dream (Figure 146). This landscape inspired painters such as David Hockney.

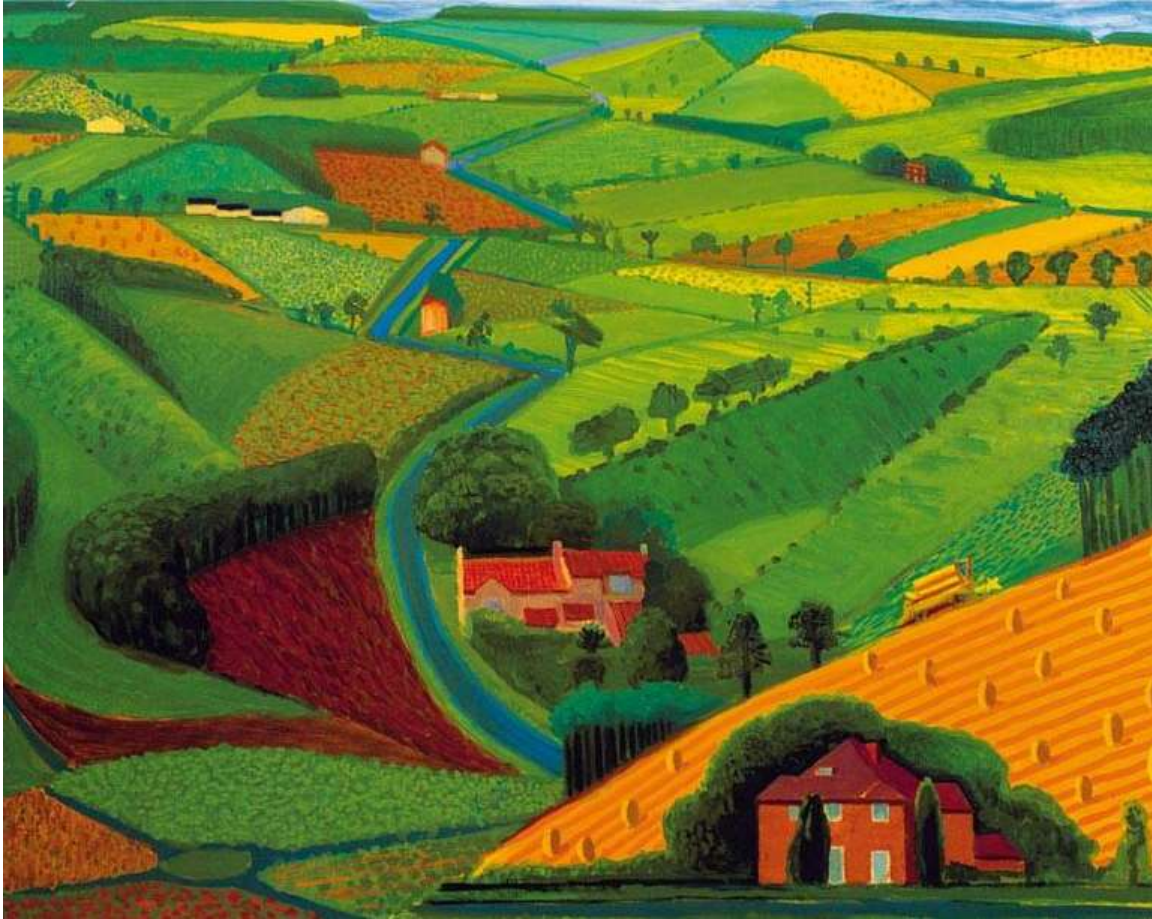


Figure 146 -The Road Across the Wolds, David Hockney (<https://saltmillshop.co.uk/products>)

It is not until one realises that this landscape used to boast at least 1,147 Neolithic and Early Bronze Age monuments (Figure 115). These comprised Neolithic long and round mounds, cursuses, henges and a monolith, as well as Bronze Age barrows. This does not include the vast numbers of Iron Age, Roman and Anglo-Saxon barrows, also lost, nor any of their settlements and associated landscapes. One cannot comprehend the quantity and quality of barrows that have been flattened, to create this pictorial countryside. Beneath the charming, agriculturally-managed dales, lie a complex series of impressive and often unique burial structures and contemporaneous Neolithic and Early Bronze Age features of varying sizes and shapes. As can be seen and understood from the map above (Figure 115), these monuments must have dominated their surroundings. The burials they contained were often deliberately placed; some of the grave goods laid with the dead were highly

valuable and may have held magical properties. They represented a complex society of specialist craftworkers, their families and associated groups. Many deceased were buried in coffins; under or on stones; surrounded by ring cairns or within dug graves, often with many accompanying objects. The numbers of barrows and their proximity to one another are staggering. Yet, despite many extant structures in the 1800s, the majority have now disappeared from the surface, due to agricultural improvements of the landscape and many may ultimately be de-scheduled.

The sheer numbers of monuments have been highlighted in several surveys. Ian Kinnes' completed two gazetteers of Neolithic non-megalithic long and round mounds in 1979 and 1992, both of which listed substantial numbers of monuments on the Yorkshire Wolds. Catherine Stoertz accomplished a huge study of the aerial photography of the Yorkshire Wolds in 1997. Nevertheless, books written about N/EBA barrows over the last 40 years have mainly focussed their discussions on southern England, with general references to barrows elsewhere in Britain (see Chapter 7). Thorpe and Richards provided a general comparison of the barrows of Yorkshire and Wessex. They stated that there was a lack of comparative material for Yorkshire, which a series of Wessex excavations had provided (1984, 70). F. Petersen (1971) and later Koji Mizoguchi (1993) did analyse the evidence from many barrows within East Yorkshire but no comprehensive monument analysis has been completed, hence the need for this case study. Fortunately, several current, ongoing projects are starting to provide comparisons between the barrows of East Yorkshire and those elsewhere. These will be discussed later in the chapter. The results of this chapter will demonstrate just how much data can be gleamed from historic legacy data and how much value that information can hold. This analysis was completed using the original excavation data provided by John Mortimer and William Greenwell, as well as a comprehensive study of Historic England's Pastscape data for East Yorkshire.

7.1 ATTRITIONAL SEQUENCE

This study has been completed to provide an insight into the benefits of a desk-based assessment, which incorporates legacy data and antiquarian excavation techniques. In total, 1,147 structures were included within this wider study (Table 54). At least 1,127 Neolithic and Bronze Age barrows were clustered along low ridges, many intervisible and

potentially contemporaneous, including Neolithic long and round mounds, oval and mortuary enclosures, Bronze Age barrows and ring ditches. With approximately 1,352 Neolithic and 15,486 Bronze Age barrows in England (Pastscape data, February 2019), a study of these monuments is important. The 1,147 Neolithic and Early Bronze Age monuments in eastern Yorkshire account for 6.81% of the total monuments in England, that is, three times as many monuments per area as other regions in England, as the land areas of the Yorkshire Wolds and the Vale of Pickering together account for 2,979 kilometres squared (2,479 & c.500, respectively), which is 2.28% of the total land area of England (130,395 kilometres squared) (www.google.com).

County	Total
East Yorkshire	1083
BA barrow	940
BA barrow Henge	1
Barrow	1
Cursus	5
Enclosure	4
Henge	7
Hengiform enclosure	7
Long barrow	38
Mortuary enclosure	1
Neolithic round barrow	39
Oval enclosure	1
Ring ditch	35
Ring ditch Henge	3
Standing stone	1
North Yorkshire	64
BA barrow	44
Henge	1
Long barrow	11
Neolithic round barrow	8
Total	1147

Table 54 – Total Neolithic and Bronze Age monuments for the Yorkshire Wolds and the Great Wold Valley

This regional analysis firstly plans to demonstrate the differing local treatment of and survival of monuments in a lesser studied and less well known area (Woodward & Hunter 2015, 1) of Britain. The study area comprises a group of low hills, each known as a wold or upland moor, with long open valleys to the north and west, the sea to the east and the wide Humber estuary to the south. The area to the north had been occupied by the earliest

inhabitants after the last glacial maximum, over 11,000 years ago. Living along the shores and islands of Lakes Pickering and Flixton between 9,300 and 8,400 BC, Mesolithic foragers invested a large amount of time and effort into the creation of and habitation of their world. Along the lake shore, they knapped flints for tools, including axes; hunted and manipulated deer, elk and auroch bones (among others); completed complex wood-working episodes to construct walkways, platforms, causeways, boats, houses and tools; worked with reeds and wetland plants to make mats, baskets and other items; and gathered nuts, seeds and fruits (Milner *et al.* 2018, Volumes 1 & 2; Milner *et al.* 2013, 49-50, 60, 75, 86).

The earliest long and round barrows were constructed in the at the start of the fourth millennium BC (Table 55). Yet, by 2003, there were only 54 excavated Neolithic, sites within the whole of Yorkshire, the largest county (Manby *et al.* 2003, 40). Agricultural operations have destroyed many barrows, before they could be excavated. The issue of ploughing in Yorkshire has been discussed for more than a hundred years. William Greenwell recognised the threat posed by the plough. He wrote of barrow groups, where one barrow had been completely removed for 'agricultural operations'. Others 'had been more or less ploughed down, and some secondary burials had most probably been destroyed in consequence' (1877, 160). John Mortimer commented about the Garton Slack barrow group, 'This is one of the largest groups, and occupies the whole of the valley...It consists of thirty-five barrows, four only of which are shewn on the Ordnance Map, the remaining thirty-one having been so far erased from the surface as to have escaped the eyes of the Surveyors. There are, probably, a few others, the sites of some of which may yet be found' (1905, 208). A.L. Pacitto excavated Rudston barrow LXII in 1968, as ploughing was rapidly reducing its height and excavation therefore was a matter of urgency (1972, 1). It had been 1.35m high in 1869 when it was excavated by Greenwell and much worn down by the plough even then (1877, 235). Pierpoint noted the continuing destruction by ploughing in the Yorkshire Wolds (1981, 41). Elsewhere in England, Sale's Lot, excavated by Helen O'Neill in 1965, was subjected to a large-scale investigation as the site was due to be bulldozed during an agricultural improvement scheme. Darvill stated that this drew attention to the negative impact of arable cultivation on long barrows (2004, 41).

Yet, the destruction of Callis Wold 275, a Neolithic round barrow to the east of Stamford Bridge, East Riding, seemed unnecessary. It was totally excavated in advance of farm extensions in the 1970s, even though a large part of the barrow was extant (Mortimer 1905, 161-3; Coombs 1976, 130). During its excavation, the significance and unique nature of the monument was shown, both due to its inhumation and cremation burials on a chalk-slabbed platform and within an associated pit and thanks to its Early Neolithic dates of 3800-3500 cal BC (Manby *et al.* 2003, 49). Pierpoint discussed the short chronological horizon of the Yorkshire 'crematorium' barrows, with all dates fitting in between Seamer Moor and Hanging Grimston barrows (1981, 224-5). Ayton East Field (Seamer Moor) has more recently been dated to 3950-3700 cal BC (Manby *et al.* 2003, 44). A more general date has been posited for Hanging Grimston, from the Grimston ware found within the long barrow, dating to circa 4150-3500 cal BC (*Ibid.*, 47) (Table 55).

Name of site	Location	Determination	Radiocarbon dates calBC	Confidence	Source
Kemp Howe	SE962662	antler	4240-3640 cal BC	?	Gibson & Bayliss 2010, 105
East Heslerton	SE938752	charcoal	4050-3630 cal BC	?	Gibson & Bayliss 2010, 105
Willerby Wold	TA029621	centre of facade trench (Quercus)	4050-3370 cal BC	?	Gibson & Bayliss 2010, 105
Whitegrounds	SE782682	charnal usage/human bone	4040-3640 cal BC	?	Manby <i>et al.</i> 2003, 43
Willerby Wold	TA029621	base of cremation trench (Quercus)	3990-3360 cal BC	?	Gibson & Bayliss 2010, 105
East Heslerton	SE938753	charcoal, Quercus spp., heartwood	3970-3650 cal BC	?	Gibson & Bayliss 2010, 105
Ayton East Field	TA000864	charcoal from internal timber post structure	3950-3700 cal BC	?	Manby <i>et al.</i> 2003, 44
Leven, Holderness	TA106453	hazelnuts in pits with Grimston-style pottery assemblage	3950-3659 cal BC	?	Manby <i>et al.</i> 2003, 47
East Heslerton	SE938753	wood charcoal	3950-3520 cal BC	?	Gibson & Bayliss 2010, 105
Kilham long barrow	TA056675	charcoal	3950-3350 cal BC	?	Gibson & Bayliss 2010, 105
Kemp Howe	SE962662	charcoal (mature oak)	3920-3380 cal BC	?	Gibson & Bayliss 2010, 105
Wold Newton	TA048726	Child mandible	3805-3705 cal BC	90%	Gibson & Bayliss 2010, 83
Wold Newton	TA048726	Burial 2 left femur	3820-3690 cal BC	87%	Gibson & Bayliss 2010, 84
Callis Wold 275	SE830562	charred timber posts from façade structure	3800-3500 cal BC	?	Manby <i>et al.</i> 2003, 49
Boynton (High Easton) barrow 1	TA156704	post terminals	3790-3380 cal BC	?	Manby <i>et al.</i> 2003, 49
Leven, Holderness	TA106453	hazelnuts in pits with Grimston-style pottery assemblage	3788-3502 cal BC	?	Manby <i>et al.</i> 2003, 47
Wold Newton	TA048726	Burial 7 left mandible	3645-3520 cal BC	95%	Gibson & Bayliss 2010, 84
East Heslerton	SE938752	charcoal	3640-3120 cal BC	?	Gibson & Bayliss 2010, 105
Towthorpe 18	SE89816495	Individual 4 right mandible	3475-3365 cal BC	70%	Gibson & Bayliss 2010, 104
Duggleby Howe	SE879668	Antler macehead associated with Burial G	3500-3130 cal BC	?	Gibson & Bayliss 2010, 104
Fox Covert / Greenwell LXI	TA098658	carbonised residue	3350-3010 cal BC	?	Gibson & Bayliss 2010, 104
Grindale barrow 1	TA148702	charcoal layer within ditched enclosure	3500-2790 cal BC	?	Manby <i>et al.</i> 2003, 49
Whitegrounds	SE782682	crouched inhumation	3500-2910 cal BC	?	Manby <i>et al.</i> 2003, 53
Kemp Howe	SE962662	charcoal	3340-2670 cal BC	?	Gibson & Bayliss 2010, 105

Table 55 – Chronological chart of gathered radiocarbon dates for Neolithic long and round mounds in East Yorkshire and the Great Wold Valley (Manby *et al.*, 2003; Gibson & Bayliss, 2010)

Despite this, 24 secure radio-carbon dates from Earlier Neolithic monuments have recently been published (Manby *et al.* 2003, Gibson & Bayliss 2010). These include human bone, timber, charcoal, hazelnut and antler dates (Table 55). One of the monuments with secure radio-carbon dates is Duggleby Howe, with dates between 3500-3130 cal BC for the Neolithic round mound and 2550-2200 cal BC (95% confidence) for the interrupted ditched enclosure surrounding the monument (Hamilton 2011, 27, 29), partially excavated by Gibson *et al.* in 2009 (2011).

Another nearby monument complex lies on the edge of the Wolds: Rudston monolith and associated cursuses, for which there are no available radiocarbon dates. However, through the primary silts of Cursus A, the cutting of a pit provided a laurel-leaf arrowhead, similar to those found in context with Towthorpe Ware in the region. Roy Loveday has therefore dated the cursuses to the Middle Neolithic period (3600-3300BC) (2006, 165), which implies that the standing stone must be earlier, due to the impossibility of dragging it over a fresh cursus. These tie in with the Cumbrian Langdale quarry dates of 3800 to 3300BC (Bradley *et al.*, 2019, 1). Contra Durden (1995, 431) and thanks to the work completed by Henry Chapman (2005), discussed above, regarding the deliberate alignment of the cursuses to keep earlier monuments within their viewshed, it is contested that the Rudston cursuses and long barrows form part of an earlier not later Neolithic landscape.

The Gypsy Race stream, which although small now, dominates the valley and is of great importance to the region. As the only source of water within the wide valley bottom by 4000BC, it is not surprising that Early Neolithic long and round mounds began to be constructed along its length. Comparable to the size of Duggleby Howe, Willie Howe and Wold Newton 284 lie close together to the north-north-west of the Rudston monolith, near another Gypsy Race spring (Loveday 2006, 179). Denby, Rudston and Kilham long barrows all lie nearby. The original timber mortuary enclosure at Kilham, for example, constituted a 'massive and elaborate' phase of construction, independent of the banked burial chamber (Manby 1976, 148). Despite this, these Earlier Neolithic monuments were not respected in the building of the cursuses. Rather, the Neolithic long and round mound builders built their monuments away from the confines of the monolith, thought by Loveday to be Mesolithic in date, although the cursuses align on the standing stone (*Ibid.*, 167). Mark Edmonds has referred to the Rudston standing stone as 'axe-shaped' (1995, 53; Bradley

1990, 55). In fact, the whole landscape around Rudston has 'an unparalleled range and quantity of elaborate flint and stone artefacts', such as glass-like, smooth, waisted axes; hand-polished, 'remarkable' and 'greatly valued' rectangular flint knives; and a major concentration of Earlier Neolithic (3800-3300BC) flint axes (Loveday 2006, 164). Having also been found within Aldro C75 and Duggleby Howe, the flint knives can be loosely dated to approximately 3300BC (ibid., 174-175). Their production was well beyond functional necessity, from the thinness of the flakes and difficulty of production, the lavish attention to polishing and the lack of hafting. In fact, they are the exact parallel of the European rectangular copper flat axe, with dates of 3400-2900 cal BC. The prestige objects, known as Seamer axes and Duggleby adzes, were polished to a glass-like sheen and made using the red, yellow, orange and mottled colours of the local coastal Devensian till for their creation (Loveday 2009, 36-37, 39). These were sometimes accompanied by a beautifully-created jet belt slider, such as, at Whitegrounds barrow (Brewster 1984, 12).

Numerous Group VI axes from Great Langdale, Cumbria, have also been found within a 20km radius around the Rudston monolith (Loveday 2009, 35, 46). Group I Cornish and Group VII Graig Llwyd axes, from Wales, are clustered around the standing stone and to the east, where there is also a large concentration of edge-polished flint axes, the material of which probably derived from the cliffs around Flamborough Head, where there is evidence of specialist artefact production (Durden 1995, 409). Given that the Gypsy Race may have emitted fountains of water at seasonal intervals, with the springs moving westwards over the period, this offers a possible reason for a link between Great Langdale and the Great Wold Valley (Loveday 2006, 168-9).

Other Later Neolithic and Early Bronze Age barrows were erected in the Yorkshire Wolds throughout this period. Unlike those further north in and around Northumberland (Fowler 2013, 215), many of the barrows in East Yorkshire were constructed in linear patterns along the ridges of the wolds, along the watersheds, visible from below and prominent within the landscape. Very few have been dated, so it is not clear whether they were all in use at the same time or built sequentially. Their construction may have been a yearly ritual. However, many of the barrows must have been extant during this period and not ploughed flat, as some long barrows had round barrows constructed over their lower end, such as Whitegrounds, East Yorkshire (Brewster 1984) or Great Ayton chambered cairn, North

Yorkshire (Hayes 1967, 12-17). No excavator, however, referred to any evidence of barrows which had been built over the partial footprint of a long-flattened mound. Instead, they noted that barrows often had an earlier, smaller mound within (such as Greenwell LXIV, Rudston Parish) (1877, 252) (PastScape 79491); or a stone circle within (for example, the flat, upright, sandstone slabs, which created a circular enclosure within Mortimer's Barrow 83, Painsthorpe Wold group, Kirby Underdale) (1905, 119) (PastScape 61657), implying phases of construction. In two cases at least, Greenwell considered the barrow to have been constructed over a dwelling (Barrow CV, 1877, 315-316; Mortimer Barrow 110, 1905, 102-105).

The burial record for the whole Neolithic period is healthier in East Yorkshire than in other regions (Thorpe & Richards 1984, 71). Whitegrounds barrow, mentioned above, is an Early Neolithic long barrow, with one of the earliest radiocarbon dates for the region (4040-3640 cal BC) (Table 55). It is also one of the most interesting barrows in the area. The primary burials were three inhumations (child, adult, disarticulated), all without skulls; three extra skulls, not from those bodies; the skeleton of a dog/fox and the disturbed remains of five further individuals. These were associated with Grimston Ware sherds. A pit, within a later round mound built on top of the long mound, dug into the centre of the primary cairn, contained a crouched inhumation, dated to 3500-2910 cal BC (Manby *et al.* 2003, 43), with significant grave goods: a jet belt slider and a waisted polished flint axe. Below the inhumation was a small pit containing a pig humerus and a calf mandible, with traces of a possible wooden cover. The crucial point to emphasise here is that the crouched inhumation and grave goods offer a Middle-Late Neolithic date. This custom of constructing round mounds and of leaving objects with the dead is known to have emerged in northern England (Lynch 1997, 34) by the middle of the fourth millennium, such as, at Callis Wold, Duggleby Howe, Wold Newton and Towthorpe. Here, the burials were accompanied by flint arrowheads, ceramic vessels and animal bones (Bradley 2019, 77).

During the Bronze Age on the North Yorkshire Moors, to the North, people were dividing up the landscape and farming parcels of land, visible from the linear barrows on their skylines (Spratt 1989, 36-37). Clearance cairns and lynchets demarcated these Bronze Age zones or 'estates' (Ibid.). That possible picture has been completely lost in the Yorkshire

Wolds, due to the nature of the soil, the lack of stony outcrops and destructive agricultural practices which have removed any trace of these landscapes.

The Middle Bronze Age saw the appearance of numerous dykes or linear boundaries within the Wolds. These earthworks divided up the landscape into territories. Constructed from approximately 1000BC, many were still upstanding in the nineteenth century and noted, in particular, by Mortimer (1905), who detailed them as entrenchments on his hand-drawn map (1905, Introduction). However, many are now severely denuded, due to the massive impact of ploughing and quarrying in East Yorkshire, such as, the area of Heslerton Parish (Powlesland 2003, 277), where the total rescue excavation of an Anglian settlement and cemetery was completed ahead of mineral extraction between 1977 and 1986 (Powlesland 1998).

In the Wolds, the compulsion to construct barrows restarted during the Iron Age. Arras Culture-rich burials in square-ditched barrows have been researched since the 1960s and 1970s, when over 700 burials were examined in East Yorkshire. They have been dated to the later 5th or early 4th centuries BC, based on Stead's metalwork typology (Mackey 2003, 117).

During the earlier Anglo-Saxon period, new burials mounds were again constructed. Neolithic and Bronze Age barrows were also re-used as cemeteries for the dead, some enlarged as with Barrow I, Uncleby, East Yorkshire (Greenwell 1877, 135). At others, secondary interments and cremations were inserted into the sides of Neolithic and Bronze Age barrows. Seven Anglo-Saxon burials, for example, were excavated at Duggleby Howe (Mortimer 1905, 23-42; Gibson *et al.* 2011; Gibson, Bayliss *et al.* 2009). In the later Saxon period, Neolithic barrows transformed into locations feared by the general population, possibly due to an association with continuing pagan and heathen practices in an early Christian world (Semple 1998, 109, 120, 123). At Walkington Wold, Reynolds excavated 15 later Anglo-Saxon criminals, one of whom was decapitated (Reynolds in Semple 1998, 111). Many barrows were probably named around this time, such as, Elf Howe Neolithic round mound, Flixton Wold, Folkton Parish (Greenwell 1877, 271-272) (Pastscape 79759).

The populations of villages in East Yorkshire increased during the Medieval period. Many Norman churches are upstanding, such as North Dalton, often with later, elaborate additions. Farming has dominated the landscape from that period onwards to today. The study of Greenwell and Mortimer's barrow excavations, as well as the analysis of all known Neolithic and Bronze Age barrows of the Yorkshire Wolds, will demonstrate (below) how few of these monuments survived in their original condition, even in the nineteenth century. Of the 1,127 barrows, 338 were only discovered through aerial photography. A further 2 were revealed by coastal erosion. Even in the nineteenth century, agricultural improvements included the levelling of barrows (Knox 1855 in Manby *et al.* 2003, 36), including Iron Age Arras Culture cart burials in square barrows (Stead 1991, 1). The issue of plough damage was well understood and acknowledged by antiquarians, such as Thomas Bateman (1861). Antiquarians provided some lengthy explanations of how they found the barrows and their condition at the time and were concerned about the issue, hurrying to complete excavations prior to their disappearance. Mortimer was thankful he had opened Towthorpe Barrow 18 three times in order to really understand and explore it as, a few years later, it was completely removed by the then tenant of the farm and spread over the surface of the adjoining land. Mortimer wrote, 'Had it not been explored, it would have been one more addition to the large number of barrows thus removed before having yielded its well-kept secrets of the past' (1905, 11). Thomas Bateman conducted barrow rescue excavations of barrows, where ploughing had revealed body parts or internal stone structures or cists (1861, e.g. 231-232).

To further complicate the picture, early excavators dug into barrows, turning over the whole mound in their searches for burial evidence. Many of the barrows excavated by antiquarians were probably destroyed after the excavations. Yet, Mortimer wrote that six or more 'workmen...were employed in restoring the form of the mound' after the excavation at Barrow C39 (*Ibid.*, 6). It is not clear whether this was commonplace practice by Mortimer or an unusual event. It is evident though, from Mortimer's comments above, that once a barrow had been thoroughly excavated, its worth drastically diminished. Barrows were ploughed but also dug into for rabbits or to bury diseased animals; they were removed for road repairs or for the marling of fields; they were cut into by Iron Age or Medieval people or had already been opened before the antiquarians. Mortimer used the

field names in the Yorkshire Wolds to add to his view that many barrows had been ploughed flat in the past, as there were so many fields with the names mound or hill, stating 'Where the land has been long tilled few remain visible' (ibid., 193-4).

Although scheduling of plough-damaged barrows was completed in the early 1960s (Stead 1991, 1), many of these monuments have not been seen by the state since the 1970s or the 1990s, when the barrows were visited during the Ministry of Works and the Monument Protection Programmes. Much of the 1990s data also came from the huge survey completed by Catherine Stoertz and the RCHME, of all known photographic archives of aerial data of the Yorkshire Wolds (1997). In fact, her work was part of a wider English Heritage National Mapping Programme which, by September 2000, had only covered 27% of England. Despite the Wolds' mapping and work in the Yorkshire Dales, the rest of northern England had failed to be included within the project (Figure 147).

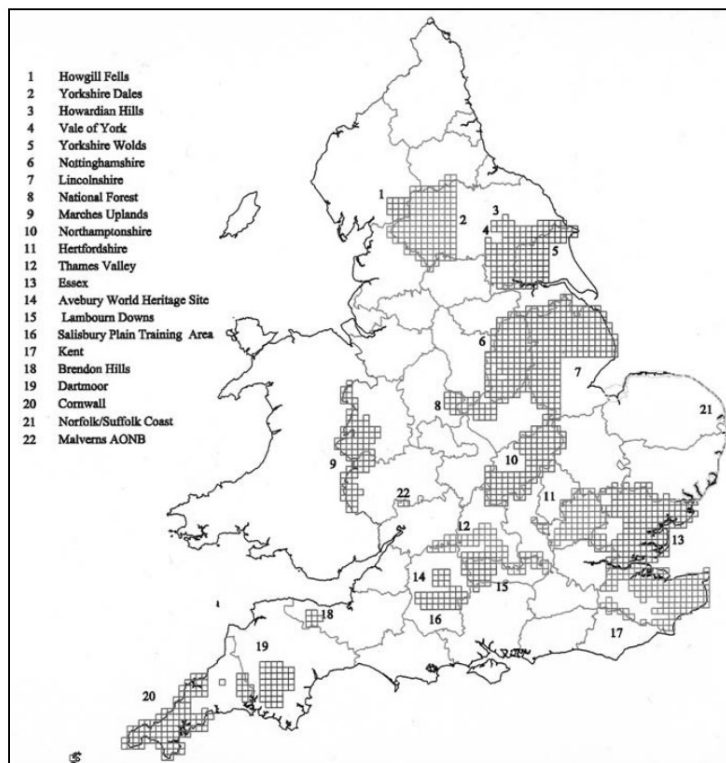


Figure 147 - English Heritage's National Mapping Programme to 30 September 2000. Each square represents 25 square kilometres. Bewley (2001, 77, Figure 2).

Many more barrows have only been identified by later aerial photography and have already disappeared at ground level. In fact, the numbers of ploughed out and levelled barrows has increased dramatically over the last 170 years. This is shown in the tables below (Table 56

& Table 57). However, we must exercise a level of caution here. It is well known that there can be problems distinguishing the smallest henges from the remains of round barrows when they are levelled by the plough (Bradley 2019, 132) and, without excavation, only assumptions can be made regarding these structures.

Yorkshire Wolds	Lost pre 1850	Lost 1850-1900	Lost 1900-1959	Lost 1960-70s	Lost 1980-90s	Lost 2000-today
Total lost barrows	1	20	56	349	513	727

Table 56 -Total lost barrows over time in the Yorkshire Wolds and Great Wold Valley

Current state of monument	Total
Destroyed	727
Extant	15
Status unknown since 2000	406

Table 57 – Current state of 1,127 barrows in the Yorkshire Wolds and Great Wold Valley

Currently, 63% (727/1,127) of barrows are known to have been lost (from my own fact checking and field observations, August 2018, May and June 2019), with a further 406 whose dimensions are now unclear, given PastScape’s data. This unfortunately implies, from PastScape’s data, that only 15 barrows are definitely upstanding. Since 2000, they have been formally checked, found to be extant and this data has been logged on PastScape’s website (May/June 2019). As stated, much of the height data for all other ‘upstanding’ barrows actually pertains to field visits in the 1970s and 1990s. If they have been ploughed flat since those dates, PastScape has not been updated, such as PastScape monument number 64585, (<https://www.pastscape.org.uk>).

Even though some have not been completely destroyed, it is clear that over time, their heights have been significantly reduced. This data was obtained, both from Greenwell and Mortimer’s height data and from the varying reports submitted to PastScape about each monument (Figure 148). The green dots below indicate the current elevation of barrows, the majority of which are at 0 metres. In fact, the colour clusters clearly demonstrate the effect of ploughing within the Yorkshire Wolds’ region. Over the last 200 years, the majority of the Neolithic and Bronze Age barrows of the Yorkshire Wolds have been ploughed out, their contents most likely lost.

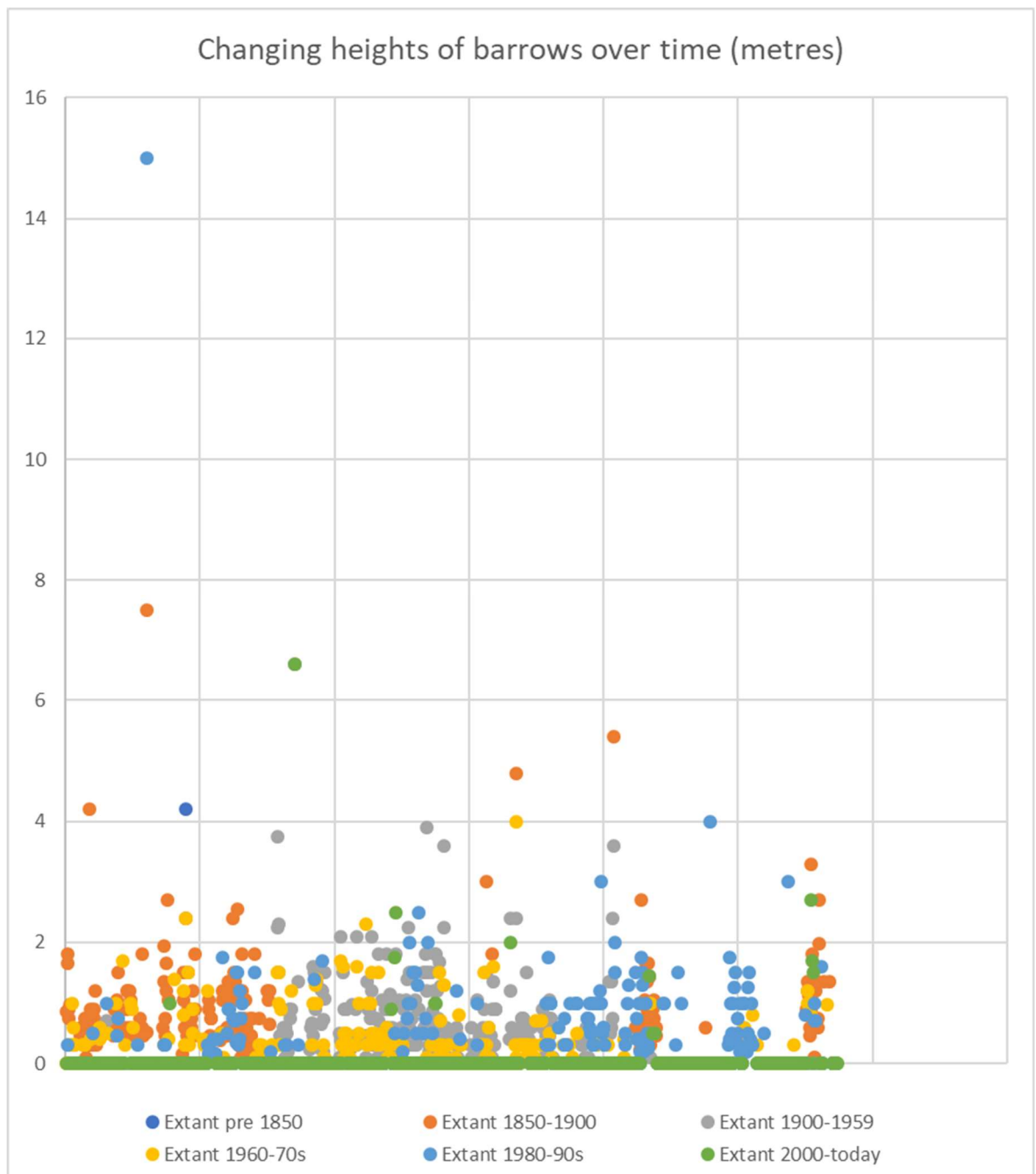


Figure 148 – Changing barrow heights over time in the Yorkshire Wolds and Great Wold Valley

The Ministry of Works, and later the Ministry of Public Building and Works, who noted reducing heights of barrows in their surveys of the Yorkshire Wolds in the 1960s and 1970s, did not recommend a change in the law, to prevent further destruction and to protect the remainder of the barrows. Over thirty years ago, Tim Darvill asserted that ‘attitudes are beginning to change in the wake of growing support for nature and countryside conservation’ through ‘changes in agricultural policy’ and ‘less intensive farming operations’ (1987, 1). Darvill called for ‘the development of a...strategy for the preservation of archaeological sites on a large scale’, considering it ‘critical...for our own and future

generations to enjoy' (Ibid.). Despite that, the destruction of over a thousand Neolithic and Bronze Age monuments has been allowed to continue in the Yorkshire Wolds' region.

Scheduling was originally designed to acquire 'nationally important' prehistoric monuments for protection by the State. These are meant to be 'closely managed', requiring Class Consent for work on the land. The Class Consent for agriculture permits some existing agricultural operations, which already benefit from this Class Consent, to continue. Certain operations that may be particularly damaging to the buried archaeological remains are excluded from the Class Consent: for example, ploughing where this does not already have Class Consent; ploughing to a greater depth than that previously carried out lawfully; subsoiling; drainage works; planting or uprooting trees, hedges or shrubs; the stripping of top soil; tipping operations; or the commercial cutting and removal of turf (Historic England, 2014). The Ancient Monuments and Archaeological Areas Act 1979 was developed to preserve ancient monuments of national importance, 'in the state in which they have come down to us'. This process of protection seems unnecessary if ploughing is allowed over these structures, especially when it is a criminal offence to damage or destroy Scheduled Monuments (2013, 4).

The Neolithic and Bronze Age monuments of the Yorkshire Wolds' region have already been highlighted as exceptional. Kinnes demonstrated the prominence of the region for non-megalithic round barrows. At the time of publication, there were 48 Early Neolithic round barrows in northern England, compared with 26 monuments in southern England, 16 in the Midlands and 4 in Scotland (1979, 40, 42, Figures 4.4a & 5.2). Yorkshire is also one of only three areas in Britain with high concentrations of non-megalithic long barrows (Ibid., Figure 5.3).

As stated above, Frances Lynch queried the lack of Neolithic communal monuments, such as causewayed enclosures, in northern England. She pondered the role of Neolithic round mounds like Callis Wold 275 and Duggleby Howe. Might these and/or the cursuses and standing stone at Rudston have been northern equivalents of those structures? This issue continues to be unanswered today and further investigation is needed to provide new evidence for this discussion.

7.2 LEGACY DATA AND EXCAVATION TECHNIQUES

A detailed assessment of the Neolithic and Bronze Age barrows of the Yorkshire Wolds was undertaken through a two-part study. Firstly, a primary analysis was completed of the legacy data of the excavations of the Yorkshire Wolds' barrows in books by William Greenwell (1877) and John Mortimer (1905), using their published excavation accounts, as can be seen on the map (Figure 149). Secondly, all available barrow data for East Yorkshire was logged, using Historic England's Pastscape website, to try to get a comprehensive picture of the numbers of original barrows and their locations within the region.

Canon William Greenwell (1820-1918) was born in County Durham. In 1839 and 1843, he gained an undergraduate degree and later a Master of Arts in Theology from Durham. He was a member of the upper echelons of northern Victorian society as a well-established cleric, from a landed background (Rob Young, pers. comm.). In 1877, Greenwell published *British Barrows*. It included sections on both Bronze Age round barrows and Neolithic long barrows. The volume contained Greenwell's research and excavation data. It mostly related to barrows in northern England, including those in the North Riding (1877, 33-357; 484-7; 501-5; 509-10; 550-3) and East Riding (ibid., 132-331, 487-501; 505-9; 553-6), which have been assessed for this chapter. Greenwell felt that his record of barrows would preserve the knowledge of the contents of these 'sepulchral mounds' which had, even in those days, already been 'destroyed by shepherds' for their own curiosity and treasure-seeking (1877, Preface).

John Robert Mortimer (1825-1911) lived in East Yorkshire, where he was responsible for the excavation of 311 barrows in the Yorkshire Wolds over many years. He recorded his and his brother's work, in a book published in 1905, called *Forty years' researches in British and Saxon burial mounds of East Yorkshire*. They had many, mainly employed workers, digging for them. John Mortimer recorded the excavations in detail and his talented daughter illustrated the finds beautifully. The book itself is a masterpiece, with the compilation of a thousand detailed illustrations of finds from Yorkshire barrows (1905, Introduction).

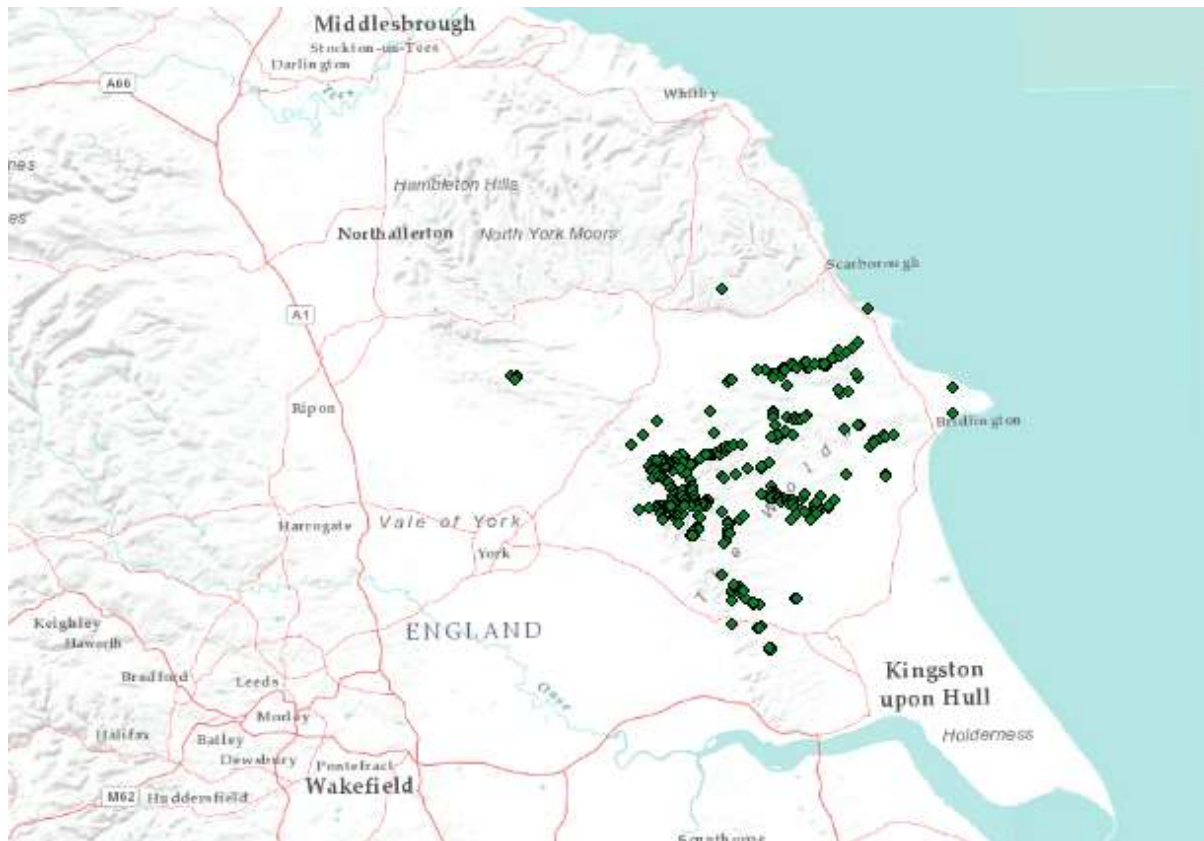


Figure 149 – Locations of Greenwell & Mortimer's barrow excavations

Both excavators provided details on the state of each monument before excavation: its height and diameter, previous disturbances (such as for the interment of 18th and 19th century dogs and cattle) and the level of ploughing undertaken. As they dug, they wrote about interred, cremated or disturbed burials and incomplete corpses, with burial information about how and where the body or cremation had been placed within the grave or barrow. This was sometimes difficult to ascertain, owing to the variable level of detail provided in each antiquarian barrow account. Artefactual details included the tools, pottery and special artefacts or specific burial details (such as, an inner stone circle, organic remains or evidence of burning). Later burial mound additions and any other details were also logged. The terminology, used by the antiquarians to describe the artefacts, was sometimes unclear or inconsistent and therefore the data collected for this study has its inherent limitations. Nevertheless, it enables us to gain an insight into the Neolithic and Bronze Age barrow excavations in the Yorkshire Wolds and provides quantification for future research purposes.

Both have had their excavation techniques and recording defended by modern archaeologists (Darvill 2004, 59; Grinsell 1975, 115; Ashbee 1960, 22), unlike Colt Hoare

and Cunnington in Wiltshire, whose techniques are now considered poor in comparison. Yet, at times, Greenwell left others to complete the excavations, which led to accusations of negligence and unprofessional conduct (Kinnes & Longworth 1985, 10). When his barrows have been re-excavated, modern-day techniques have uncovered far more material, such as at Rudston 62. It was excavated by Greenwell (1877, 234-245), then by C & E Grantham (1960) and later by A.L. Pacitto in 1968 (1972, 1-22) (Kinnes & Longworth 1985, 61-68). However, Pacitto did concur with many of Greenwell's comments and some of Greenwell's measurements (1972, 4).

Greenwell and Mortimer provided differing and fascinating details about their excavations. Yet, it is interesting to note differences in the two antiquarians' digging styles. They both analysed the contents of their barrows in slightly different ways. Greenwell dug barrows throughout northern England mainly between 1862 and 1901, with publications in 1877 and 1890 (Kinnes & Longworth 1985, 15-16). Some barrows were allocated many pages of discussion regarding their contents, the soil types, as well as details and pictures of specific artefacts. Other barrows were only afforded a couple of lines of text, with no images. In his written account, he focussed on a linear progression, such as the parishes west-east of Heslerton, Sherburn, Ganton and Willerby at the northern edge of the Wolds. He began his discussion of barrows in Kirby Underdale parish, overlooking the plain towards York (1877, 135). He then proceeded into Langton Parish, to the north, then eastwards to Kirby Grindalythe (Figure 150). As can be seen in the map below, there was logical movement in Greenwell's barrow investigations. He followed the barrows along the ridges of the wolds, usually starting new investigations in sight of those barrows he had just excavated.

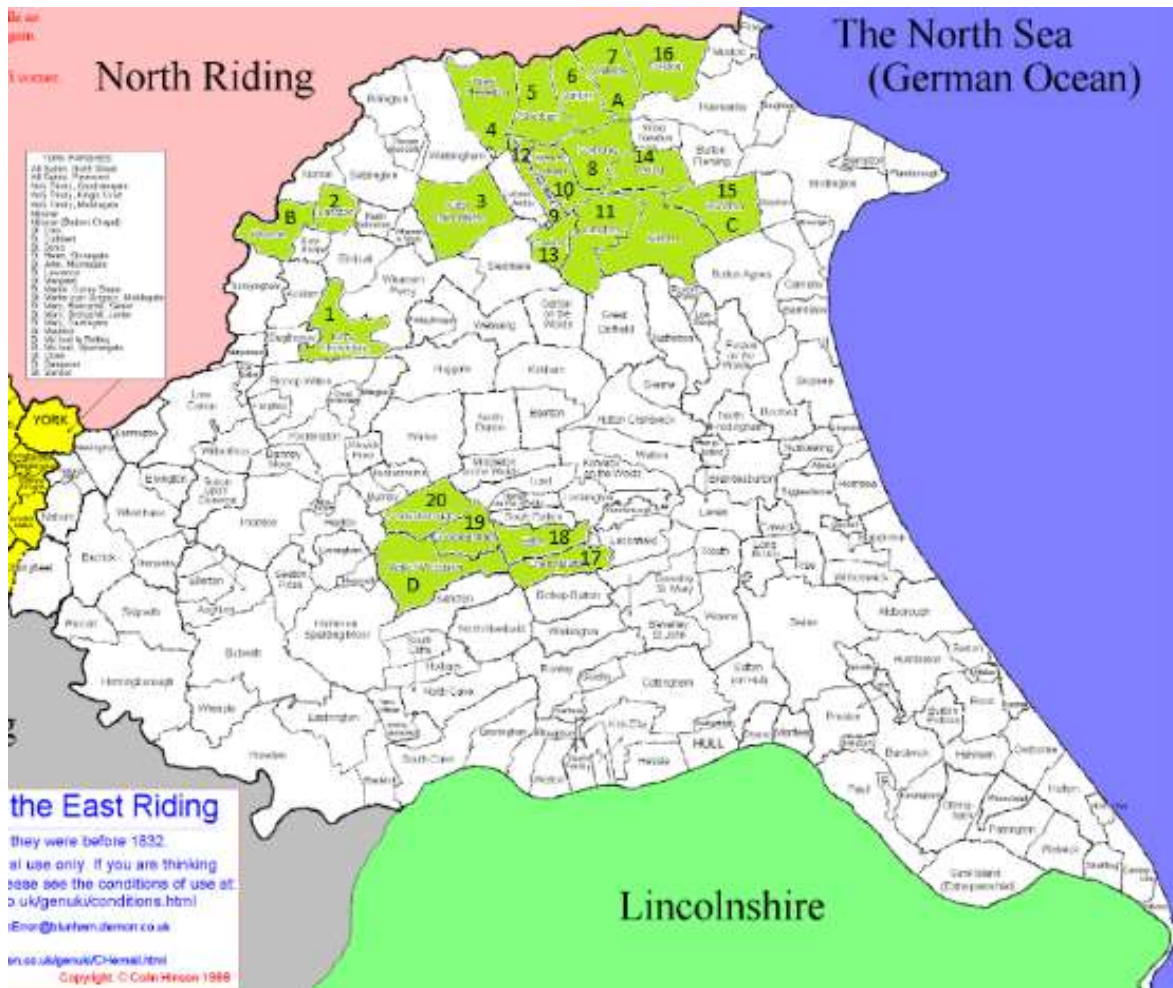


Figure 150 - Greenwell's excavation order (1877)

The numbers refer to round barrow excavations and the letters to long barrow excavations (<http://www.blunham.com/big/eng/YKS/YRY/Maps/ERYParishes.png>)

Although Greenwell published a numbered order for his excavations, these do not correlate with the dates they were dug (Kinnes & Longworth 1985, 15-16) and many are missing off this calendar. However, the barrow excavation parishes and dates were logged (Ibid.) (Appendix C). Due to agricultural seasons, Greenwell's explorations were confined to earlier or later periods in the year (Ibid. 13).

Greenwell's fascination lay in the descriptions of both the corpses and their associated artefacts, a few of which he illustrated, such as, the exquisite jet button and ring found with a primary burial within a grave of Bronze Age Barrow LXVIII, Rudston Parish (1877, 263-264). Greenwell was also keen to understand burial sequence. Barrow 86 in Goodmanham Parish showed a direct link between cremation and inhumation, 'one of the most curious burials' Greenwell had ever seen. He named it a 'cremated interment' (Ibid., 290-2). In

Barrow CXII, also in Goodmanham Parish, Greenwell stated, 'In this barrow we find...the primary interment of an unburnt body being overlaid by a burnt one, and that again by a second unburnt body' (Ibid. 302). Greenwell also noted that the largest of the Bronze Age round barrows he excavated had single interments, such as Barrow XC, again in Goodmanham Parish, East Yorkshire (Ibid., 300). Greenwell sometimes referenced barrows opened by others. One example is Barrow VII, a Neolithic round barrow in Sherburn Parish, East Yorkshire, which was opened by Reverend Porter and Mr Monkman in May 1866 (Ibid., 146-7). At least 8 disarticulated and broken human bodies, with some animal bones, were 'scattered about in the greatest confusion' (Ibid., 146). Greenwell posited that they may have been the remains of bodies, which had been disturbed by the insertion of secondary interments and re-buried.

John Mortimer dug barrows within East Yorkshire over a period of forty years. His interest was drawn to a description of the graves' contents, the colours and types of flint and the colours of the earth associated with the barrows, which he described in his 'dig diary', with his daughter's beautiful drawings. The diary included dates, weather, numbers of assistants and data about who else was present (such as, himself, his brother Robert, and other interested local landowners and dignitaries). He sometimes portrayed sketches of the barrow profile and the position of the burials, such as, Towthorpe Group, Barrow 1 (1905, 1). In Mortimer's Introduction, he also provided a large overall plan of the entrenchments and barrows of the region, with named barrow groups. However, the map was difficult to follow in the modern era, as the only definitely remaining monuments in the landscape now are the parish churches. Mortimer also included one photograph of diggers in action (Barrow C83, Riggs Group, page 183) and three photographs of individual burials (Barrow 81 and Barrow C34, Garton Slack Group, 239, 255; and an ungrouped barrow, known as Hedon Howe, Barrow 281, to the west of Langton village, page 348).

Mortimer generally chose a parish and excavated all barrows within that 'group' (Appendix C) but not always at the same time, nor within any particular order. He numbered the barrows 1-295, with A, B, X, and Z barrows, as well as 1a, 2b, B1, B2 and so on and excavated them in a geographical order (Appendix C). He provided an overall map of many of these groups, with the barrows dotted within, for the reader to follow (1905, Introduction), as well as an individual map for each parish (such as of the Aldro Group, Figure 151).

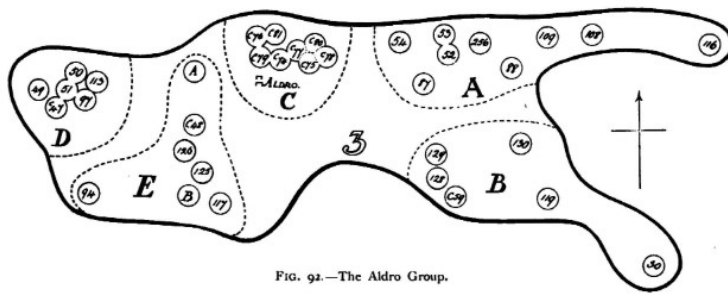


FIG. 92.—The Aldro Group.

Figure 151 - Mortimer's map of the excavated barrows and their numbers within his 'Aldro Group'

As can be seen on the above sketch, the barrow numbers are sometimes consecutive, implying that those barrows were excavated in order (such as C74, C75, C76, C77, C78, C79, C80 and C81, Figure 151). However, there are many more that were dug much earlier or later in the sequence. This is the only group where, probably due to the numbers of barrows. Mortimer had grouped the barrow clusters A to E. There were also solitary barrows, included at the end of group sequences, with the explanation 'Detached barrows', for example, Barrow B2 (1905, 170).

Mortimer was always keen to explain his diligence and care of the barrows he excavated and clearly felt great pressure to be taken seriously with his work, hence his detailed descriptions of the process he undertook for each excavation. An example is Barrow C39 in the Towthorpe Group, where a grave was in the process of being excavated but as John Mortimer could not be present for one day, 29th November 1870, the area was avoided. On his return the following day, he and 'an experienced workman' 'carefully emptied' it (1905, 5). He was also keen to discuss 'foreign' aspects of the barrows he excavated. In this context, foreign meant flints not deriving from the Yorkshire region. At the excavation of Callis Wold 100, he discussed the difference between Yorkshire and 'foreign' flints (Ibid., 158-159). Barrow 70, Wharram Percy Group, contained 39 'foreign' and 4 'native' flint splinters (1905, Birdsall Parish, 46-47). The Neolithic round barrow, Aldro 88, in Aldro Group A, contained one 'foreign' flint diamond-shaped arrowhead, with its decayed wooden shaft *in situ* (Ibid., 58-59).

Some barrows had been opened by the Yorkshire Antiquarian Club, before they were then excavated by Mortimer, such as several of the barrows on Acklam Wold, Group IV (1905, 83-95) or a group of the Aldro Group barrows, about one of which Mortimer commented, 'presumably disturbed by the Yorkshire Antiquarian Club in 1853' (Barrow C78, 1905, 73).

He also occasionally re-excavated a Greenwell barrow. Mortimer must have altered and improved his techniques over time and re-opened at least 31 of his own barrows, once he felt he had improved his excavation techniques. He re-opened his own Barrow C82 three more times and Barrows 5 & 18 twice more. In Barrow 18, new features were found each time (Ibid., 9-11). On the other hand, Barrow 45 provided no further details (Ibid., 44). Mortimer also added a comment at the end of his writing about Barrow 70, Wharram Percy Group, 'This barrow has not been re-opened, but might possibly yield something more, as it may be we did not quite reach the bottom of the grave' (Ibid., 47). A similar comment was made about Barrow 110, Hanging Grimston Group (Ibid., 102-105).

Following the analysis of Greenwell and Mortimer's principal publications, a further thorough analysis of every barrow reference for East Yorkshire was undertaken through a parish by parish search of East Yorkshire's Pastscape data for the word 'barrow'. The number of barrows per reference was ascertained and their exact (or approximate) locations from aerial survey (thanks to Catherine Stoertz, 1997) and field reports. All entries from my previous MA research for East Yorkshire, as well as entries by Kinnes (1979, 1992) and those referenced in Ashbee's two Indexes (1960, 1984) were included, along with Pastscape's parish-by-parish data. Any finds within the grave were noted, although as many of these were recorded after destruction, many columns had to be left blank. Occasionally, Greenwell and Mortimer's records could not be matched to a Pastscape record, despite several search techniques.

Of the total figures from the wider 'Pastscape' analysis (Appendix C), which includes some extra barrows dug by Greenwell, published in an article in 1890, Mortimer excavated 311 barrows (as above); Greenwell excavated 170 barrows for the 1877 compilation and an extra 17 by the 1890's article. 55 barrows were excavated by other archaeologists or antiquarians; 337 rings have been revealed by aerial survey; two mounds were uncovered by the sea; and 226 barrows have no explanatory data at all, on Pastscape's website.

7.3 RESULTS

Within East Yorkshire, there are numerous examples of both inhumation and cremation, single and multiple burials within Neolithic long and round mounds and Bronze Age barrows. As the predominant geology is chalk, the preservation of the majority of burial or

cremation deposits was very good, with only 85 out of 490 excavated barrows (17%) yielding evidence for taphonomic loss, according to the excavators (Figure 152).

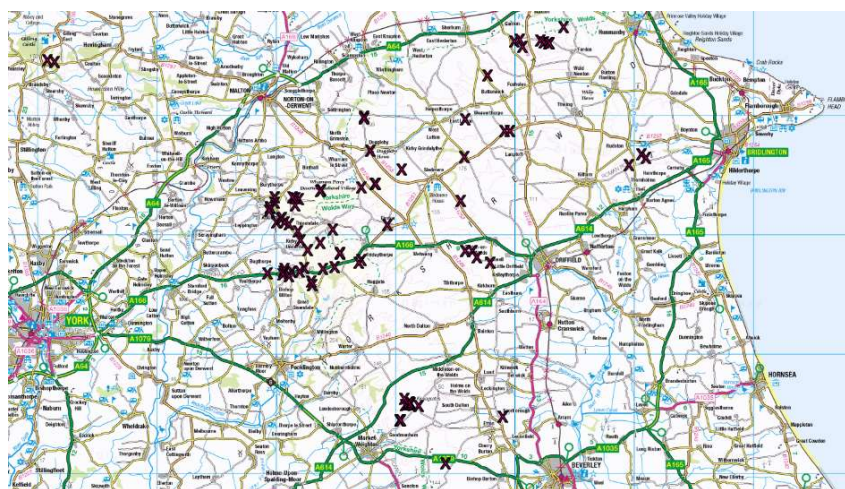


Figure 152 - Barrows with evidence of taphonomic loss

The barrows with taphonomic loss frequently occurred within upland landscapes, with the greatest and sharpest contours (Figure 153). This implies that the topography and location of the barrow affected its survival and those of its contents. It was therefore not a huge determining factor in the survival of most barrow contents, as they were located throughout the Wolds, on ridges as well as on lower ground.

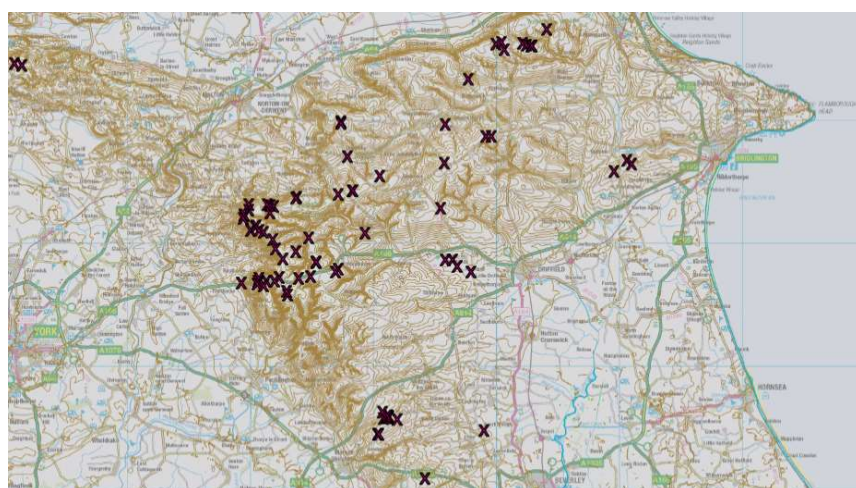


Figure 153 - Hill shading and Contours, showing the locations of barrows with evidence of taphonomic loss

In certain situations, the excavator considered taphonomic loss, if a corpse was absent, such as Greenwell's assessment of the lack of a body at the bottom of grave in Barrow CXIII (1877, 321-3). Mortimer sometimes referred to a 'sandpipe', such as within Barrow 125 (1905, 80). Mortimer found an oval grave within the barrow, which measured 5.5 feet by 3.5 feet by 3 feet deep. There was no evidence of a body. In Barrow 204, there was evidence

of the variable survival of remains throughout the barrow (Ibid., 86-7). Whilst one burial was decayed, in other parts of the barrow the remains all survived intact, such as a child's body laid on the natural surface; 2 small graves containing an infant burial and a child burial, separately; and an adult, who was laid on its side with a cremated adult and a foetus forming a spread of material from the waist to the knees of the skeleton.

50% (245/490) of excavated barrows in East Yorkshire contained evidence of more than one burial rite. As can be seen in the Table below, the 490 barrows (Table 58) showed evidence of four categories of deposition: Burial (318/490 barrows), Cremation (275/490 barrows), Incomplete interments (139/490 barrows) and Disturbed interments (116/490 barrows).

	Burial	Cremation	Incomplete interments	Disturbed interments
Total barrows	318	275	139	116

Table 58 – The four categories of deposition within the 490 excavated barrows

54 barrows contained deposition evidence of burial, cremation, incompleteness (that is, extra bones, not belonging to any complete corpse) and disturbed remains (where a grave or possibly the whole barrow had been re-entered in the past, to add further remains, or more recently by farmers or treasure seekers). A further 20 barrows show evidence for burial, cremation and incompleteness. 67 barrows have direct evidence for burial and cremation within the same barrow. Nine barrows have buried, cremated and disturbed human remains and 33 barrows have burials, plus incomplete bodies and disturbed remains. No barrows showed evidence of cremations, incomplete cremations and disturbed remains (Figure 154). 46 other barrows contained other combinations of incomplete and disturbed burials. A further 105 barrows were excavated but this study failed to uncover the findings. 578 other barrows have not been excavated at all. This includes 27 barrows with unknown contents (due to previous disturbance or known loss before excavation); and one barrow with at least 62 individuals laid to rest within it.

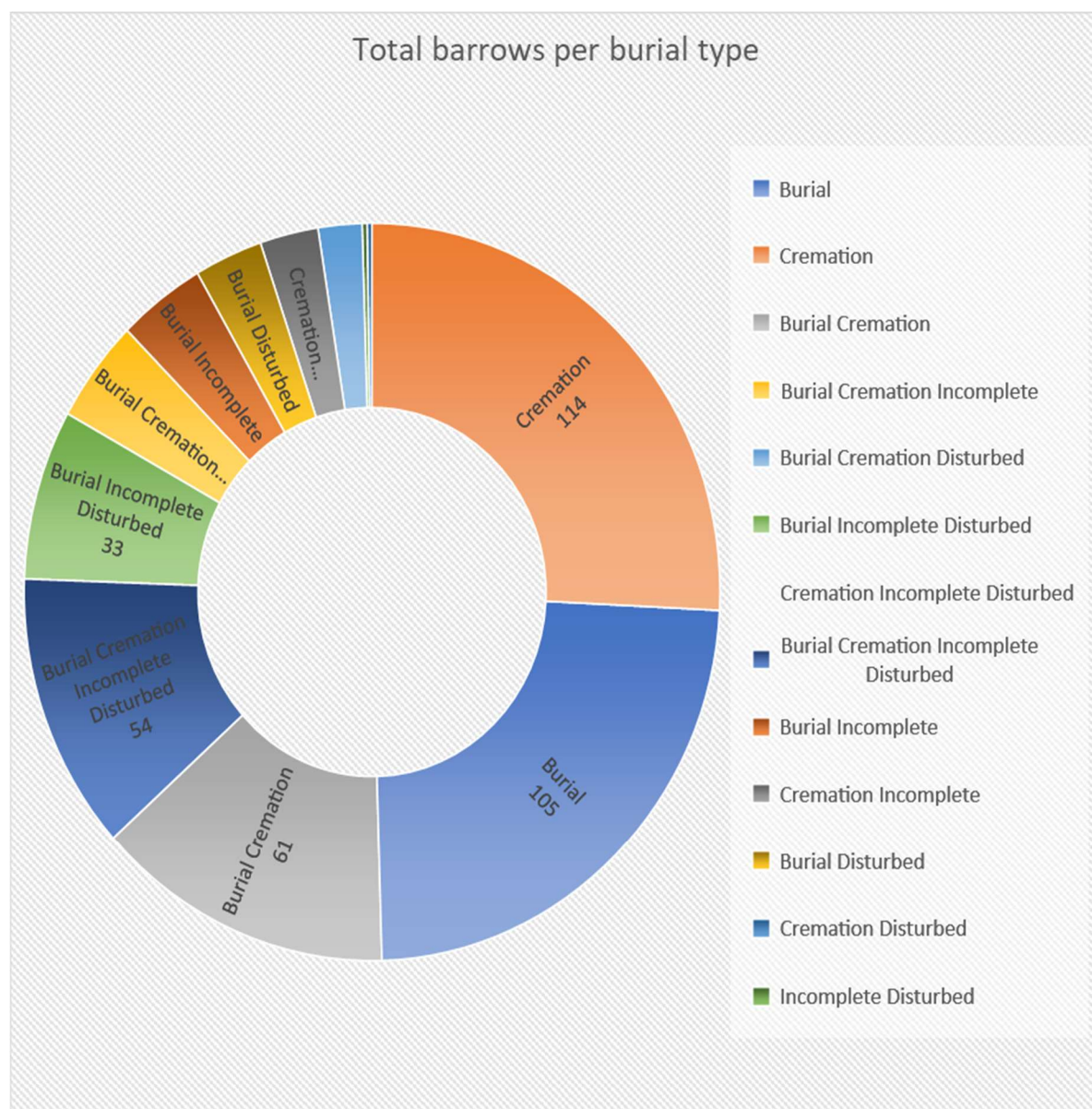


Figure 154 – Doughnut of the total numbers of barrows per deposition type

Overview of the burial and cremation data

Of the 1,127 barrows included in this study, 490 yielded evidence of human burial and/or cremation. Of the 313 barrows containing burials (Figure 154), 243 included adult burials (Figure 155), 81 included burials of young people (Figure 156) and there were 113 barrows which contained child or infant burials (Figure 157). Whilst up to 14 adults and up to 12 children might be buried within a single barrow, only three or less young people occupied any barrow.

Added to this were the 271 barrows which contained cremations. 122 barrows contained between one and six adult cremations (Figure 158). 33 barrows contained between one

and three cremations of young people (Figure 159) and there were 27 cremations of children, within 24 barrows (Figure 160).

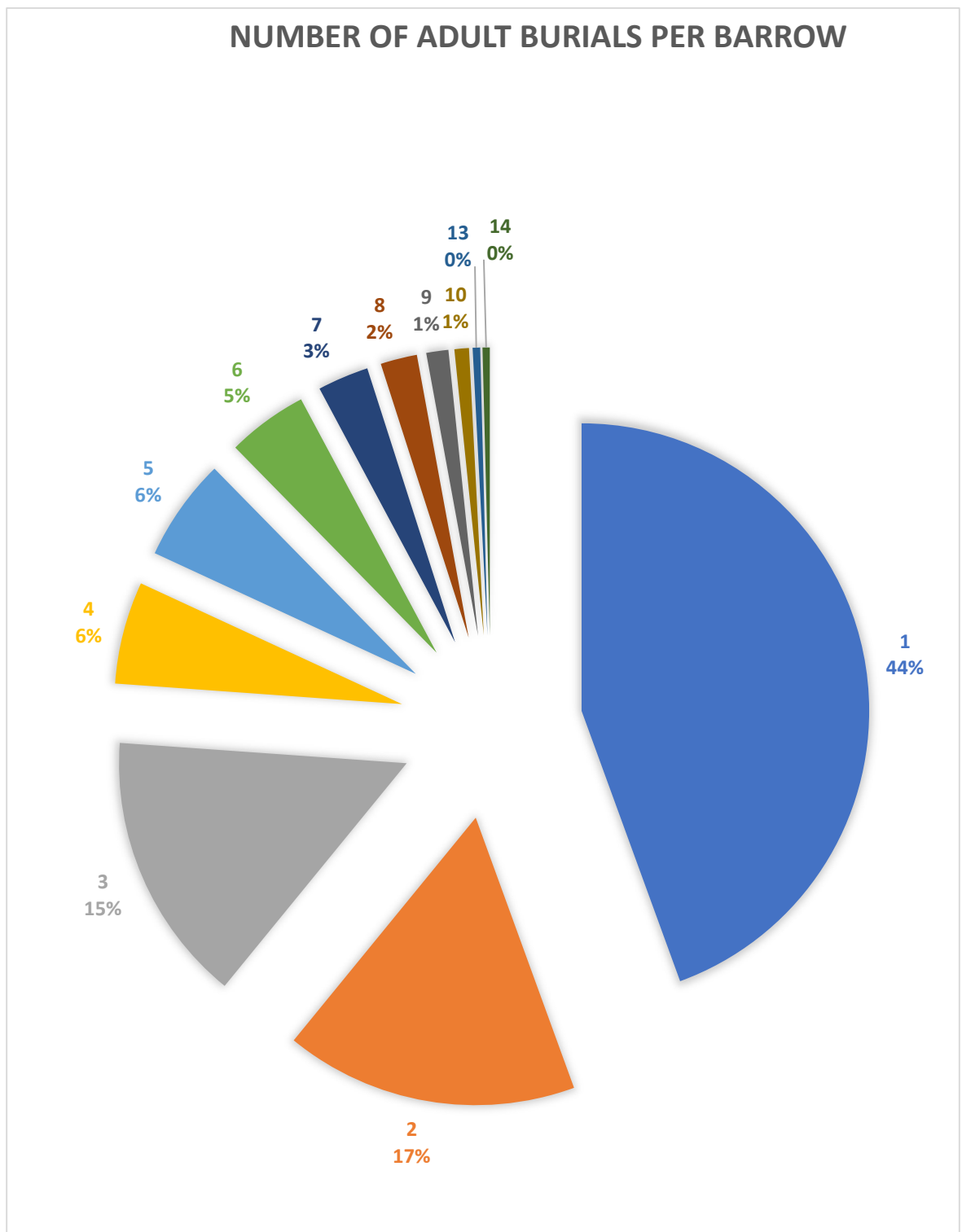


Figure 155 – Pie chart of the percentages of the total numbers of adult burials per barrow

NUMBER OF YOUNG PERSON BURIALS PER BARROW

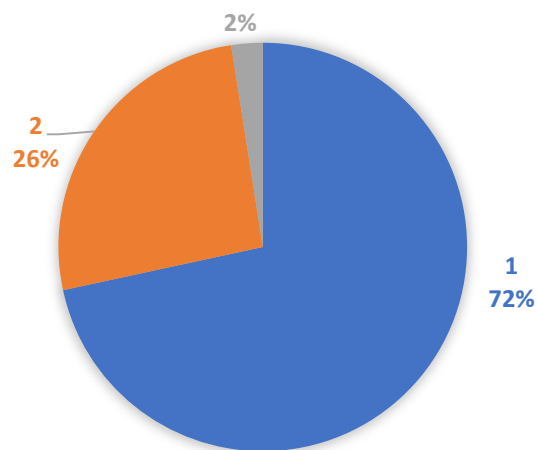


Figure 156 - Pie chart of the percentages of the total numbers of young person burials per barrow

NUMBER OF INFANT OR CHILD BURIALS PER BARROW

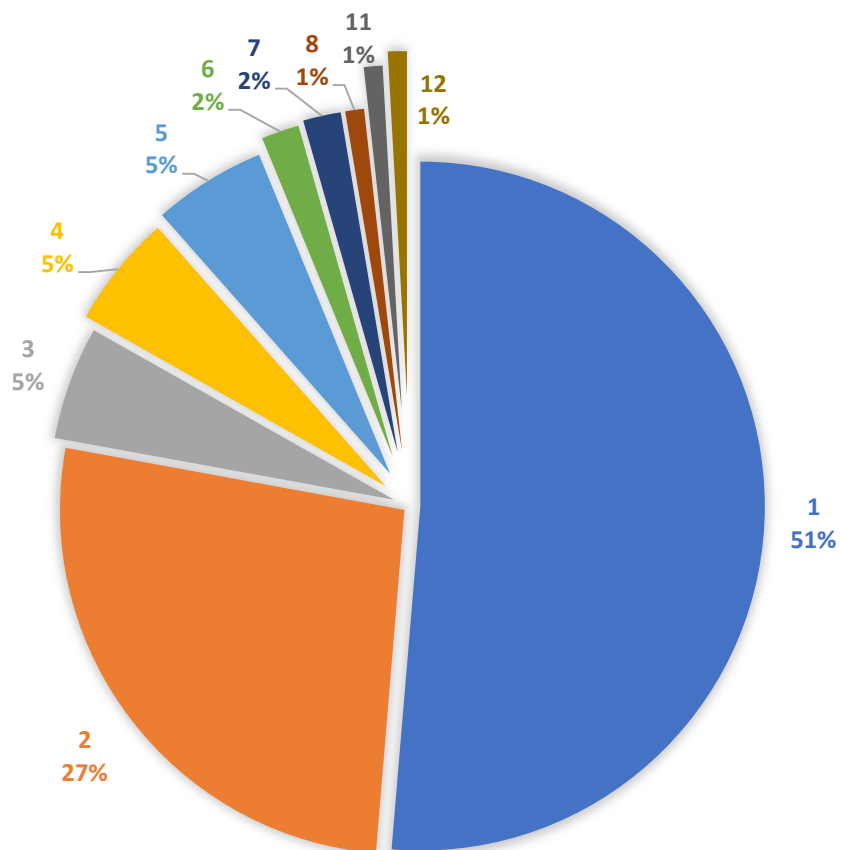


Figure 157 - Pie chart of the percentages of the total numbers of child or infant burials per barrow

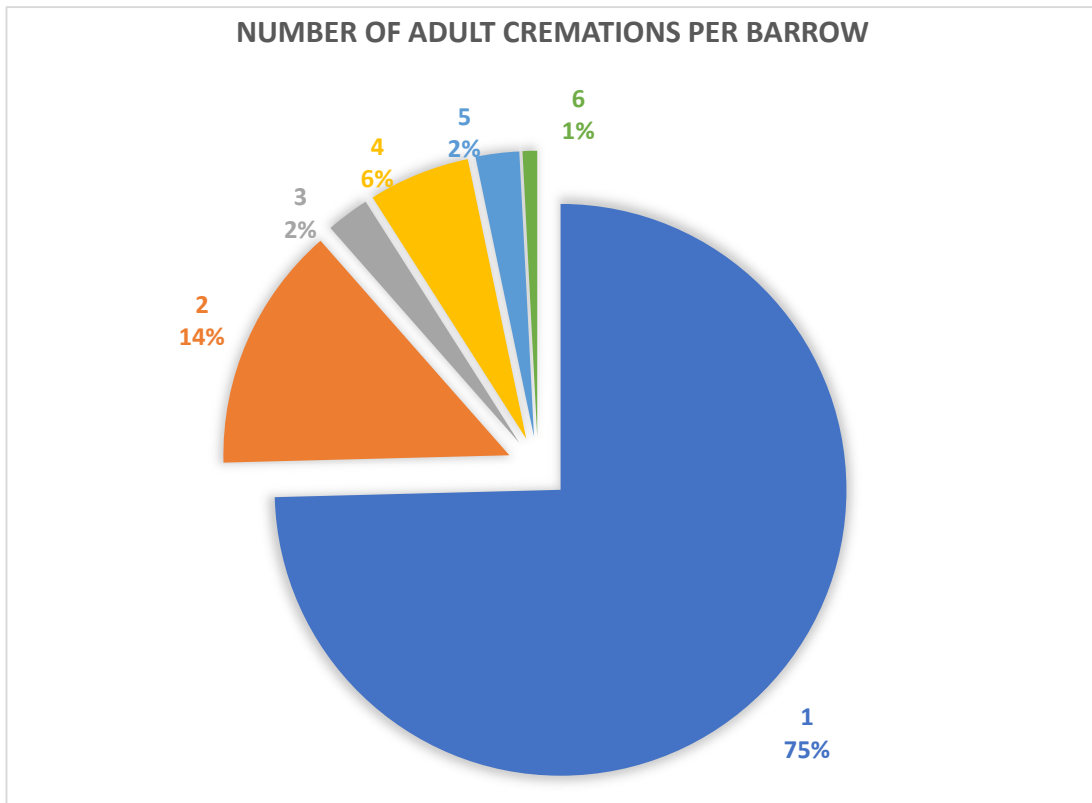


Figure 158 - Pie chart of the percentages of the total numbers of adult cremations per barrow

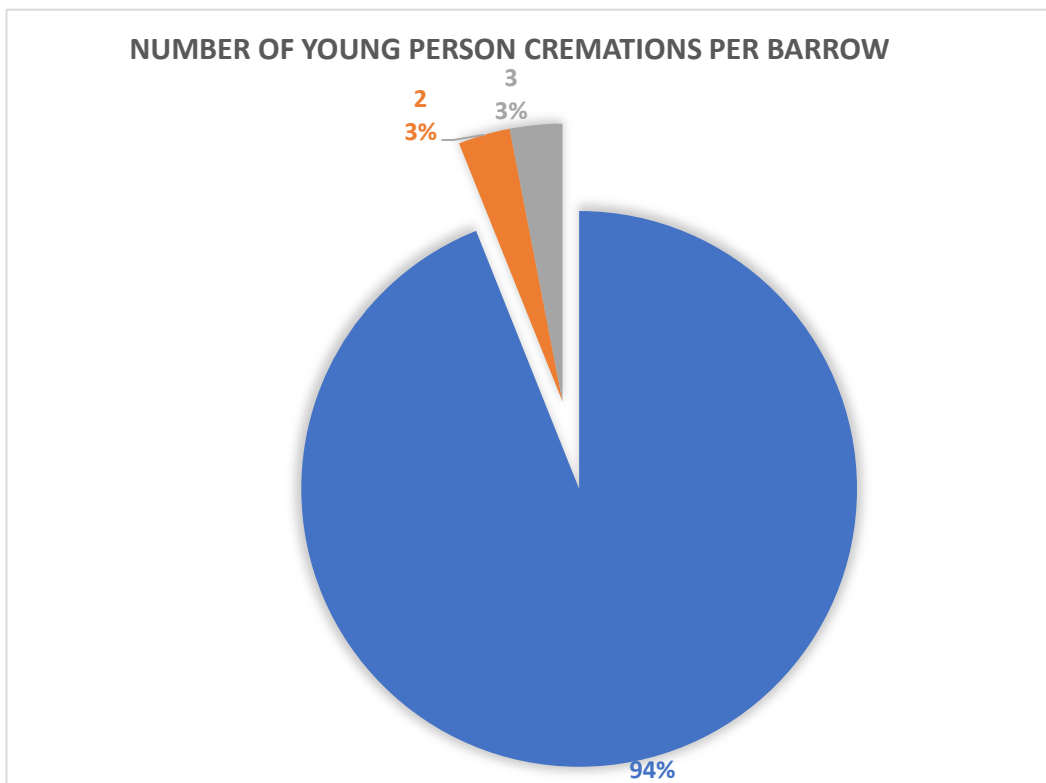


Figure 159 - Pie chart of the percentages of the total numbers of young person cremations per barrow

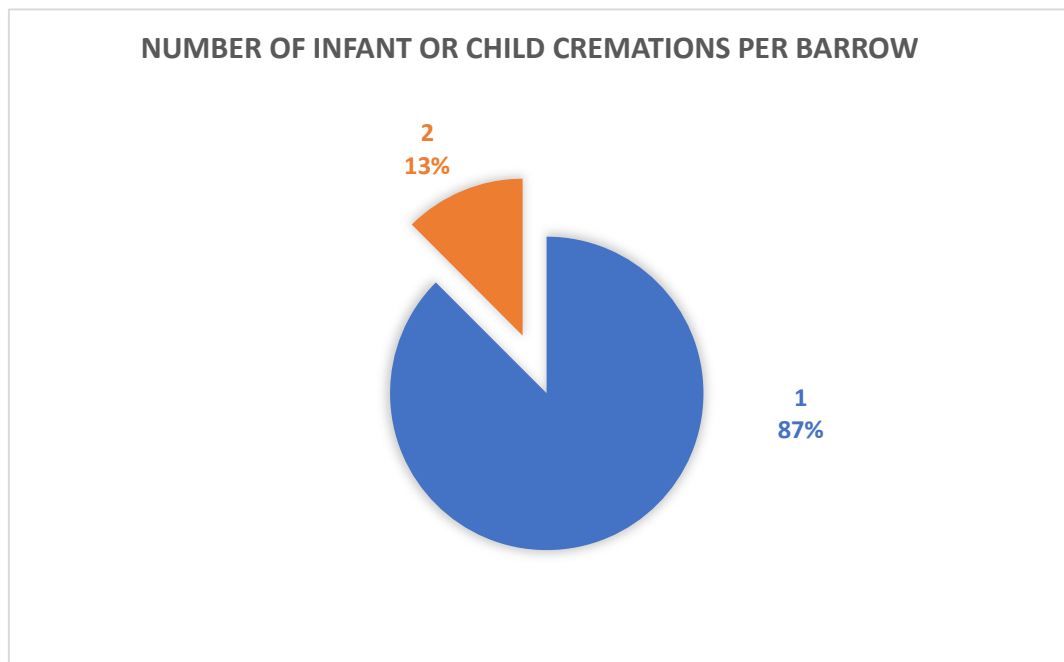


Figure 160 - Pie chart of the percentages of the total numbers of child or infant cremations per barrow

Single burials or cremations

33% (154/490) of barrows contained only a single burial or cremation within (Figure 161). 71 contained single burials (B) whereas 83 contained one cremation (C), although, realistically, there may have been less or more than one burnt body within the cremation deposit (McKinley 1997, 131, 138). The excavation reports of 49 of the barrows did not reference the age of the person. 15 barrows offered evidence of later disturbance (D); 7 burials showed extensive signs of decay (De); and 14 barrows had evidence of fragmentation of the body (F). The cremations contained far too few burnt bones for a complete person (CF) or the burials were missing key body parts, such as the skull (BF). However, two of these barrows showed definite signs of disturbance (BDF?), which may explain the incompleteness of the burial assemblage, in those cases.

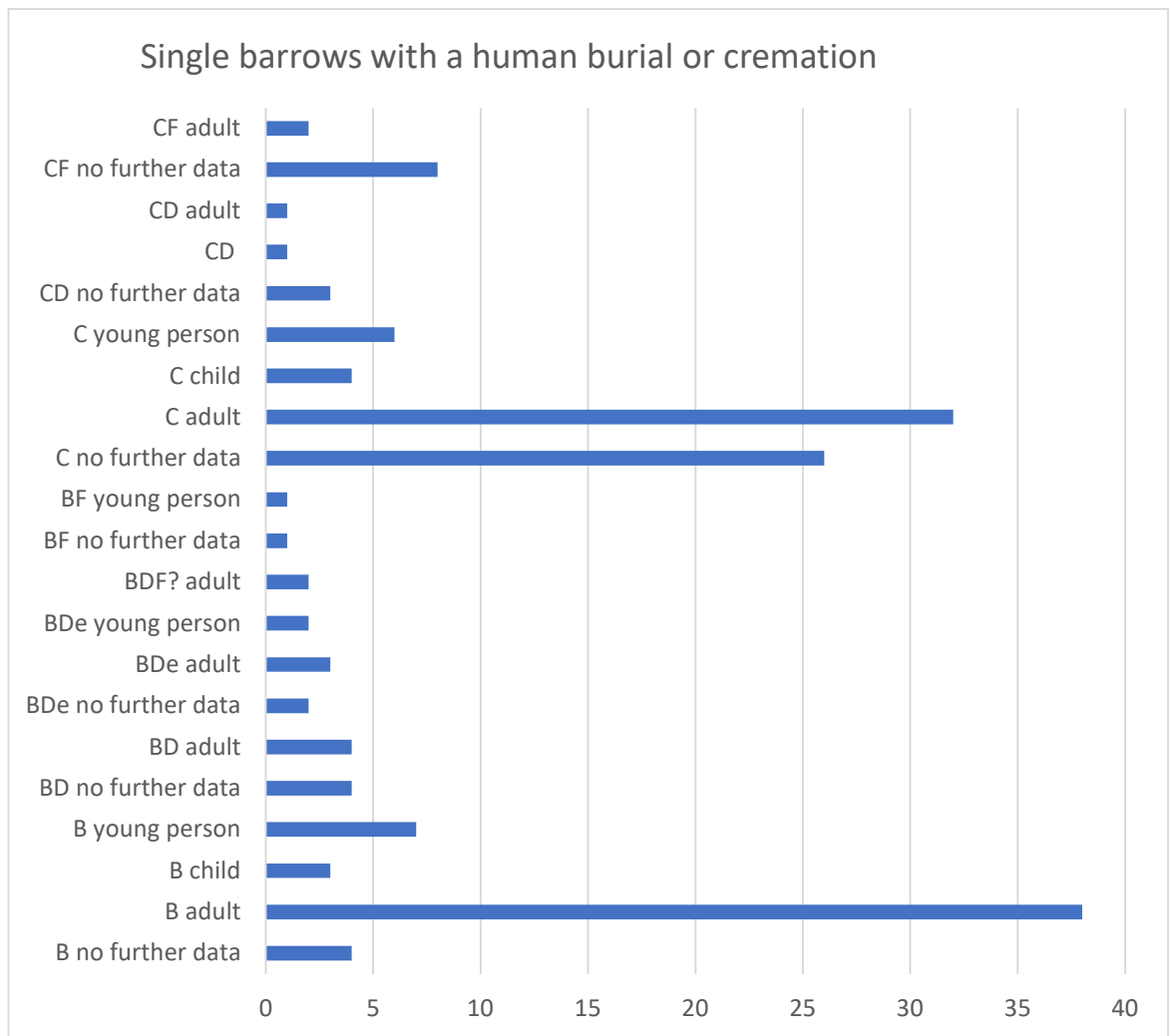


Figure 161 - Barrows with a single burial or cremation

308 barrows contained only one burial type of either cremation or inhumation, with 564 burials and 205 cremations in total. There were up to 20 burials within one barrow but no more than 9 sets of cremated remains in any one barrow (Appendix C). 21.4% of barrows contained only burials (105/490) whilst 23.2% had only cremations (114/490), either in hollows, graves or pits, often associated with pottery (Figure 154). The 105 barrows had 216 burials distributed within them, with between one and eighteen bodies and the 114 barrows with only cremation data had evidence of at least 169 cremations of between one and nine bodies, either on the old surface of the barrow, within pots or pits. 220 barrows contained only complete burials or cremations (1293 in total). That equates to 44.9% of all excavated barrows and 70% (1293/1828) of all corpses (Figure 154).

Cremation / Inhumation

Although 150 barrows contained both burial and cremation (Figure 154), 67 contexts had direct evidence of both burnt and unburnt bones, deposited at the same time. These scenarios were described as undisturbed and secure, even if there had been disturbance, ploughing or earlier excavations in another part of the barrow (Table 59).

Cremation and Inhumation together	Total
Y	66
Y - beyond the burned bones, some unburnt bones found with some previously burnt ones, added to the later pyre	1
Grand Total	67

Table 59 – Secure contexts with both cremation and inhumation within barrows

Greenwell stated that, ‘we have so many instances of inhumation and cremation contemporaneously practised as to show that their concurrent adoption was by no means uncommon’ (1877, 152). Mortimer uncovered burnt and unburnt bones together, such as in Barrow 99, Painsthorpe Wold (1905, 122). Within Barrow 72, Mortimer claimed that, ‘it appeared almost certain that the deposition of the two incinerated deposits (A and C), under the remains of the fractured bodies shown within the dotted line above them, was effected at one and the same time’ (1905, 16).

Petersen also noted numerous examples of physical contact between burials and cremations, implying that they were deposited at the same time or within a short timespan (1972, 34-35, 38) (Figure 162).

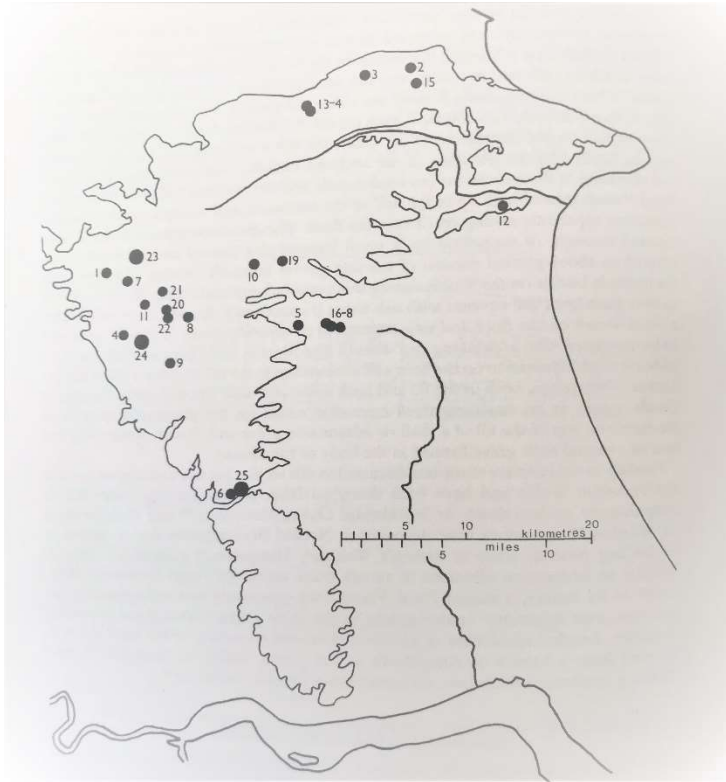


Figure 162 - Petersen (1972, 38) - Map showing barrows with cremation/inhumation associations

In Mortimer's Barrow C83, in the Riggs Group of barrows, in Thixendale Parish, East Yorkshire, there were two graves, both of which held one adult cremation and one adult burial. A child was inhumed between the two graves (1905, 184). Sherburn 10 (X) contained both cremation and inhumation, deposited in the same grave at the same time, as some of the burnt bones were lying underneath the arms of the unburnt body and the two bodies' appearance implied that they had been interred 'on the same occasion' (Greenwell 1877, 149). Another example in the same parish is Sherburn XI, also a Bronze Age barrow (*Ibid.*, 149-150). Here, three people were buried: a young child's body overlay a cremated child, both of which were at the feet of an adult inhumation. In Barrow 270, of the Life Hill Group, East Yorkshire (Mortimer 1905, 201-202), there was an oval grave containing an inhumed adult, with a young person's cremated remains on their chest. In this case, the remains had been added once cold, which differs from Barrow C43, Bishop Wilton Parish, Garrowby Wold Group, some of the cremated remains 'had been deposited in a glowing condition, as the lower interment, from head to pelvis, was more or less charred, and the heat had extended to the surrounding chalk' (*Ibid.*, 148).

In situ burning and crematoria

There is evidence of *in situ* burning within 38 barrows (7 long barrows, 10 Neolithic round barrows and 21 Bronze Age barrows) (Table 60). Of those, 26 excavations noted some form of burning *in situ*. Greenwell excavated Barrow CCLXVIII in Fylingdales Parish, North Yorkshire. Within it was a grave with one 'in situ' cremated adult (Pastscape 29699) (1890, 1-72). In other cases, bodies had been cremated elsewhere and then placed either within the barrow whilst hot, burning the earth, such as Mortimer 91, Hanging Grimston long barrow, North Yorkshire (Pastscape 62130) (1905, 102). Other cremations were entered once cooled, such as the cremated adult in a cinerary urn with two burnt flint pieces (Greenwell, CLVIII, Hutton Buscel Parish (Pastscape reference not found) (1890, 1-72).

Sometimes, burning was achieved through a pyre on the old ground surface and then the barrow was later constructed above this (11/38 cases). Grinsell had also uncovered this situation within ten Wessex barrows (McKinley 1997, 132). In 12 situations, however, the authors describe the body or bodies as being burnt over a hollow, so that the cremated remains fell into it from the pyre above, which would have aided draught (Ibid., 134).

15 barrows contained unevenly burnt individuals and/or evidence of flues, which led to less or more burnt bodies towards one end of the barrow, termed crematoria (Table 60). An example is Greenwell's Barrow CCXXIII, which contained 4 adult and 2 child burials in its long barrow area, which had been partially burnt within a crematorium structure, covered by roof-shaped ridge of slabs, with other slabs beneath the bodies. There was 18 feet of 'burial', that is, with burning from east to west, forming a type of kiln, the burning of which was most intensive at the eastern end. There were also three secondary cists and some other disturbed bones. 32 bodies were burnt *in situ* within the barrow (1877, 491-497; Kinnes & Longworth 1985, 107). However, this concept was clearly in its experimental stage in Yorkshire, as the most intensive burning was evident towards the eastern end of the barrow in four cases, at Rudston, Scamridge, Willerby Wold and Westow long barrows (Greenwell 1877, 484-510; Manby 1963, 173-204) and once towards the southern end of the mound (Bateman 1861, 227).

Monument type	Use of flues	Burnt in situ	Burnt in situ - in hollow
BA barrow	1	8	12
Long barrow	7		
Neolithic round barrow	7	3	
Grand Total	15	11	12

Table 60 - In situ burning within Neolithic long and round barrows and Bronze Age barrows

It is interesting to note that there were numerous methods for the disposal of bodies, rather than a focus on one type. Whilst assessing the excavation reports, via journal entries, of the different burials, many of the interments could not be easily explained using any specific criteria. Incomplete and disturbed interments were very frequent occurrences in the Yorkshire Wolds (Table 58) and are similar to those found in areas where fragmentation has been studied, such as the Balkans and Scandinavia. A study of burial and deviancy has therefore been undertaken, as a way of explaining these forms of interment.

Fragmentation of humans, animals and objects – Overview of personhood

The discovery of burial fragmentation has been developing for over 20 years. The basic premise is the case of an object or body which cannot be returned to completeness because it was never deposited in a whole state in the first place (Chapman 2000, 23). Whilst John Chapman was the first to give a social face to fragmentation in the Balkans in 1996, others had noted broken bodies and artefacts before this. Paul Treherne had discussed the destruction of the body through the act of disarticulation in northern and western Europe's Neolithic period, with the selection of some bones for display as relics, or deposition (1995, 112).

Chapman introduced the concept of fragmentation through a discussion about the completeness and incompleteness of persons and objects which, he stated, could be used as 'an analogy for changing social relationships in the Neolithic and Copper Age' (1996, 204). Bounded networks and containment can be witnessed by complete bodies, whereas incomplete bodies imply chaotic networks, complex and enchained social ties (Ibid., 215). The tendency towards incomplete artefacts and bodies would therefore suggest a 'resistance to the new, idealised forms of social integration by continued use of social practices based upon deposition of fragmented, inalienable objects denoting the enchainment of social relations' (Ibid., 220).

Koji Mizoguchi analysed 104 burial mounds in East Yorkshire. He noted the concept of corpses as, 'portable artefacts, carrying bundles of symbolic meaning' (1993, 224-225) but did not fully explain why this process occurred in this region. In the article 'Of death and debt', Gavin Lucas looked at the changing relationship between the role of grave goods, the treatment of the corpse and the architecture of the tomb in prehistoric East Yorkshire. He acknowledged that disarticulation itself is fragmentation, that is, pulling the body apart into elements and that cremation was a swift way of disarticulating the corpse. He saw cremation in the Yorkshire Wolds as a rejection of kinship and inhumation as its affirmation (1996, 103, 113).

In John Chapman's *Fragmentation in Archaeology*, he took the concepts of the fragmentation and enchainment of humans and objects within the mortuary domain further, by considering sets of objects, accumulation and structured deposition in the Balkan MNCA (Mesolithic Neolithic Copper Age). The two practices of enchainment and accumulation were shown to link social relations, distribution and material culture, control and exchange (2000, 5-7). Deliberate artefact and human body fragmentation were found in 10-20% of the sites he studied.

Joanna Brück has frequently written about body fragmentation. She tied people to their surroundings, through the view that, 'the person is not a single, isolated entity but is embedded within a network of social relations' (2001, 655). Brück also related this to Neolithic and Bronze Age barrows, 'A single monument could at any one time produce a series of different renditions of social reality, depending on the people, objects, and practices situationally mobilized within it' (Ibid., 656).

In 2004, Chris Fowler published *The Archaeology of Personhood*, a study of interpretations of personhood within European prehistory. It traced the relationships between human bodies, objects and animal remains, where grave goods were 'central to the mediation of relations between a host of social beings' (2004, 153). It considered people as multiply-authored, deploying different strategies, such as, self-determination, self-awareness, partibility and permeability, to negotiate their personal identities (Ibid., 52). Gift-giving, deliberate destruction, curation and re-circulation of parts of objects, people and animal

remains were central to the book's discussions, which focussed on a re-interpretation of Mesolithic sites in southern Scandinavia (Chapter 6).

John Chapman's work with Bisserka Gaydarska led to the publication of *Parts and Wholes* (2007). It considered fragment enchainment and the role of the incomplete in object biographies of the Balkan prehistoric period.

Recently, Sarah Semple and Stuart Brookes have considered 'dispersed, fragmented and circulated' bodies and the 'agent roles' of the dead in funerary theatre, with the 'remains and cremains' being collected, dispersed and sometimes circulated, either in whole or partial forms (2020, 2, 4).

Fragmentation has been identified in British contexts for the Mesolithic, Neolithic (Piggott 1958, 238), Bronze Age (below) Roman (Croxford 2003, 81, 93) early Medieval and Post-Medieval periods (Semple & Brookes 2020, 9). In Joanna Brück's 2006 article, she discussed the variety of Bronze Age fragmentation, with regards to objects and settlements (2006, 77-80). Early Bronze Age burials (Cook 2000, 82) and 'token' cremation deposits (Brück 2006, 80-1) continued a discussion already acknowledged by Jacqui McKinley at Guiting Power III barrow, Gloucestershire and at Linga Fold, Orkney (1997, 138). Charcoal associated with the Guiting Power III cremation was dated to 2120-1730 BC (Darvill 2006, 36). The practice of fragmenting skulls for deliberate deposition was particularly discernible in Britain after 1100BC (Brück 2006, 81). Yet, the concept of enchainment is lacking from many of these arguments, despite its prevalence in Later Neolithic and Earlier Bronze Age contexts within the Yorkshire Wolds. Contra Brittain and Harris (2010, 585), fragmentation and enchainment are totally intertwined in East Yorkshire. There are too many examples of incomplete corpses, additional and replacement body parts and cenotaph graves, within undisturbed contexts, for the instances to be to be solely fragmentation, or explained through accidental or destructive processes, whether taphonomic, ploughing or post-depositional disturbance of the burials and cremations. Yet, we must always consider all possibilities. John Barber noted differential preservation in the tomb environment during his excavation of the stalled cairn at Point of Cott, Westray, Orkney, due to the existence of microenvironments and partial weathering and differential erosion, probably from animal disturbance and percolating water within parts of the cairn. This was despite the

good state of preservation of 50% of the human bones, with 67% showing no signs of weathering. Thick walled limb bones, thin skull fragments, weak, low density, rib fragments and neonate bones all survived (1997, 38, 68-69).

This introduction has not provided explanations of the different terms referred to in this study (cf. Chapman 2010, 33; C Fowler 2004; Chapman 2000), nor the time needed to accomplish such practices (cf. Lorentz 2010, 21). Rather, this introduction has offered an understanding of these practices, which are known to exist both elsewhere in Britain and in other parts of Europe and which have been studied to back up the examples uncovered within the Yorkshire Wolds. This case study offers desk-based examples of the different types of burial uncovered in East Yorkshire, followed by a discussion and the future research potential of the compiled dataset.

7.4 FRAGMENTATION AND PERSONHOOD CATEGORIES

1. No bodies - Cenotaphs

This analysis uncovered evidence for unexplained empty and re-filled holes in the ground beneath the barrow, referenced as 'enigmatic holes' by William Greenwell (such as, 1877 140, 145). Their appearance was too frequent and their sizes too large for them to be dismissed without commentary, either in the past or within this study. 43 barrows contained no burials at all (Figure 163) and 109 barrows, or 23% of excavated barrows, contained one or more 'cenotaph' graves, which were holes, scoops or graves which had been dug and then re-filled without a burial or cremation. 47 barrows had one empty hollow, hole or grave with no reason or explanation for the lack of cremated or buried remains; 20 barrows had 2 of these enigmatic holes; 6 barrows contained 3 empty holes; 2 further barrows contained 4 empty holes; and 4 barrows had 6 holes with no person buried within. There were also 27 barrows with one or three empty holes, which could also be cenotaph graves; 2 empty cists within a barrow; and 3 pots with no associated bodies. In total, 169 possible holes or graves were dug and then re-filled, without placing human remains within them, either as burial or cremation deposits.

Later disturbance and plough damage must account for some of these issues, as referenced above. Taphonomic loss would also have occurred and was recognised by the antiquarians. An example is Barrow 271, Life Hill Group, Sledmere Parish (Pastscape 64752), where

Mortimer uncovered a grave and a food vase, but no bones. He postulated that it may originally have contained the bones of a child, which had since decayed. Others, such as Mortimer 82, Garton Slack group (Pastscape 64485), contained 14 cremations, inhumations, incomplete and dismembered skeletons; yet one of the graves had been deliberately left empty. Within the grave, there were the remains of material fragments: fine rope, string, fibre-like flax and wool, as well as decayed wood but no human body. Within Willy (Willie) Howe, Barrow CCLII, Greenwell found no interment but there were four animal bones within the oval grave (1890, 1-72). Another example is Mortimer's C63, Garton Slack barrow (Pastscape 64391), with 8 people buried in it, in three graves, but with another grave which only contained the bones of a red deer (Ibid., 214-215).

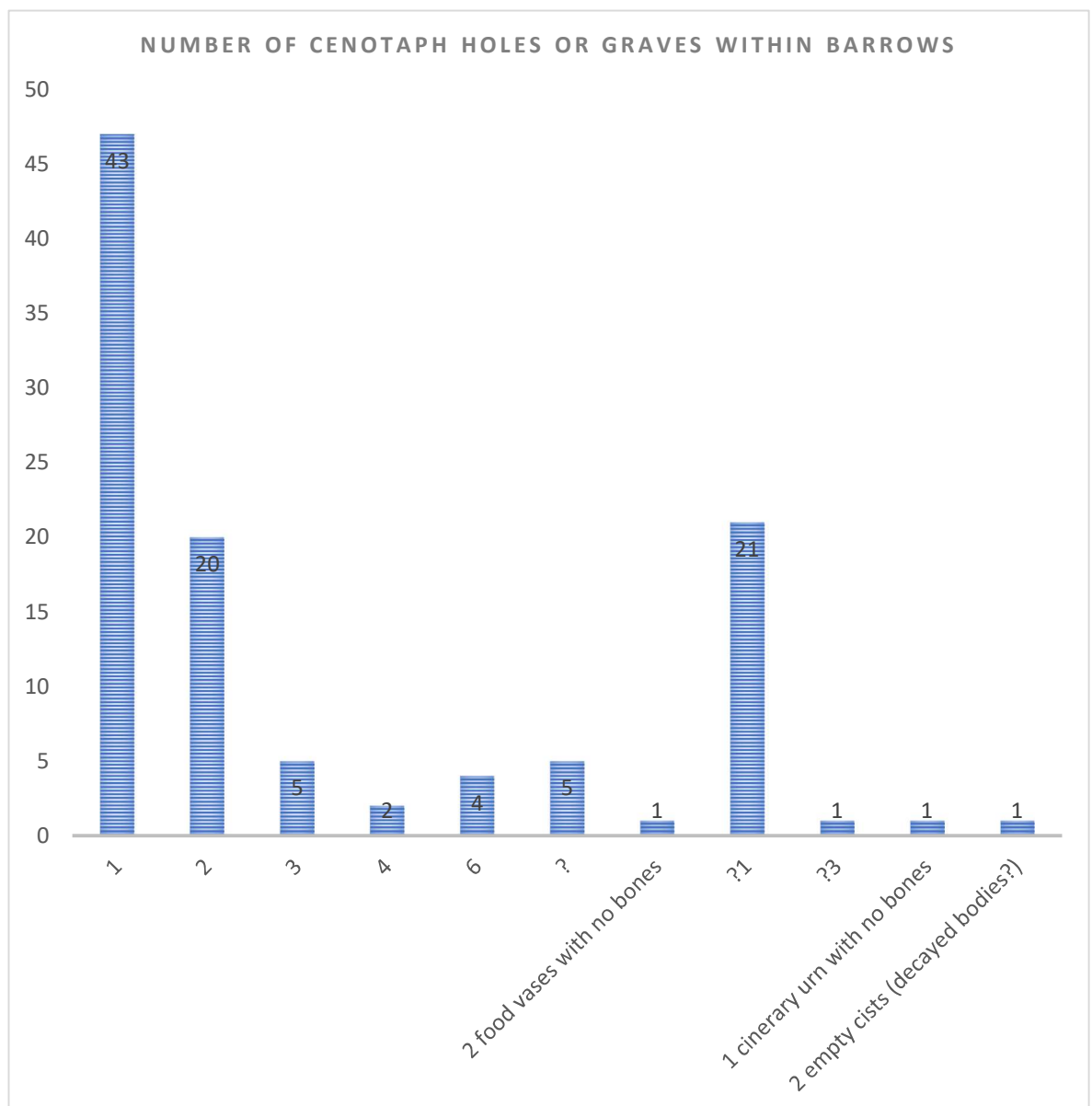


Figure 163 - Number of holes or graves within each barrow, versus total number of empty holes/graves

2. INCOMPLETE BODIES

As mentioned above, 139 barrows contained evidence of incomplete bodies (Table 58). Of these, 18 barrows held evidence of incomplete burial, with 60 bodies involved in such practices (Appendix C). There were also 10 examples of unburnt bone fragments, 8 of which were placed within a grave, hollow or hole. A further example was located above a cenotaph hole and there was one example of unburnt bone fragments within the barrow infill material (Figure 164). Clearly, with modern day sieving, the latter number could easily increase.

12 barrows contained 33 incomplete cremations (Figure 164). Of these were 57 examples of incomplete sets of cremated bone, as recorded by the excavators (Appendix C). 54% (31/57) of these were located within a grave, deliberately-dug hollow or hole and 3/57 (5%) were carefully placed above a cenotaph grave, hollow or hole. A further 10/57 (18%) were found within cremation urns and 19% (11/57) had been placed directly onto the old land surface within the barrow. 4% (2/57) of these cremated remains were found within the barrow infill material.

In total, 1024 bodies were found within 139 barrows (Appendix C), where there were instances of incomplete burials or cremations, sometimes with disturbed or disarticulated burials or cremations (Figure 154).

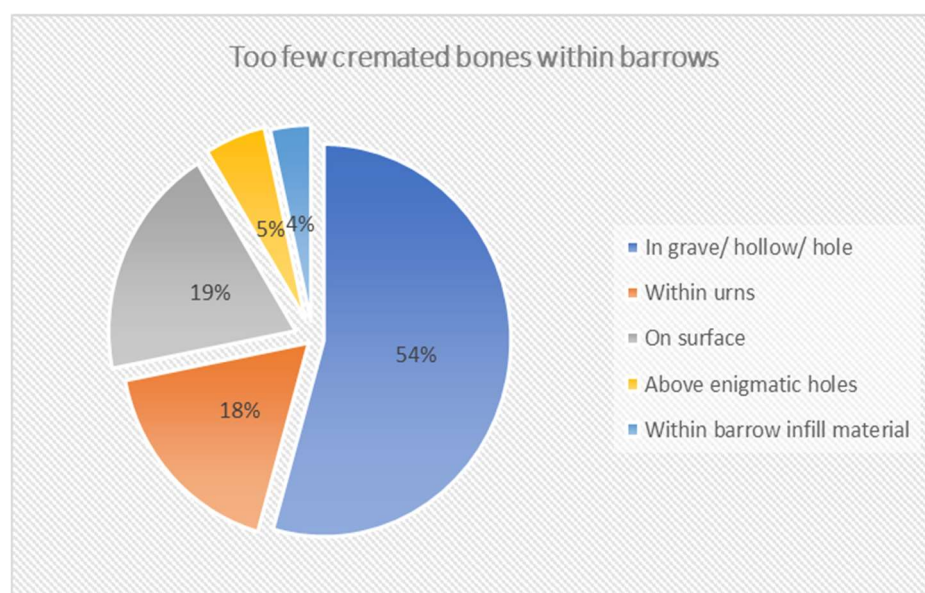


Figure 164 – Too few cremated bones within barrows

3. REPLACEMENT AND BODIES WITH ADDITIONS

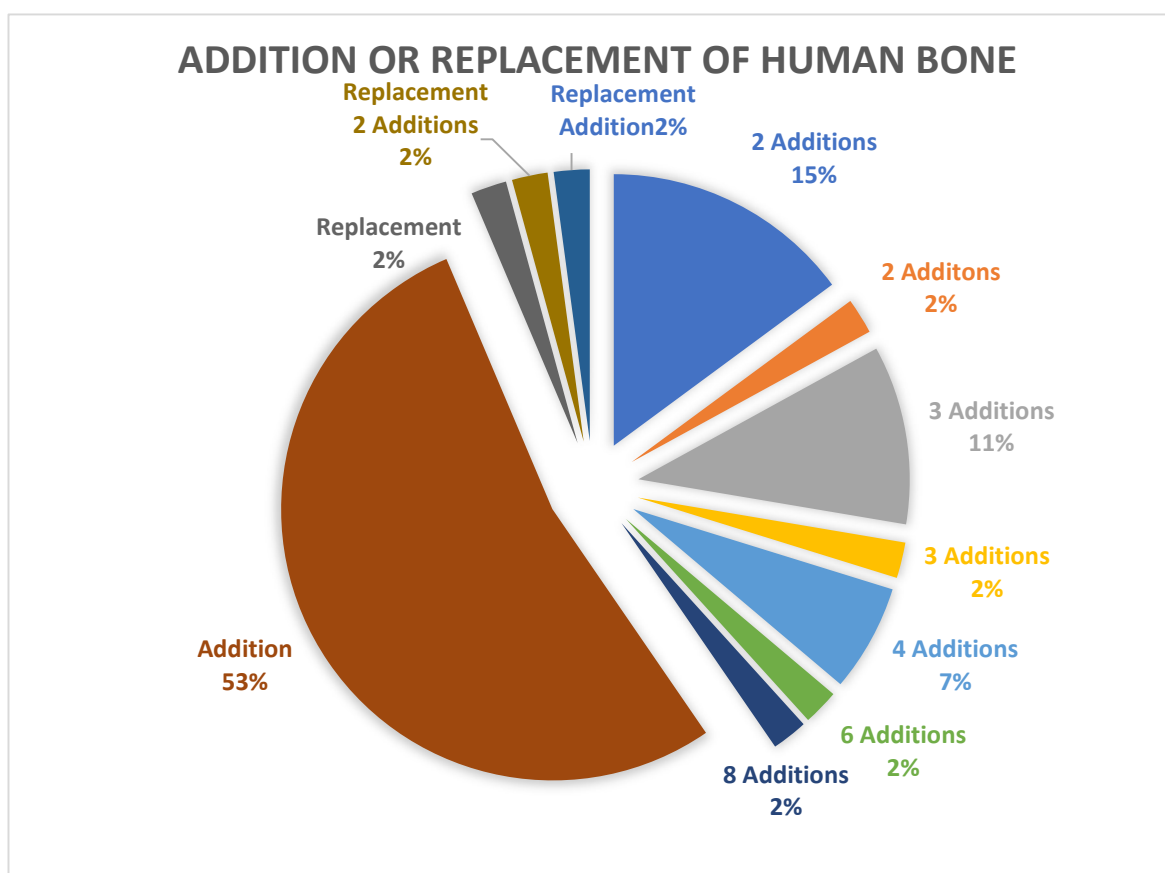


Figure 165 – Additional or replacement human body parts within barrows

47 barrows had examples of replacement or additional human bones. Up to 8 additions were found with corpses. Some human bodies had both replacement and additional parts and others just replacements (Figure 165). Rudston 62 contained an adult male with a skull belonging to a younger individual (Pacitto 1972, 9). In Mortimer's Neolithic Round Barrow 81, Garton Slack Group, part of a left foot was missing from an adult skeleton and a whole extra foot, with ankle, had been added to the grave (1905, 238-241). There were no skeletons missing only a foot within the 490 excavated barrows. However, there was another extra foot within Barrow 82, nearby. This barrow contained numerous disturbed remains and an elderly person, who had lost several teeth some years before. These had been carefully curated and were placed with the burial, below the person's chin (Ibid., 232-234).

4. OTHER - Evidence of Violence

This category covers examples of other ways the data might be manipulated. In eleven barrows, the excavator noted that the human bones had been manipulated in different

ways from other bodies. Human bones of adults, young persons and children had been split lengthways and/or splintered; jaws had been smashed, in one case to remove a young person's teeth before burial; and in two examples, the bones looked as though they had been boiled. These were all found in Mortimer's barrow excavations (Barrows 21, 43, 48, C63, 54, 50, 56, 104, 82, 228 and 284) (1905, 11-15, 48, 63-6, 77, 98-9, 134-6, 214-5, 232-4, 304-5, 350-2).

In 15 further barrows, there was possible evidence of violence (Table 61). Two skulls had a hole punched through their parietal bones. Two further corpses were mutilated at time of death. One had been 'amputated' above the pelvis and the other was missing its hips and legs. One corpse had an arrowhead, with wooden haft, under its thigh and another had four flint flakes in a line along the vertebrae of the person.

However, in the other cases, the suggested violence was from the excavator's explanation of the locations of specific flint, stone or bronze implements. In 5 cases, the implement's point was touching the face or teeth and in a further three cases, the point of the implement was directed towards the person's face or was in front of the face. In a further two cases, the point was directed away from the face. Obviously, there are many reasons why these implements might have ended up in these positions within the barrows, not least due to settling of the burial and taphonomic loss.

Nevertheless, there are enough examples here to warrant further investigation into this issue.

Possible Evidence of Violence	Total
1 leaf-shaped flint arrowhead pointing towards skull	1
1 arrowhead in front of face touching teeth	1
1 barbed flint arrowhead in front of adult face	1
1 bronze dagger by face but point directed AWAY from face	1
1 bronze dagger point touched chin	1
1 bronze dagger point touching chin	1
1 diamond-shaped arrowhead with remains of decayed wooden shaft found under thigh bone	1
1 flint scraper in contact with teeth	1
1 leaf arrow-point facing AWAY from body	1
1 stone chisel with cutting edge towards child's face	1
2 round flint scrapers touching teeth of a buried person	1
4 black flint flakes occurred in line along vertebrae of interment	1
circular hole in left parietal bone	1
hips and legs of body missing & hole punched through parietal bone	1
mutilated remains' - 'amputation' above the pelvis prior to burial	1
Grand Total	15

Table 61 – Possible evidence of violence within the Yorkshire Wolds' and Great Wold Valley's barrows

5. ANIMAL CATEGORIES

Animal bones

Within 73 barrows, animal bones were deliberately buried with the dead, whether human burials or cremations (Figure 166). There were 78 examples of animal bones, associated with between one and six adult burials within barrows. 42 barrows contained evidence of up to four young people and children having been buried with animal bones. 22 adult cremations were associated with animal bones, within 19 barrows. Seven cremations of young people, within 5 barrows, had animal bones with them, as did two child cremations. A further 22 people of unknown age were also associated with animal bones. A further 42 barrows contained animal bones which were mixed with dismembered human bones, either burnt or unburnt. All of these details can be found in the Appendix C.

Total human bodies or cremations with animal remains

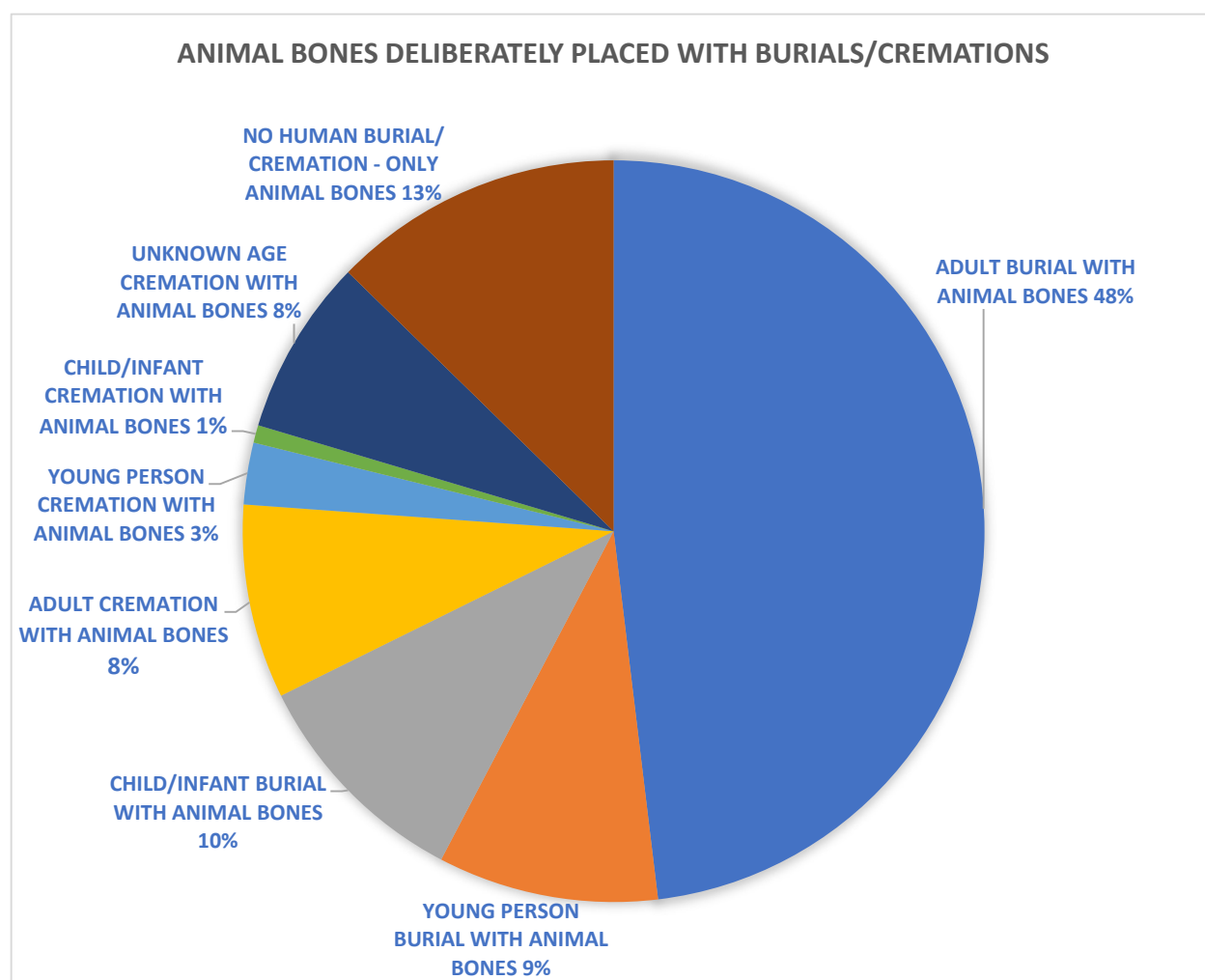


Figure 166 – Pie chart of animal bones deliberately placed with human burials and/or cremations

As can be seen in the pie chart above (Figure 166), adult human burials were most likely to be associated with animal remains. It is worth noting that a further 33 animal burials (13%) had no humans buried with them. An example is Towthorpe 18 (Mortimer 1905, 9-11). The skulls and bones of three foxes had been carefully placed in the barrow, just to the south and east of centre and below the apex, in an undisturbed context. From radio-carbon dating, it is clear that at least two of the skeletons had been placed there at different times, leading Bayliss to consider the curation of one carcass, 'perhaps as a pelt or trophy' (2010, 91). 24 barrows contained animal bones which were not associated with a human burial, but which were placed in similar locations to buried humans (Appendix C).

Unworked animal bones with human burials/cremations

Found in graves, hollows or on the ancient surface, fox/dog bones were associated with both buried and cremated humans, of all age groups, whereas badger and vole bones were only found in direct association with burials (Figure 167).

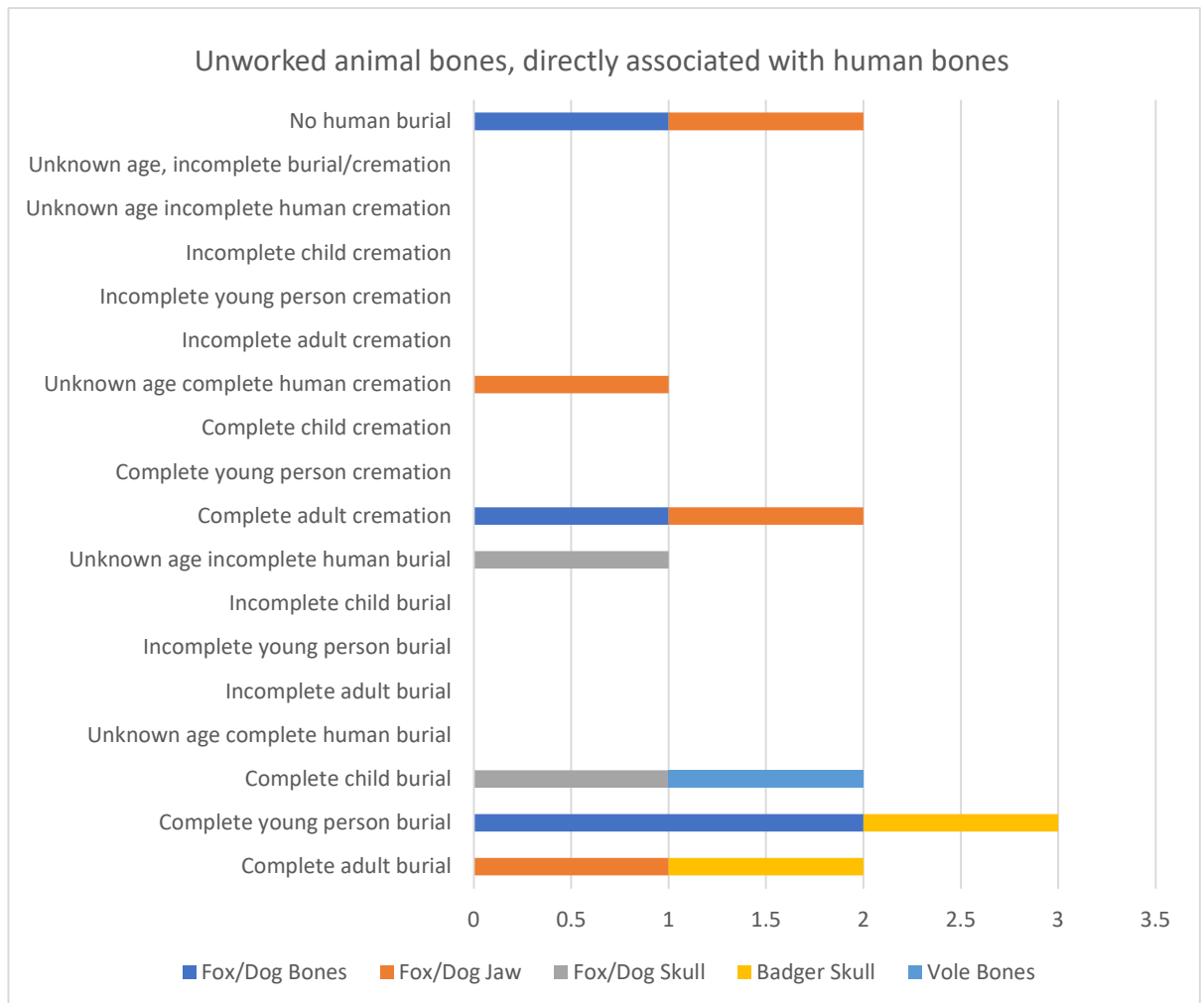


Figure 167 – Unworked animal bones, directly associated with human bones

Worked or unworked animal teeth, antlers and tusks were also placed directly with human remains. Ox teeth and deer antlers dominate this category. Both were found mainly with complete burials or cremations and were often associated with adult burials. Some were associated with incomplete sets of buried and cremated remains. Eight deer antlers were found in contexts usually associated with human burial but were found unaccompanied by human remains (Figure 168 & Figure 169).

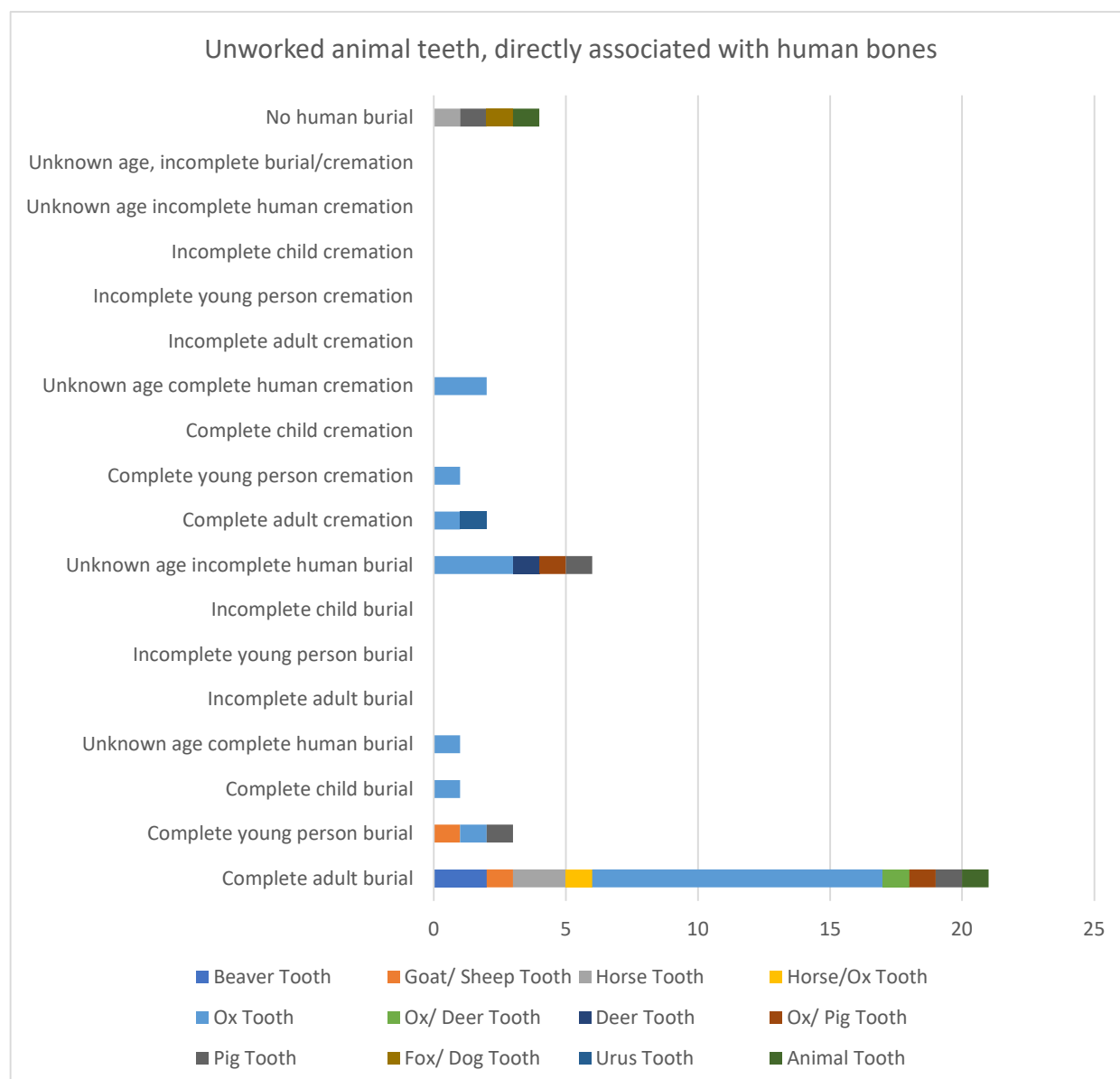


Figure 168 - Unworked animal teeth, directly associated with human bones

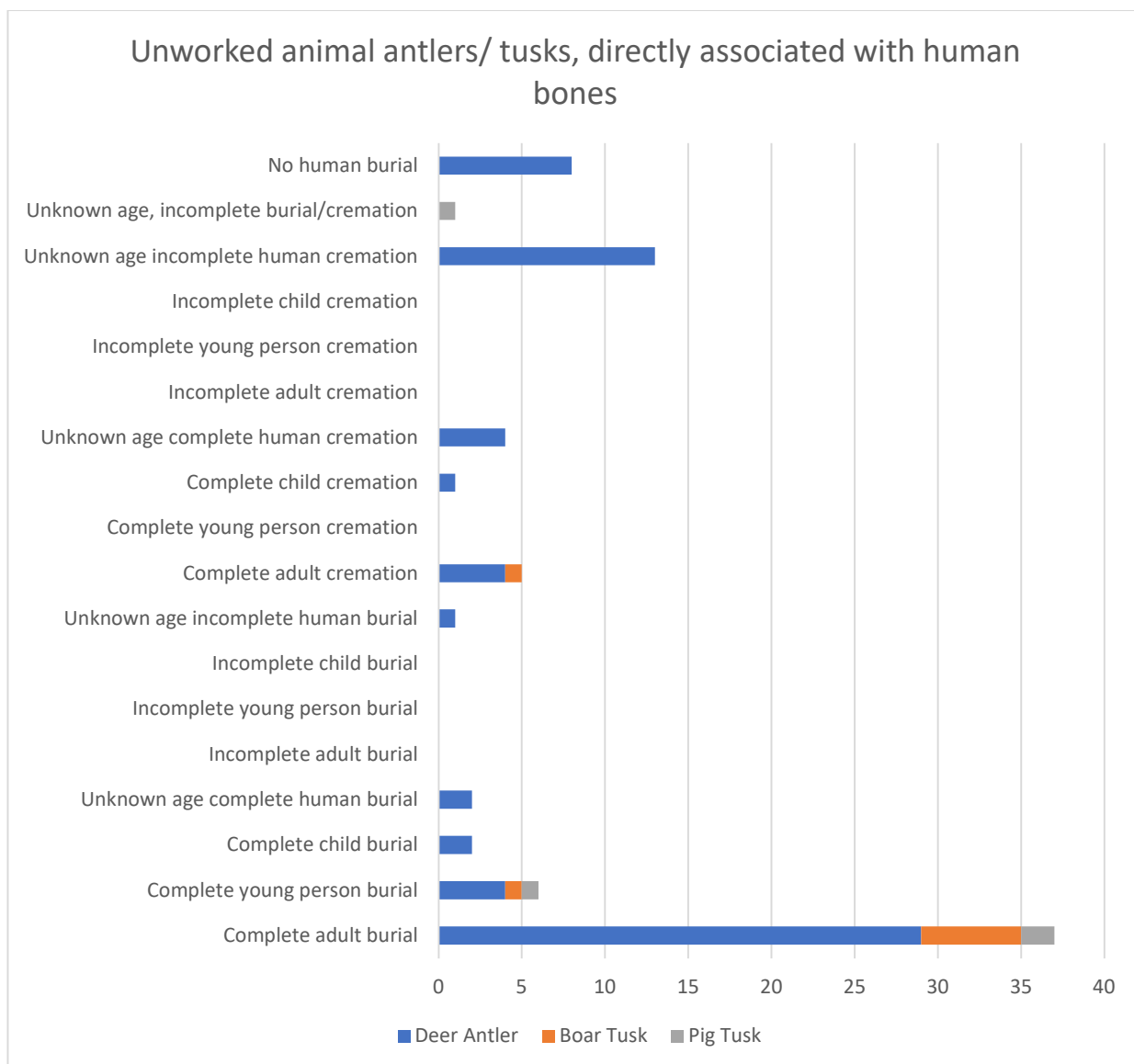


Figure 169 - Unworked animal antlers or tusks, directly associated with human bones

6. GRAVE GOODS BY MATERIAL CATEGORIES

The results show sets and types of objects (Appendix C). 412 barrows contained deposited items, which included deliberately-placed objects, such as tools, personal ornamentation and/or pottery; those objects worn at the time of burial or cremation; those objects which ended up in the barrow, as containers for the deceased, as tools which dug the grave or as items from feasting associated with the burial. Evidence of burning, charcoal or pits were not included, neither were inner circles of stone or flint, or internal ditches. As stated, this cannot include those items which have since perished.

Of the 412 barrows containing artefacts, many contained deliberately-placed objects. The assessment of this was very subjective. Can an urn be deliberately placed if it also contained the remains of the deceased? Surely then, the placement of the 'grave good' was incidental. Yet, what if the item was more delicately ornamented than others of its type? What about those items which were with the deceased at the time of cremation or burial, such as artefacts burnt with the body or those items which held the body in the ground? How can items be definitely identified as grave goods? From this analysis of the Yorkshire Wolds' barrows, it can only be stated that 107 barrows contained unique, non-local and/or beautifully manufactured or worked items. Another 122 barrows contained multiple items, albeit ubiquitous in their descriptions (such as flint tools or pots). Everyday ubiquitous items were included if the excavator described them as 'beautiful' or 'very fine'. Individual flint flakes and/or flint chippings, a few ubiquitous pot sherds (unless from different pots) and basic animal bones were not included in this latter analysis.

The results of the artefactual data, from barrows mainly excavated by William Greenwell and John Mortimer, are presented below. The quantity and quality of the items found by the antiquarians, along with their descriptions, was enlightening, as the writers had not emphasised the wealth of data available from the Wolds' monuments. Fortunately, in 2015, images of some artefacts were published in *Ritual in Early Bronze Age Grave Goods* by Ann Woodward and John Hunter. The authors trawled 13 museums/institutions to assess 887 artefacts and 81 necklaces. The book has the most wonderfully-presented photographs of objects in minute detail. These include 16 photographs of jet necklaces and other artefacts from East Yorkshire, among 99 images, whose sites are specifically named within the List of Figures. And while the distribution maps (pages 542-544, 546, 549 and 551, example, Figure 170) seem to demonstrate a fair distribution of sites across England, unfortunately the sites covered include 221 representations from Wiltshire (from the raw data in Appendix III) and only an average of 11.65 examples from the other English counties referenced in the book. This is reinforced by the number of pages indexed for each county, with 153 sites specifically referenced for Wiltshire in the Index, whereas there were on average 11.71 specific sites referenced in the Index for the other mentioned counties in the book.

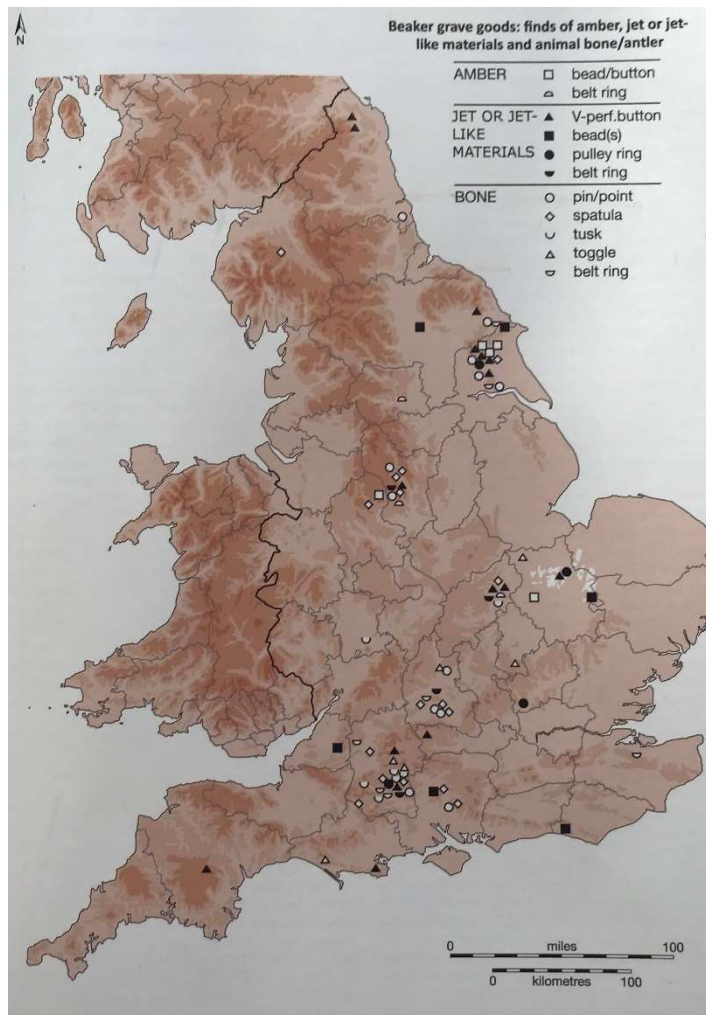


Figure 170 - Map from page 543, *Ritual in EBA grave goods*, by Woodward & Hunter (2015, Figure 12.2)

However, three projects may be further altering our perceptions of these barrows. The Beaker People, published in 2019 (Figure 171), provided data on 373 people from Chalcolithic and Early Bronze Age Britain, with the largest sample from East Yorkshire with 83 individuals (2019, 508-534). The Grave Goods project, by Anwen Cooper, Duncan Garrow, Catriona Gibson and Melanie Giles (2019) has assessed 6000 objects from six areas of later prehistoric Britain, including East Yorkshire. Their full results are yet to be published. Another on-going project known as 'In the Wolds', may also answer some of the questions posed in this chapter.

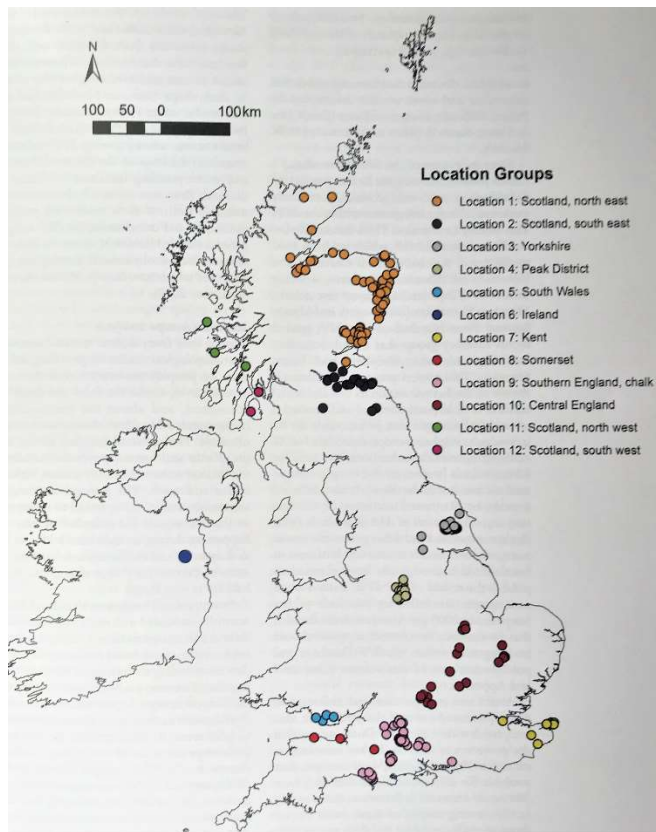


Figure 171 - Map of chosen locations from page 27, *The Beaker People 2019 book*

Despite these publications, 587 barrows in the Wolds have not been excavated or only partially excavated. Their secrets may be lost for ever or, in a very few cases of upstanding, unexcavated barrows, yet to be revealed.

The grave goods by material category shows an analysis of worked animal bone, which has been deliberately placed with human burials and cremations (Figure 172). Here, 47 burials and 21 cremations contain worked animal bone. Only one worked bone was found without human remains but with other animal bones.

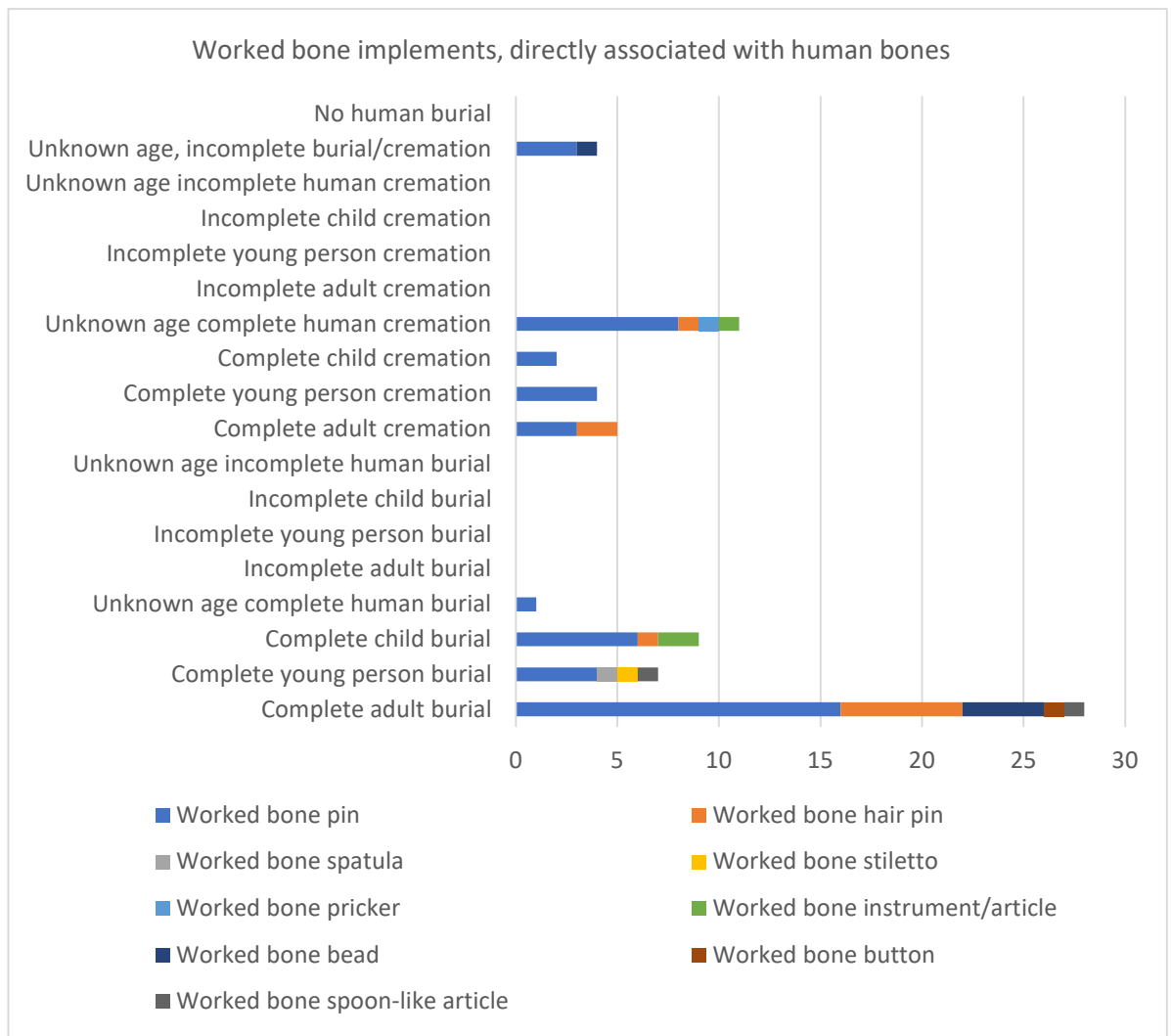


Figure 172 - Worked bone implements, directly associated with human bones

Worked bone artefacts were almost exclusively associated with complete burials or cremations and many with complete adult burials. The variety of artefacts included bone pins or hairpins, beads or buttons, prickers, stilettos, spatulas, instruments or spoons.



Figure 173 – Other worked implements, directly associated with human bones

14 adult burials and one adult cremation were associated with other worked bone, tusk or antler implements. Once again, most implements were found with complete corpses, whether inhumed or cremated (Figure 173).

Two barrows contained amber objects; 4 barrows contained ochre and 6 contained shells. 26 barrows had polished stone axes or adzes in them, some in partial form or even splinters of polished axes. 13 were Type VI axes from Great Langdale in Cumbria. A further 13 were made from Alpine greenstone. Barrow C38, excavated by Mortimer at Kellythorpe Farm, part of the Driffield Group of barrows, contained an Alpine greenstone wristguard with numerous bronze rivets, gold heads and a bronze buckle, a bronze dagger with its wooden

sheath and handle. Mortimer considered the portion and two fragments of polished greenstone axe within barrow C59 to have come from the same implement (1905, 69-71). 64 barrows contained bone implements (Figure 172) and a further 23 had tusk, horn, tooth or antler objects in them, including a ring, a comb, a rake, spoons, pendants, handles, tools, sheaths, maceheads and a musical instrument (Figure 173). All the results can be found in the Appendix C.

42 barrows contained over 1,320 jet items plus other broken beads and pieces (Figure 174). This included six jet necklaces, of between 12 and 623 beads, some with either a triangular or a semi-circular pendant; and 4 other barrows with pendants (rectangular or triangular in shape) in them. There were 5 jet rings in separate barrows, often with buttons or studs; 1 jet arm ring with a button; 1 jet slider; and other barrows with jet beads, buttons, studs and a spindle-whorl. Five further barrows contained 11 lower-quality jet and shale beads and unshaped pieces (Appendix C).

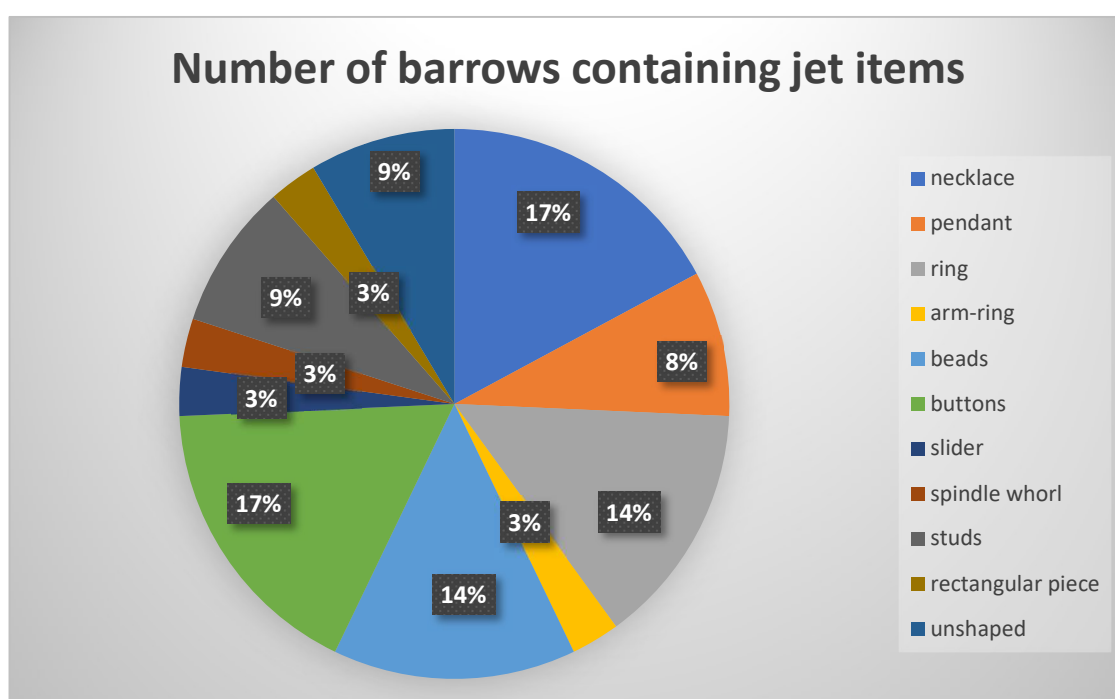


Figure 174 – Pie chart showing the types of jet items found in these barrows, and their percentages

52 of the barrows contained bronze objects, including 26 awls or prickers, earrings, rings, a 'Celt' (or axe), early axes, daggers, knives, a sword and numerous rivets (Appendix C).

In total, 90 barrows contained jet or possible items for working, cutting, shaping and polishing jet (Appendix C; Figure 174). These included jet, lignite and shale jewellery, such

as necklaces, rings, arm-rings, beads, buttons or studs, as well as unshaped pieces ready to be worked. The rest of the possible 'jet toolkit' comprised of sandstone polishing stones, flint saws and bronze wire, awls or prickers, although according to Alison Sheridan (pers. comm.), these bronze items may not have been fine enough to penetrate jet, in such a way as to create the tiny piercings found within jet bead manufacture. The actual bronze wire they used may have disintegrated because it would have needed to be so fine. Nevertheless, 18% (90/490) of all excavated barrows from this study contained possible jet-working objects but this number may change as new theories and artefacts come forward. The discussion below will develop this concept further.

7.5 BURIAL, CREMATION, HUMAN BODY FRAGMENTATION ANALYSIS AND DISCUSSION

Through this desk-based study, a variety of mortuary practices have been revealed by analysing legacy data from early barrow excavations. The varying treatments of the dead were being completed throughout the region at different time periods during the Neolithic and Bronze Age. Human body parts, animal remains and objects were circulated, sometimes whole, sometimes in a fragmented or smashed form. Burial customs in East Yorkshire are known to differ from those elsewhere in England. In the Earlier Neolithic period, people were burying their dead in both long and round mounds. Some of these became crematoria, as they were deliberately burnt at the end of their use life. Neolithic round mounds contained the first burials to include grave goods, such as within Duggleby Howe. Many of these were deliberately placed at points of articulation, which itself can be seen as a demonstration of the segmentation and transformation of the corpse (Lucas 1996, 103-104).

Within the Neolithic period, body disarticulation was common, either through excarnation, possibly within covered charnel pits (Joanna Brück, pers. comm.) or within burial chambers and surrounding ditches created for that purpose (Ibid., 100). Whilst the stages of decay would have followed a predictable pattern, not all individuals would decay at the same rate. The time of year, age of the individual and manner of death might all alter this process, providing a 'serious challenge to the...ability to impose structure and order upon their world' (Crozier 2016, 731).

In 1851, Ruddock found 15 disarticulated skeletons, 'which lay one upon another, without much arrangement' in Heslerton Neolithic round mound, Sherburn Parish (Bateman 1861, 230-1) (Pastscape 64841). When Greenwell re-excavated, he found the secondary burial of a crouched inhumation above the old surface, within the mound material and a single human skull on the old Neolithic ground surface (1877, 145-146). In Mortimer's 112 Neolithic round barrow excavation, Garton Slack Group (Pastscape 64421), he uncovered 11 bodies (1905, 245-246). Four infants, one child and one young person were buried within an internal ditch. A further three adults and an infant were interred on the surface and there was burnt bone in a vase. Four bone pins (one of which was split) had been deliberately placed with four of the children, possibly as a way of sealing a burial shroud.

Jan Harding noted that East Yorkshire's monuments challenge the long-held view that long and round barrows had opposing 'collective' and 'individual' burial rites, with both types of burial tradition operating within the same area (1996, 75), a phenomenon already discussed by Grinsell (1953, 38) and Petersen (1972, 25). There are numerous multiple children, adult and young person burial and cremation occurrences within the Yorkshire Wolds. 'The status of each individual either in life or immediately prior to death must have been very different for them to have warranted such drastically different treatments' (Gibson 2016, 59). 334 out of 490 Neolithic and Bronze Age barrows contained more than one burial or cremation. This contradicts findings in other areas of Britain (Mizoguchi 1993, 224). It is only during the Bronze Age that the preference for single burials within East Yorkshire barrows slowly becomes the norm (Lucas 1996, 108). In 236 of 420 Bronze Age barrows, there was more than one interred person within the barrow (Table 62).

Total number of bodies in Bronze Age barrows	Number of barrows
0	40
1	144
2	74
3	46
4	33
5	15
6	11
7	17
8	10
9	7
10	3
11	4
12	1
13	3
14	5
15	2
16	0
17	3
18	1
19	0
20	1
Total barrows	420

Table 62 - Total number of bodies per barrow type

Cremation and inhumation were also practised concurrently in 67 of 490 barrows during the Neolithic and Bronze Ages in the Yorkshire Wolds. This was confirmed by Mizoguchi (1993, 231) and by Lucas. During his study of the Wolds' barrows, he found cases where cremation and inhumation were 'more or less contemporaneous' (1996, 111-112). In Barrow 27, Ganton Parish, burnt and unburnt bone were found within the same burial, which had been later disturbed (Greenwell 1877, 173-5). *In situ* burning also occurred within East Yorkshire's barrows, such as that on Etton Wold (Lucas 1996, 112) or Greenwell Barrow LXXXVI, Goodmanham Parish (Mizoguchi 1993, 231). There is evidence of this occurring elsewhere in Britain (such as, Fowler 2013, 8) but further research is needed for more definite examples.

Flues were constructed within the Earlier Neolithic tombs, with the hottest burning towards the eastern or open end of the monument. Lucas considered this to be evidence

of the closing of the chamber, as with blocking stones on megalithic tombs. This would prevent the exit and re-circulation of people back into the community (1996, 106). An example is Raisthorpe long barrow, Barrow 3, Wharham Parish, excavated by Mortimer and later Brewster (1905, 18; 1965, 8 in Manby 1988) (Pastscape 62096). Upright flues and incompletely burnt remains were recovered from the barrow.

Whilst taphonomic loss was uncommon, due to the favourable soil conditions within the Yorkshire Wolds (Mizoguchi 1993, 224), there were many instances of plough damage within the excavated barrows. Mortimer's Barrow 60, Kirby Underdale Parish, East Yorkshire (Pastscape 61612) contained one incomplete adult, which had been plough-damaged and two whole adult burials. In Barrow 32, Garrowby Wold Group, an adult skeleton had been destroyed by the plough (1905, 145-146). In Greenwell's Bronze Age Barrow XXXIX (1877, 186-191) (Pastscape 64905), Foxholes Parish, a highly ornamented adult burial had been covered in turves and so had decayed. Yet the grave goods, comprising a highly-polished bronze knife-dagger with ox-horn handle, 3 bronze rivets and a wooden sheath; an early bronze axe-blade, with wooden handle and wooden sheath; 5 jet and 1 sandstone buttons; a bronze drill or pricker; and bones of 4 oxen and 1 pig, had all been preserved.

The antiquarians and their workers were fairly diligent in their barrow excavations. Nevertheless, it would be easy to miss small bones in a chalk context and often, only sections of the mound were investigated. Poor excavation techniques were underlined by the re-excavation of Rudston Barrow 62 (Greenwell 1877, 234-245) (Pastscape 79488). Manby noted the unusual choice of cremation cist-burial with a Beaker, found by Greenwell, and wished to re-examine the mound (Manby 1971, 254). The mound's re-excavation in 1968 uncovered Neolithic pottery and flints on the old ground surface to the north-east of the mound. Three more secondary burials, with no grave goods, were also found (Pacitto 1968, 246).

Some of the incomplete and dismembered bodies can be attributed to later disturbance, such as oval Bronze Age barrow XVII, Ganton Parish, where burial 2 had been disturbed in the past by burial 3 (Kinnes & Longworth 1985, 36). Callis Wold 275 Neolithic round barrow (Mortimer 1905, 161-163) (Pastscape 61627), which had previously been dug into to bury

cattle, contained 22 human burials, some disturbed by the later intrusion. Mortimer uncovered inhumed and cremated remains together, as well as dismembered and incomplete skeletons. Powlesland (2003, 285) uncovered secondary, Bronze Age disturbance of a primary Neolithic excarnated corpse in the excavation of Heslerton 1R, during the Heslerton Parish Project, in the Great Wold Valley. The primary interment had been moved aside for the burial of a juvenile and a Beaker (Mizoguchi 1993, 230, from Powlesland 1986).

The burial evidence from other barrows represents the fragmentation of some bodies after death, with instances of additional bones, incomplete cremations and missing or replacement body parts within burial contexts. From radiocarbon dates assigned by Alex Bayliss, he stated that, 'late third millennium BC dates for the primary disarticulated deposits were unexpected', as in Willie Howe Plantation (2130-1690 cal BC) (Gibson & Bayliss 2010, 96). While taphonomic loss and later disturbance cannot be ruled out, some of the cases of incomplete bodies and additional or replacement body parts presented here were considered sealed contexts by the excavators, suggesting deliberate fragmentation and enchainment of remains, with the fragment being appropriated to represent the whole, acquiring a distinct meaning (Rebay-Salisbury *et al.* 2010, 2). Within British mortuary rituals, fragmentation reflects 'attempts by past communities to negotiate relationships between the living and the dead' (Croucher 2010, 9).

In East Yorkshire, 40 Bronze Age and 3 Neolithic barrows contained no burials, although we cannot really rely on this data as they may not have been fully excavated. What is more interesting, however, is that there were 169 graves, hollows or holes within 110 barrows (Figure 163), which had been deliberately dug and then re-filled without adding a human corpse, although those barrows contained other burials or cremations. The concept of cenotaphs or *pars pro toto* was noted by John Chapman in the Balkans, as 'a logical extension of bodily fragmentation' (2000, 6). This compares with the totals at Varna I, where there were 9 cenotaph graves and at Zengővárkony in Transdanubia, two cenotaph graves, out of almost 400, were excavated (*Ibid.*, 107, 143). We can be fairly sure of this assumption for these 169 cases, as they were only chosen for this analysis if the excavator noted that the ground was undisturbed. The excavator also often commented that the situation was puzzling, that there was no logical reason for the emptiness of these

‘enigmatic holes’. Yet, there are explanations for these occurrences. ‘The absence of a physical body...cannot be taken to mean the absence of a social body whose persona is known, valued and symbolised in specific...ways’ (Ibid., 122). Chapman discussed the construction of a social persona through hoards within elaborate cenotaph graves within the Balkan region, which altered views on both body and object personalisation (Ibid., 179, 182). Contra the situation in the Balkans, in the Yorkshire Wolds none of the cenotaphs contained elaborate artefacts. Some had burnt animal bones within them or a drinking cup but no body, such as within Greenwell Barrow VI (1877, 142-145) (Pastscape 65005). Others contained animal bones only. Within Mortimer’s Barrow 18, an oval hole (2.1m by 1.35m by 0.77m deep) was excavated. It contained the upper portion of a red-deer antler, but no interment (Ibid., 9-11) (Pastscape 62058). Some were completely empty, for example, Mortimer Barrow 109, where two holes had been dug and re-filled, neither with contents. Both were circular. One was 1.8m deep and 1.2m in diameter and the other was 0.9m deep and 0.75m in diameter (1905, 58) (Pastscape 1259775). Thomas Bateman excavated a barrow 6 miles north of Pickering, which contained a stone-lined grave 1.35m below the natural surface, which ‘strange to say, did not contain any human remains’ (1861, 211). Another example is Heslerton Neolithic round mound. When Greenwell re-excavated Ruddock’s barrow, he found three ‘enigmatic holes’, dug and re-filled with the same material. Two were 1.5m by 0.96m and one was 1.35m by 0.9m. All were 0.75m deep (1877, 145-146).

However, we must exercise caution when discussing cenotaph barrows. In Barrow XLVII, Weaverthorpe Parish (Greenwell 1877, 201-203), Greenwell had not uncovered a human burial, despite turning over most of the mound. Yet, 5 graves were later uncovered by TCM Brewster, who worked for the Ministry of Public Buildings and Works in Yorkshire in the 1960s and 1970s, excavating mainly long and round barrows (1984).

Within Neolithic East Yorkshire, there is some evidence of the sorting of bones, such as Esh’s Round Barrow, Helperthorpe XLIX, Helperthorpe Parish, where three skulls were grouped in a trefoil shape, with a child’s burial. There were also one or more bodies burnt *in situ*, two adult and one child burials and some other burnt bones (Greenwell 1877, 205-208) (Pastscape 64679). In Barrow LVII, a Neolithic round barrow in Cowlam Parish, East Yorkshire, burial 3 contained multiple disarticulated and incomplete inhumations

(Pastscape 910590) (Ibid., 214-221; Kinnes & Longworth 1985, 56). In fact, 139 of 490 barrows contained incomplete skeletal evidence (Table 58). Lucas acknowledged that incomplete bodies were recovered from excavations but could only think that certain bones might have later been removed. He did not offer an explanation as to why this happened or what occurred to those bones after removal (1996, 102). 'Some incomplete burials may be explained by taphonomic processes, but this is certainly not the case in all (arguably most?) examples, especially where long and other robust bones are missing' (Gibson 2016, 59). Thomas Bateman's account of Mr. Ruddock's excavations in the Pickering region between 1848 and 1858 also referenced incomplete corpses. One such example, a long barrow 4 miles north-west of Pickering, uncovered several incomplete bodies, including a skeleton, 'wanting the skull, which had evidently never been buried with it' (1861, 227-228). In another case, only bone fragments were recovered from a small tumulus in the same region (Ibid., 224). Other examples come from elsewhere in Europe, such as the settlement pits in Podgoritsa, north-east Bulgaria or the missing mandibles or skulls within 33 of approximately 400 graves at Zengóvárkony in Transdanubia (Chapman 2000, 143). Closer to home, at Low Hauxley, Northumberland, only long bones and the skull were deposited in the Bronze Age cist, even though it was large enough for a whole burial (Waddington 2010, in Fowler 2013, 159). Within the Hasting Hill cist, the weathered bones of a 5-year old child were placed with a male burial and the inferior maxillas of 7 people were scattered throughout the burial mound (Fowler 2013, 150). Once again, no satisfactory explanations were posited for these occurrences.

The Yorkshire Wolds also has numerous examples of additional body parts within graves or barrows. In Greenwell's barrow CXV, Goodmanham Parish, (Pastscape 64369) (1877, 324-5), there were three adult burials, one with no skull; an incomplete skull from a different body; and some child bones. Greenwell dug an oval grave with an inhumed child plus two adult femurs in Barrow IV (Heslerton IV, Heslerton Parish) (Pastscape 64962) (1877, 141). In Painsthorpe 118 Neolithic round barrow, dug by Mortimer (Pastscape 61663), there were over 20 bodies. The upper-most burials may have been lost, as there were few burnt bones left in an urn, most having been removed by ploughing action before the excavation took place. Further to this, in sealed contexts below the plough level, there were two cremations in urns; one cremated young person's bones had been deliberately laid in a

hollow; inhumations of 1 young person, four infants, two children and seven adult burials (although one adult had a detached skull and another was missing its legs). There was an extra human skull and some extra finger bones; and some unburnt child bones (1905, 125-128). In North Yorkshire, in Mortimer 55, Hanging Grimston Parish (Pastscape 62127), there were over 14 burials: one incomplete inhumation, which may have been disturbed by people digging for rabbits; inhumations of two children, two young people and three adults; two cremated adults and one extra heap of burnt bones; numerous other human bone fragments and four extra human leg bone pieces with an infant burial. The infant was buried behind the pelvis of another adult and the leg bones were in front of the infant's face (1905, 100-102). Their DNA would need to be tested, if possible, to ascertain their connections, if any, to one another. In Neolithic round barrow Aldro 88, Aldro Parish (Pastscape 62166), there were 10 burials: 2 children, 1 young person and 2 adult burials; one extra adult skull and leg bone; one young person and one adult burial, both disarticulated; and two cremated adults, one in a hollow (Mortimer 1905, 58-60). In Mortimer 52, Birdsall Parish (Pastscape 62148), the Bronze Age barrow contained more than six burials. There was a cremation at the base of a cairn; 3 adult burials, one with an extra tibia and another with an extra human arm; plus, a disarticulated adult burial (Ibid., 61-63).

There are many references to additional skulls, such as those in Esh's Barrow, mentioned above. In fact, three skulls, without their associated body parts, are found in 7 barrows, 5 Neolithic and 2 Bronze Age, with a further Bronze Age barrow, Barrow 116, which contained three animal skulls (Mortimer 1905, 54-56) (Pastscape 62163). The choice of three skulls together reminds us of Stuart Piggott's excavation of Early Neolithic West Kennet long barrow, where a row of three skulls was found in the south-west chamber, laid against the rear wall (1958, 238). Another example is the fairly recent excavation at Windmill Fields, Ingleby Barwick, north-east England. Annis *et al.* excavated two adult crania and some long bones in a bundle in front of the complete burial of an Early Bronze Age adult female. Dating of these extra bones was contemporary with the contents of a wooden mortuary structure a few metres away, which contained further excarnated and disarticulated human remains (Booth & Brück 2020, 1196, Figure 9).

The finding of missing skulls within Bronze Age contexts cannot easily be explained through taphonomic loss and may provide, instead, evidence of the enchainment of body parts between Bronze Age barrows. To link Esh's barrow, with its three extra skulls, there is only one barrow with three missing skulls, Barrow 276, Towthorpe Group, excavated by Mortimer (1905, 19-22) (Pastscape 911324). Either of the two Bronze Age barrows with 3 extra skulls, Mortimer 72 (Ibid., 15-16) and Greenwell XLVII (1877, 201-3; Brewster 1984), may be the source for the missing skulls, although the nearer barrow is perhaps more likely (Figure 175; Figure 176). Alternatively, one cannot rule out the possibility that three different barrows with missing adults' skulls may have been enchainment to this group through family or other ties.

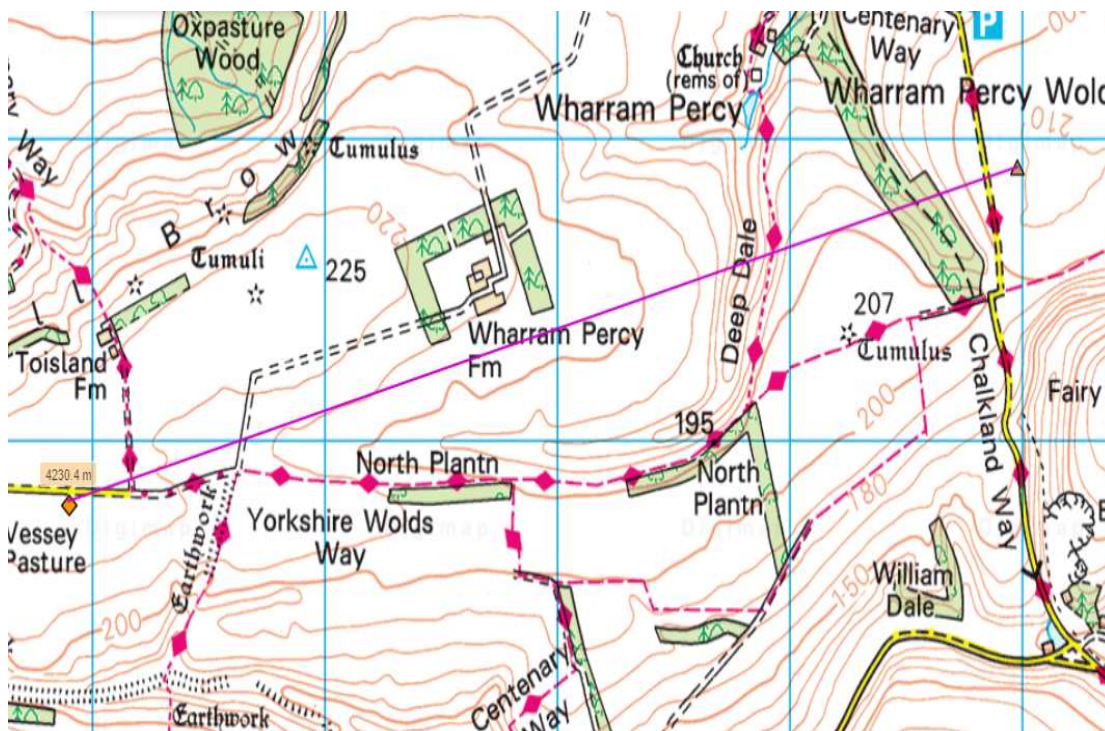


Figure 175 – Location of Barrow 276 (orange diamond) with 3 missing skulls and Barrow 72 (orange triangle) with 3 extra skulls

4.2km separates the 2 BA barrows, Mortimer 72, with 3 extra skulls, and Mortimer 276, with 3 missing skulls (1905, 15-16, 19-22). Both are in the Towthorpe Group, East Yorkshire.

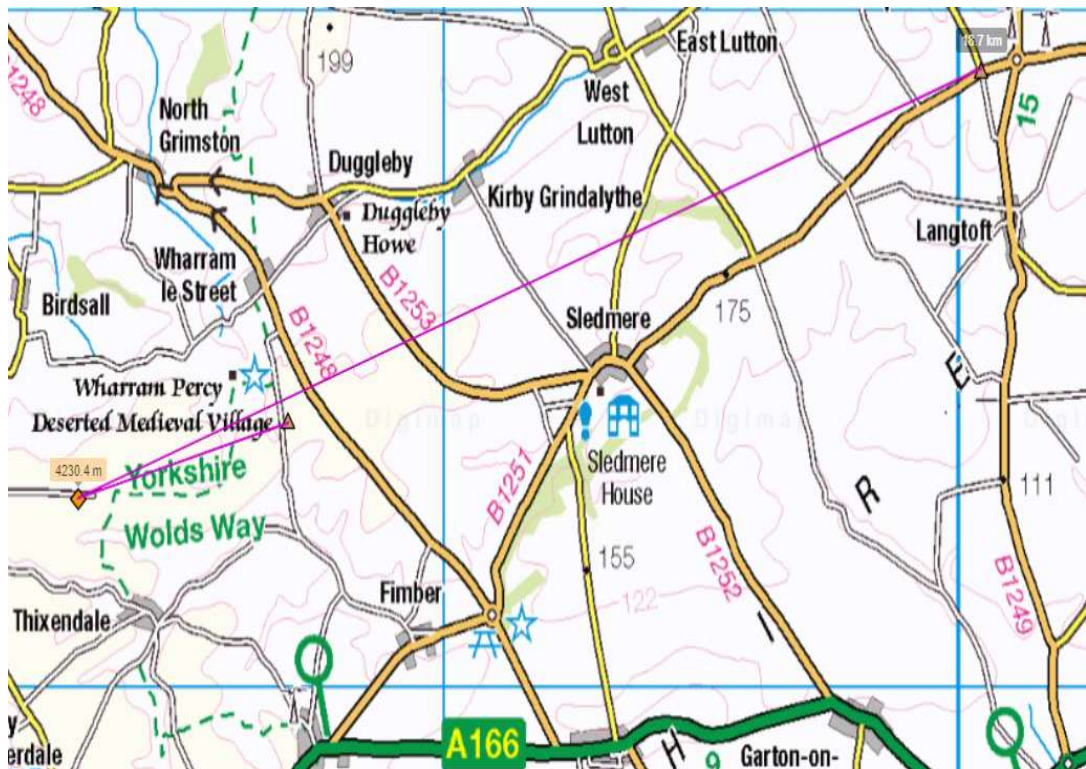


Figure 176 - Location of Barrow 276 (orange diamond) with 3 missing skulls and Barrows 72 and XLVII (orange triangles) with 3 extra skulls each

The other BA barrow, Greenwell XLVII (1877, 201-203), with 3 extra skulls, is on virtually the same alignment, but 18.7km away.

The division and reconstitution of corpses was occasionally present in East Yorkshire's barrows. There are clusters of barrows with additional or replacement body parts throughout the Wolds (Figure 177). Six of these barrows are found in Garton Parish, to the west of Driffield.



Figure 177 – Barrow locations with additional or replacement human body parts

A skull with a replacement lower jaw was excavated within Greenwell's barrow CCXXIV (1877, 497-501) (Pastscape 79508). Other items were used as additions or replacement body parts within these barrows. In Garton Parish, a small food vase had been used to replace a lower jaw (Mortimer 1905, 229-230) (Garton Slack Parish) (Figure 178).

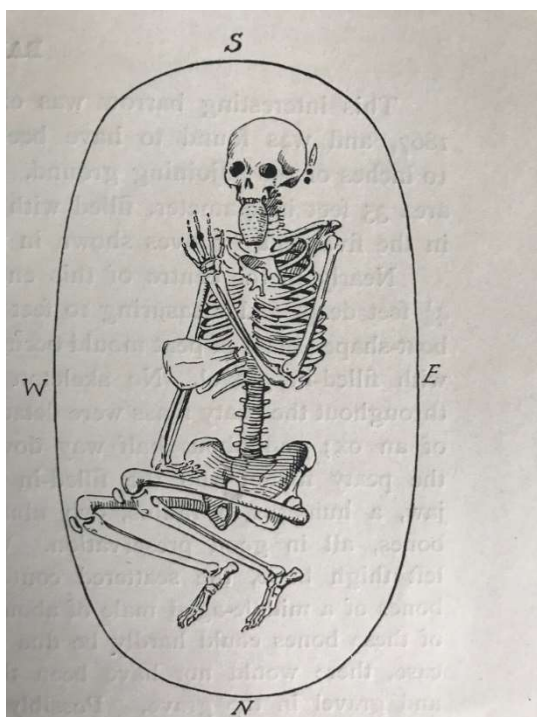


Figure 178 – Small food vase used to replace missing lower human jaw in Mortimer's Barrow 40 (1905, 229)

There are a few examples in the Wolds of the anatomically incorrect order of bones, as also found within four graves at Zengóvárkony in Transdanubia (Chapman 2000, 143). In East Yorkshire, on the original ground surface of Barrow LVII, a young person was buried with no lower jaw and bones the wrong way around. Another adult burial showed signs of having been dis-placed and re-placed (1877, 214-221) (Pastscape 910590).

There are surprisingly few examples of bodily violence, definitely found in only 15 instances in the Yorkshire Wolds. One was recorded by Bateman, during Mr Ruddock's excavation of Heslerton Neolithic round barrow (Pastscape 64841). He found 15 skeletons 'in confusion', one with a flint arrowhead lodged within its skull (1861, 230). These relatively low numbers of body injury tally with Rick Schulting and Michael Wysocki's findings of 350 Earlier Neolithic crania from (mainly southern) Britain (2015, 107).

The lack of evidence seems to contradict the view of fragmentation, as a means of control during periods of uncertainty, suggesting the insecurity was economic, rather than socio-political or due to increased populations and the societal stress that can create. There are other examples of violence from graves elsewhere in the UK, the most famous of which is the Amesbury Archer, found in a Bronze Age barrow in Wiltshire. At Lilburn South Steads, Northumberland, the bones were uncovered in disorder. Two of the long bones were split along their length and some bones were missing (Fowler 2013, 130), which is similar to the occurrences of smashed and split long bones in 11 barrows within the Yorkshire Wolds. Yet, cannibalism is well known in Europe. In south-east Anatolia, the Domuztepe Death Pit contained evidence of the heating of bone and the splitting of long bones for marrow extraction (Croucher 2010, 8, 7). Another example of cannibalism comes from Yarim Tepe II, in the Sinjar Valley of current-day Northern Iraq (Ibid., 13). In Føllenslev and northern Zealand, Denmark, there are examples of strangled and sacrificed human bodies from the Neolithic period (Tilley 1996, 99). In Føllenslev, the human remains were deposited with a cow's skull, one roe deer and three cattle jaws and part of a tortoise. Chris Tilley posited that these might have been the remains of a sacrificial meal (Ibid.).

In East Yorkshire, worked and unworked animal parts were placed, either with the deceased or within their own buried space. While intrusive activity cannot be ruled out in every case, the statistics here only considered closed and/or undisturbed contexts, as

explained by the excavators. This placing of animal parts within barrows was considered by excavators, in some cases, to be intentional. This concurs with discoveries elsewhere. When Paul Mellars excavated the Mesolithic Cnoc Coig midden on Oronsay, he uncovered 55 human bones, including 30 hand and feet bones. He argued that excavation and defleshing occurred elsewhere and then the bone was deliberately brought to the midden (Mellars 1987, 299). Vicky Cummings agreed, adding that some of the hand bones had been carefully and deliberately placed onto seal flippers, highlighting the likeness between the two (2017, 14). This suggests that on Oronsay, humans and animals were discarded in similar ways.

In Mortimer's Barrow 32, Garrowby Wold (Pastscape 61708), a cremated body was placed with an unburnt dog jaw. The barrow also contained an adult skull portion (with the rest of the body lost to the plough); a partial young person burial; and two adult burials below a pavement of angular flints (1905, 145-146). Within Mortimer 75, Garton Slack (Pastscape 64415), one grave contained a child burial and a dog skull, whereas the other grave contained one cremation, three adult burials and two heaps of burnt human bones (one of which was an adult). Also, within the barrow was another adult burial, a young person cremation and pieces of human bone, some of which were burnt (Ibid., 222-224). In 1851, Thomas Bateman opened a large mound, 6 miles north of Pickering. He excavated a primary cist, which contained a middle-aged skeleton and a hornless goat skull (1861, 223). In another barrow, 4 miles north-west of Pickering, he wrote about the discovery of an aged person, buried close to the bones of an ox (Ibid., 229). Brewster uncovered a pig humerus and calf jaw, which were deliberately placed with an adult burial, as a secondary interment into the top of Whitegrounds Early Neolithic barrow (Manby *et al.* 2003, 54, Fig. 20). In Barrow 294, Life Hill Group, Sledmere Parish (Pastscape 64758), Mortimer found a badger's skullcap which had been placed in a grave with an interred adult. There were also two other graves, one with two adults, one cremated, one buried; the other with two burials: a child and an adult. The barrow also contained disarticulated human bones, which were scattered throughout it (1905, 202-205). A final example is Barrow 281, where Mortimer uncovered the skulls of two foxes and a badger, within a cist containing an adult burial. He postulated that, as the cist cover was broken, the animals might have been natural additions as his

only explanation of the occurrence, even though he added that, 'it seemed almost impossible for any burrowing animal to have entered the cist' (Ibid., 346-350).

The importance of animals within the Neolithic and Bronze Age periods has long been understood. Animals are bound up with the landscape. They inhabit it and serve as a means of classifying it. In East Yorkshire, as in Orkney, animals were culturally appropriated and employed in structuring action within the encultured landscape (A Jones 1998, 302-303). The deliberate use of animals within graves and barrows can be seen as a recognition that the animal may have represented a dividual person (C Fowler 2004, 126). Contra Fowler's discovery in north-east England (2013, 252), there are numerous examples of artefacts and/or animals being treated like humans in East Yorkshire, such as, the placing of 31 animal body parts without human remains, within undisturbed funerary contexts within barrows, e.g. Mortimer Barrow 211, Acklam Wold (1905, 92-93). Pots were also afforded a burial, for example, Mortimer's Barrow 104, Garrowby Wolds group, Kirby Underdale, where 2 food vases were found with an ox rib but no accompanying burials in bottom of a grave, under a layer of dark, laminated matter resembling decayed leaves, which may have acted as a 'platform' to protect the vases beneath (Ibid., 134-136) (Pastscape 61696). These pots may have held the same qualities as people, emerging out of persons and as persons in their own right (C Fowler 2004, 101).

An analysis of the artefacts found within the Yorkshire Wolds' barrows demonstrates that they were numerous and varied. Mortimer spoke of the Garton Slack barrow group in East Yorkshire, 'From the variety of the methods of interment, and the fine quality of many of the relics discovered, as well as from other interesting features attached to it, this group surpasses any of the other series of barrows I have yet explored. It is also the largest group known to the writer that is situated in a valley bottom, on low ground' (1905, 208). Greenwell compared his findings to those of Colt Hoare, who had dug earlier in the century in Wiltshire. Colt Hoare had found 4 decorated bone objects similar to those in Greenwell's barrow LXXI, although LXXI's were also perforated to be used as beads (1877, 279). Polished flint axes, some with perforations, from the Alps, Great Langdale in Cumbria, Cornwall and Graig Llwyd, were found as incomplete or broken pieces, slivers and fragments in 27 burial mounds of East Yorkshire, implying their curation and long-term circulation. Many pots were also found to be broken within the burial context. Sometimes this was explained

through taphonomic loss or soil pressure, noted by the excavators. However, in other cases, single or several pottery sherds were recovered, with no evidence for the rest of the pot. The deliberate breakage of objects could indicate enchainment, with distribution of the fragmented pieces between persons representative of the materialisation of existing social relationships (Appleby 2010, 46).

Mortimer was very observant, noting slabs of oolitic limestone in a cist in Barrow C38, at Kellythorpe Farm, Driffield, the nearest source of which was 18 miles away, at Filey Brigg (Ibid., 271-283). As John Chapman and Bissierka Gaydarska noted in the essential qualities of clay in the Balkan Neolithic (2007, 7), so 'foreign', blue clay, different from the material in the area local to the barrows was found in Mortimer's Barrows 47 (Birdsall Parish, 1905 45-46); 226, 245, 229, 230, 218 (Huggate Wold Group, 1905 302-3, 306, 306-307, 307-308, 309, respectively). It was posited to have been 'brought from a distance' (Ibid., 302-303) or 'brought from a distant dale bottom 1.5 to 2 miles away' (Ibid., 306-307). In other parts of Bronze Age Britain, 'selective use of...coloured surface and subsurface materials' demonstrated a 'symbolic construction of place' (Owoc 2002, 127). The use of non-local clay and stone may be examples of the enchainment of each barrow to the other and also to the valley bottom from whence the clay or stone came, perhaps the settlement or ancestral site of these builders. Further geological research may be able to affirm this.

The first map below shows all the Neolithic and Bronze Age barrows with examples of definite and possible fragmentation, from the excavators' comments. Below the first map are four maps of barrow clusters, with similar corpse treatments, possibly indicating groups of like-minded individuals, who expressed their tensions and identities through their treatment of the deceased (Figure 179; Figure 180; Figure 181; Figure 182; Figure 183).



Figure 181 - A further cluster of definite (*yellow star) and possible (◇orange diamond) fragmentation examples, in barrows along the later Roman road, past the villages of Acklam and Kirby Underdale, East Yorkshire

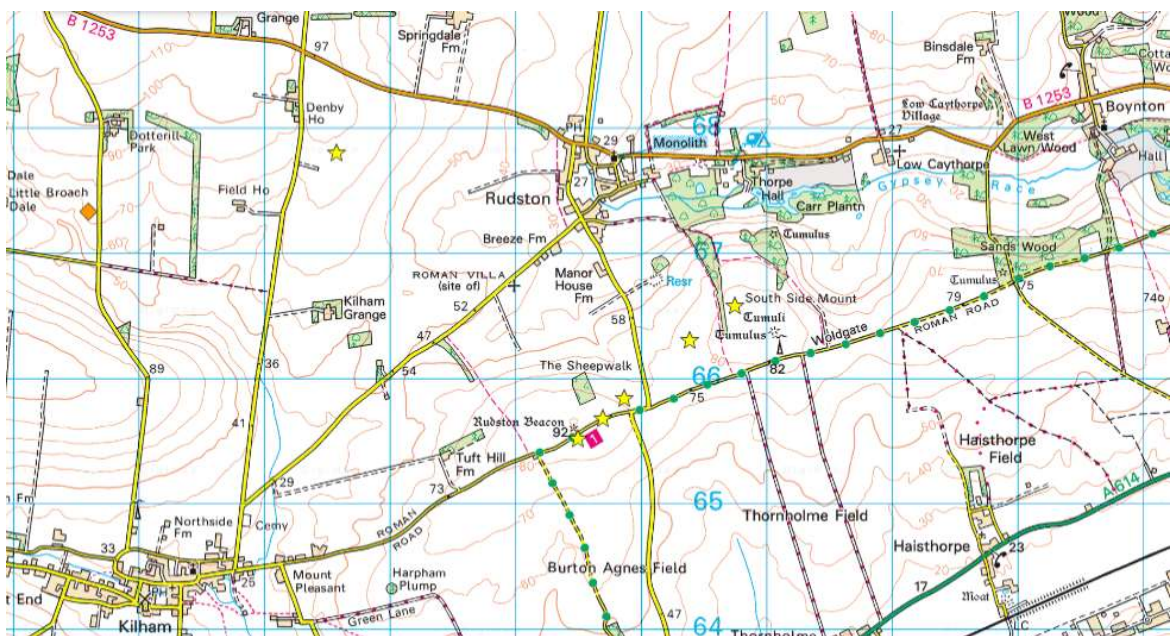


Figure 182 - A third cluster of definite (*yellow star) and possible (◇orange diamond) fragmentation in barrows, to the south and west of Rudston monolith, once again roughly following the later Roman road

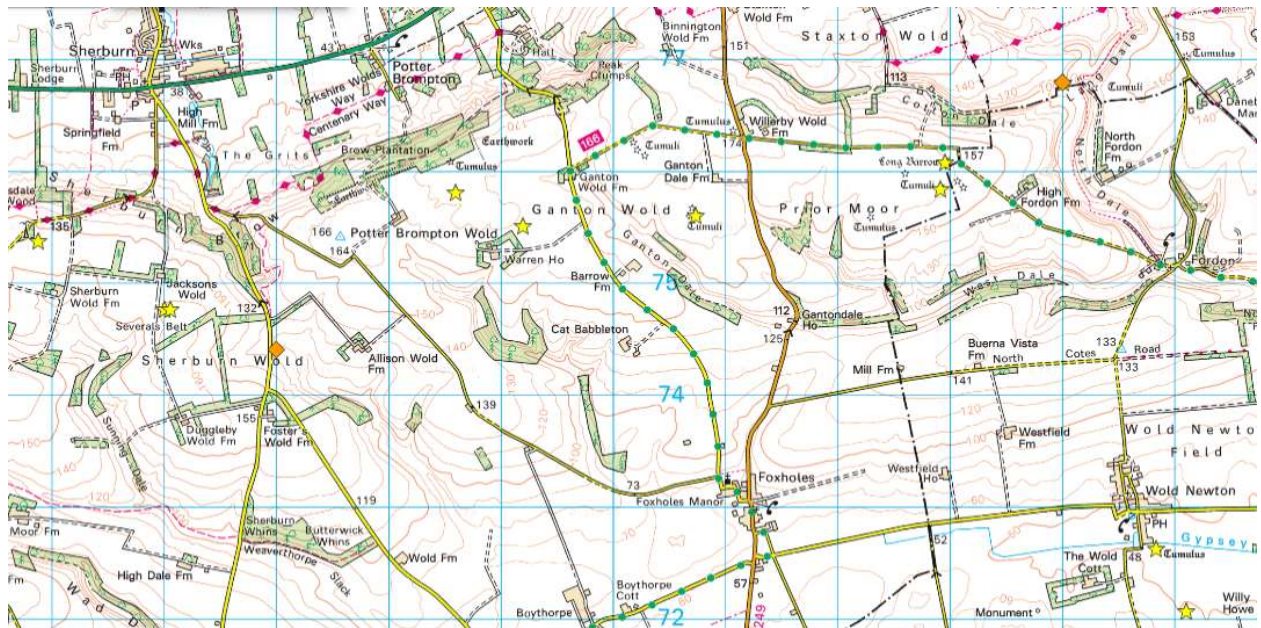


Figure 183 - Another cluster of barrows with examples of definite (*yellow star) and possible (◊orange diamond) bodily fragmentation at Sherburn and Ganton Wold

7.6 OVERALL DISCUSSION

The level of fragmentation uncovered in this study has few documented parallels in Britain. Although the concept of fragmentation has long been established and accepted, it is often not acknowledged, nor discussed, within the realm of the Late Neolithic or the Early Bronze Age burials of England. Many authors have unwittingly discussed the concept, such as, through a consideration of the circulation of selected human bone relics within British mortuary rituals (for example, Bradley 2000, 122). Even when human body parts, disarticulated bones or scraps of bone were referenced, the author would offer only the later removal of bone or chemical weathering as explanations (such as, Fowler 2013, 151), or else the concept of a 'token deposit', but without explanation of the reasons for this (such as, Platell *et al.* 2013, 37). Of the human bones re-assessed by Michelle Gamble in 2011, often only 10-20% of the body had been recovered from each cist burial. Gamble and Fowler offered reasons of poor preservation or later removal of bodies (2013, 50-1, 48). Despite possible taphonomic processes, remains of rushes and wood from the dagger hilt were excavated from the Allerwash cist, Newbrough, Northumberland (Ibid., 53). Within the same cist, only 10% of the adult male skeleton was recovered and some of the bones were anatomically displaced (Ibid.). Gamble and Fowler concluded that, as the smaller bones were absent, taphonomic loss or later removal were likely explanations, although

curation of some remains was also possible (Ibid., 54). A cist burial in south-east Scotland, at Mill Road, Linlithgow, West Lothian, contained the disarticulated and incomplete remains of at least one adult and five children, with burnt and unburnt remains in the same context. All were dated between 2320 and 2020 BC (Cook 2000, 82). The remains were considered to be 'a tiny proportion of the whole' (Mc Sweeney 2000, 85), and excarnation and loss over a long period were posited as the most probable reasons for this situation (Cook *et al.* 2000, 89-90). However, as four of the children's only surviving remains were complete hand and feet bones, this argument seems unlikely. Selective burial was also posited as the explanation for the under-representation of human vertebrae, pelvis and rib bones in the Cloburn Quarry, Lanarkshire's Bronze Age ring cairn's cremated remains, despite the presence of animal bone with three of the cremations (Roberts 1998, 122-123). In fact, pottery sherds were also included within the cremated remains but only a few sherds from each vessel, some of which were abraded at the point of deposition. Lelong concluded that 'the old fragmentary pots might have had specific meanings...which fed into the rituals and the newly prepared objects' (Lelong 1998, 129-130). Animals were also buried with humans in the Cumbrian Bronze Age. During the excavation of a cairn on Hardendale Nab, Cumbria, numerous cremation burials and deposits of both burnt and unburnt bone were dispersed through the cairn, along with animal bone. Cremation burial 14 contained inefficiently cremated animal and bird bones, including the leg bones of a buzzard, with an adult and a neonate (Williams & Howard-Davis 2004, 27). This parallels the finds from the Tomb of the Eagles, South Ronaldsay, Orkney, where fourteen or more white-tailed sea eagles were placed amongst the remains of both animals and humans (Jones 1998, 308).

In East Yorkshire, the survival of bone is excellent. Often, all the small and immature bones survived and, as at Allerwash, wood and other organic materials were also present in 63/490 barrows, when entered, although these have often not survived since their excavation. In Greenwell's Heslerton IV Bronze Age barrow, juniper seeds were found at the knees of a child burial, along with two extra adult femurs (1877, 141), although the seeds were not available for Kinnes and Longworth to later assess (1985, 33). In Barrow LX, a wooden object had been found in grave 3, in the hand of an adult inhumation. This also did not survive for assessment (Ibid., 59). Mortimer, too, uncovered organic remains within

his barrows. Of the 7 interments in Aldro Group barrow C59, Birdsall Parish, only one was a cremation (Mortimer 1905, 69-71) (Pastscape 62151). This was the primary interment, was surrounded by 'dark matter' and had been placed within a rectangular space, with postholes at each corner. Within Bronze Age barrow C74, also Birdsall Parish, a single human cremation had been placed with 2 bone pins within a cut oak log, shaped into a trough. Its lid was burnt oak lid, which may have been due to the remains being deposited whilst hot. It is unlikely that any of those will have been preserved either, although further investigation of all museum stores containing these remains would be needed to prove this.

Gavin Lucas studied the Neolithic and Early Bronze Age burials of East Yorkshire in his article, 'Of death and debt'. He attributed the disturbed burials, the piling up of bones and the selections of body parts with articulated skeletons as a practice conducted at the start of the Early Bronze Age (1996, 108). Yet, noting the higher representation of skulls than other body parts within barrows, Lucas stated that this process was evidence of links to the ancestral past (Ibid., 108). Body disarticulation is known to be a lengthy process and must have taken considerable time to achieve. The labile bones, of the hands and feet, might decompose fairly quickly and separate but the most persistent articulations can remain intact for years (Lorentz 2010, 21). Clearly, the bones of infants, children and slight, gracile individuals decompose more speedily than those of a stout, strong individual.

The period in question is important for the wider understanding of long-term changing patterns in mortuary rituals, in 'ways of being and becoming in British prehistory' (C Fowler 2004, 6). The main issue in archaeology is that we try to find the 'real' archaeological record, which is impossible for this time period. We therefore need to adopt a subjective and conditional approach, through our interpretation of the past, with prejudice, pre-supposition and local cultural values (A Jones 2002a, 18). It is important to place the people in the past at the centre of all discussions (Ibid., 90), yet we need to understand that people in the past did not consider death in the same way as we do. To quote Alex Gibson, 'it is becoming increasingly obvious that the treatment of human remains in the fourth to second millennia bc was totally alien to our own ideas'. Gibson goes on to query and ask, 'The disturbing of a body by a secondary addition is easy to understand; but less easy to explain is the partial removal of remains, assuming that they were actually there in the first

place. What was so important about the missing parts that necessitated their removal or indeed retention? Why not displace or remove the whole body? Who were these people who could share the same grave yet be treated so very differently?' (2016, 58-59).

An inability to explain the components of these burials and the people behind these decisions leads us to consider fragmentation and enchainment as one explanation. Sørensen discussed fragmentation, through cremation, as a shift in ideology (2010, 59), where the cremation of remains eliminated the soft parts of the body, disintegrating the whole (Ibid., 55). In the Yorkshire Wolds, during the fourth and third millenniums BC, body parts and objects (Woodward & Hunter 2015, 3) may have been deliberately fragmented and deposited within barrows, possibly to establish continuing relationships through enchainment. Body parts may have been treated as 'portable artefacts', with selected 'relics' circulated between a whole series of different archaeological contexts (Bradley 2000, 122) and the addition and removal of relics to and from primary interments (Bradley 2007, 162). It remains unclear as to why whole and incomplete, buried and cremated remains and objects were deposited within the same graves or under the same barrows, at approximately the same time, nor why some people were selected by the community for each process. If the flesh of the deceased is considered both 'corruptible and...dangerous' (Cummings & Fowler 2007, 63), then why would inhumation and cremation rites be practised within the same barrows? There are 67 examples of these two types of mortuary modification, which occurred within the same sealed graves, possibly contemporaneously. Within East Yorkshire, we can infer that there must have been other reasons for this behaviour. One view might be that groups, who held different beliefs, gathered together from across the region, to dig and deposit loved ones within the same barrow at the same time. Another view could be that human remains were subjected to either inhumation or cremation based on other factors: who, how and where the person died; their status within the community; or when they died in relation to the construction of the barrow. Yet, neither of the explanations above offer adequate reasons for the butchery and destruction of some human bodies, prior to deposition, which also occurred in the area.

Treatment of the corpse is key to understanding the views of people in the past. Sometimes, as in Esh's barrow, above, huge deliberate care seems to have been taken to place specific items within specific places within the barrow (Greenwell 1877, 205-8). There

is plenty of evidence that people were carefully and deliberately buried. In Mortimer's Barrow 12, Hanging Grimston Parish (Pastscape 62154), an oval grave contained two interments: one child and one adult, face-to-face with one another. The barrow also contained a second grave, with a child and an adult, buried together. However, it also contained an incomplete adult burial on limestone slabs, which had been deliberately disturbed and a separate heap of burnt bones (Ibid., 105-106). In Barrow Mortimer 106, Towthorpe Parish (Pastscape 1319633), there were two graves (Ibid., 13). One contained a single adult burial, whereas the other also contained an interred adult with an infant and another child. Yet, in other cases, numbers of bodies were found in a jumbled mass, with little obvious effort made to place the corpses or cremated remains (such as, Aldro 50, Leavening Parish, dug by Mortimer; Pastscape 1260076) (1905, 77), as well as examples of violence and cannibalism. Aldro 50, along with six other barrow sites in the Yorkshire Wolds, contained direct evidence of signs of cannibalism. Long bones had been split longitudinally; jaws were smashed; other bones were splintered and there was evidence of boiling of bones in two cases. Terje Oestigaard uncovered similar issues in the Norwegian Iron Age. He argued that human beings could be sacrificed to increase legitimacy for the participants within the social order (2000, 43). However, in the case of the Yorkshire Wolds, not only bodies were smashed up. Flints, pottery and animal bones were also crushed, splintered and broken before deposition within these selected barrows, implying multifaceted behaviour in the Bronze Age in East Yorkshire. If we see treatment of the corpse and its associated objects as important in our understanding of the development of society, then these variations complicate the picture. Mortimer, who always tried to present his work as thorough and diligent, intimated that all pottery sherds were uncovered in the majority of cases, despite numerous occasions where he wrote that the pot had been found smashed within the barrow or grave fill. This contradicts Greenwell's frequent findings of a few sherds from different vessels. A re-analysis of the recovered pottery might shed light on whether the perfect vessels drawn by Mortimer's daughter and presented in his beautiful volume, were accurate or representative of the whole pot.

While whole, articulated bodies can be linked to the importance of the individual (Chapman 2000, 219), an incompleteness of the dataset implies differentiation in the social arenas of power. Disarticulation and fragmentation would remove the physical identity of

individuals. Corporate burial and collective tombs rather expressed a shared ancestral belonging (Crozier 2016, 733).

Yet, contra this, this research identified 169 empty graves, hollows or holes. Often, these empty, 'enigmatic' holes were found within barrows with many other burials and/or cremations. The excavator could not understand the absence of a body. In other cases, they logged a few cremated remains, but far too few for a whole body. Yet, this token amount of cremated remains or *pars pro toto*, may have been sufficient for interment (Rebay-Salisbury 2010, 65), indicating that some remains were needed for further stages in funerary rites, such as, possibly being divided up among the mourners for retention (Booth & Brück 2020, 1187). The body may have been thought of as consisting of many parts, a dividual involved in numerous roles of personhood (Sørensen 2010, 60-61). This processing of remains may have occurred through changing patterns of accumulation, through episodes of colonisation or through differing gender relations (Chapman 2000, 220). Unlike other studies on this topic, however, a focus on gender categorisation within this desk-based analysis was not possible. This was due to the potential of bias in the legacy data of the antiquarians, such as, 'The burnt body...was probably that of a woman, for bronze awls have been found associated with female interments' (Greenwell 1877, 152). Further research would need to include a reanalysis of the remains from John Mortimer's barrows, as was completed by Kinnes and Longworth for Greenwell (1985). A huge amount can be gleaned for a new study of the burial and artefact assemblages. Recent strontium and isotope analysis of human remains from the Yorkshire Wolds demonstrated that its inhabitants had highly mobile lifestyles, implying the coverage of large distances (Parker Pearson *et al.* 2016, 628). Lithic and pottery analysis might further add to this evidence.

In the Early Neolithic Balkan region, 'some people were chosen for symbolic retention among the living after death' (Chapman and Gaydarska 2007, 12). While we do not have evidence, from Neolithic and Bronze Age Wolds' settlements, to support and test this theory, the focus on deliberate fragmentation of bodies within their barrows is evident. Overall, at least 1392 out of 2161 bodies were found in barrows with incomplete, disarticulated or disturbed burials and/or cremations. These events can be seen as the enchainment of body parts from the world of the dead to the world of the living, or to another world of the dead (Chapman 2010, 44). While explanations of plough damage,

taphonomic loss and past excavation techniques all go some way to explaining the findings, there is not enough evidence for these reasons to explain the findings in every case. Vast numbers of bodies were involved in multiple burial practices within the barrows of the Yorkshire Wolds, many within sealed contexts. Both Greenwell and Mortimer noted the deliberate addition or dismemberment of body parts, which had neither occurred due to secondary disturbance, nor to taphonomic loss nor ploughing. Mortimer wrote of Barrow 99, within the Painsthorpe Wold Group, 'it was clearly observed that the layers forming the mound had never been broken through to make an opening for a later burial' (1905, 123).

The Yorkshire Wolds may also have been a centre of innovation for the cremation of remains. Certainly, the occurrence of cremation and inhumation together, in sealed contexts, is another long-accepted practice of the Later Neolithic and Earlier Bronze Age peoples of the Wolds. As has been referenced above, there were 67 barrows with examples of both cremation and inhumation in sealed contexts. The practice of cremation seems to have spread to other parts of the UK after becoming established here during the Neolithic period (Lynch 1997, 34). If cremation was designed as a rite to dispose of both the body and the spirit (Oestigaard 1999, 345), then why are there so many examples (13.7%) of both cremation and inhumation together within these barrows? What happened to the social return of the spirit to the ancestors for buried corpses? In the British Bronze Age, it is relatively common to uncover too few cremated bones to make up a whole person, within a barrow context. This is certainly the case in the Yorkshire Wolds. The major issue was that, in the past, the entire cremated remains were rarely collected from a pyre site for burial. Where there are too few cremated bones, it is likely that proportions of bone had been deposited in other locations (McKinley 1997, 131, 138).

206 of 2161 human burials or cremations contained either worked or unworked animal bones. In southern Scandinavia, Chris Fowler found that relations with animals or humans did not end with the death of any being (2004, 122). Animal parts may have been placed with the humans, to keep part of the animal within the person (Ibid., 152). The association of adult burials and, to a lesser extent, cremations with both worked and unworked animal bones was interesting. The adoption of these secondary animal products, such as bone pins or antler hammers and the manipulation of animal corpses, provided enchainment between humans and the animals, with whom they were buried or cremated. This was

clearly an important feature of the relationship between the two and of the regard for these animals during the Later Neolithic and Bronze Age. Ox, deer and boars, in particular, were dividual and their bodies elements of deconstituted beings whose parts were recycled and transformed. The possible Urus tooth in Barrow 209, in the Acklam Wold Group (Mortimer 1905, 90), may represent the exchange of valued or curated items, forming connections with the past through animal body matter (C Fowler 2004, 138). The difference in the number of burials and cremations which were associated with animal parts may be due to the mis-identification or non-identification of the burnt animal bones by the antiquarians. As McKinley found animal bone in 16% of 130 human cremation burials from the British Bronze Age (1997, 132), it is surprising that so few were noted in East Yorkshire. However, it is fascinating to consider the special treatment afforded to the skulls of certain animals. In one case, the skull of a large adult ox was interred with a young pig bone within a Bronze Age barrow in Rudston Parish (Greenwell LXI, 1877, 229-234). It was on the same level as an adult burial but 1.2m away from it. On the other hand, from a purely practical perspective, the slaughter of animals led to many secondary and useful bi-products, so enhancing their value. In other areas, such as Orkney, animal skulls were found as structural elements or enchainéd beings, embedded within settlement walls (A Jones 2002, 159). With no settlement evidence for this period, we cannot add to this discussion within the Yorkshire Wolds at this time.

42 barrows contained 1320 jet items, with six jet necklaces, of between 12 and 623 beads, pendants, jet rings, including an arm ring, a jet slider, beads, buttons, studs and a spindle-whorl (Figure 174). A further ten per cent of excavated barrows contained possible jet-working items. This includes 79 saws found within the barrow fill of South Side Mount Barrow, Greenwell LXVII, Rudston Parish (1877, 257-262). Jet is a carbon-rich fossil resin, with electro-static properties. It is fragile and created necklaces required multiple components and skill levels, indicating the emergence of highly specialised workers. Animating the material from dull brown to shiny black is also very complex (A Jones 2002, 164). A 'mica-schist' 'whetstone' was found in among a group of articles associated with the primary burial in a grave in Barrow LXVIII, Rudston Parish, also uncovered with jet items in Wiltshire (Greenwell 1877, 263). It may have been employed for polishing jet which, as a tricky and fragile substance, is easily broken. Single jet beads and multiples have also

been found in Scotland (A Jones 2002, 167-168) and were sometimes emulated there, using cannel coal, lignite and lower-quality jet (Sheridan *et al.* 2002, 822). Amber beads may also have been available in Yorkshire and both jet and amber continue to wash up on Whitby beaches to this day.

As far back as 1984, Richard Bradley discussed regional variations in the British Later Neolithic, with the emergence of the restricted circulation of certain elite objects (1984, 38, 40). The introduction of jet production and the influence that had in the changing patterns of accumulation of prestige objects would, in itself, have added stress and differentiation within the social arenas of Later Neolithic and Earlier Bronze Age power within the Yorkshire Wolds. Some work on dating has been completed. Parker Pearson *et al.* have dated the use of Beakers to 2300-1950BC in Yorkshire (2016, 623). Further research will be needed here, to date other, specific objects within barrows, to uncover whether the jet-working began beforehand (Sheridan *et al.* 2002, 816, 824), or thanks to, the introduction of bronze to East Yorkshire.

Some of the artefacts within the barrows were directly associated with burial contexts. Analysis could have been done to demonstrate the 'special' and 'unique' nature of these artefacts. We cannot, however, know the values of objects in the past. We can only know how we feel about certain objects in the modern era. Many organic objects may have been lost through taphonomic processes and we cannot place 'value' on an everyday object, which was passed on to a loved one in the past and was therefore prized. However, there is one example, which definitely needs further consideration. Within Mortimer's Barrow 13, a jet necklace comprising of 623 beads was found on a bed of loamy clay, with no accompanying burial or grave, despite good preservation of other contents within the barrow (1905, 164-166) (Pastscape 61732). This may have been deliberately placed as an ornament hoard (Bradley 2000, 56-57) or may have been representative of an absent body (Chapman 2000, 179, 182). Another necklace, comprising 2 fusiform jet beads with 204 complete disc beads and a few broken beads of cannel coal or oil shale, was found with an adult burial in Barrow 64, Garrowby Wold (Mortimer 1905, 137-138), associated with a copper awl and an animal bone. Curiously, the disc beads show no obvious signs of use-wear, whereas the two fusiform beads had clearly had some wear before deposition, maybe even before being added to the necklace. This implies that those beads were

recycled, to create a new product (Sheridan, Woodward & Hunter 2015, 261-2, 283), their curation enchainning them to the past, perhaps to an ancestor or a treasured moment. Precious objects like these, which were looked after and placed in barrows by people in the past, would most likely have been valued for their properties beyond our current-day (monetary) 'values'. Materials with extra-special properties, such as quartz' luminescent properties; jet and amber's electrostatic, magical properties; gold's non-tarnishing ability; and bronze's strength and ability to be re-worked, may have been of significant worth in the past. Sheridan *et al.*, in a discussion of the 'special status and symbolic significance' of jet spacer-plate necklaces found in Scotland, considered these items, 'among the most technically-accomplished prestige items of this period in Britain and Ireland' (2002, 824, 812). They thought that, from 3500BC onwards, a Scottish prehistoric élite 'jet set' (Ibid., 824) had either specifically commissioned these objects from specialist Whitby jet-workers or the north-easterners had traded their famed items up the North East coastline (Ibid., 816).

However, as jet items were a 'markedly localized fashion', with their distribution limited to southern Scotland and northern England, as well as outward to the Continent (Ibid., 816, 824), the items are rarely referenced as prestige items. In Wessex, exotic and gold beads are associated with prestige. Ann Woodward considered deliberate storage and curation of these objects, before later deposition with the deceased or re-circulation with the living (2002, 1040; 2000, 102). Andy Jones found that often up to five, both burnt and unburnt, exotic necklace bead fragments were found in the Bronze Age graves of southern Britain (2002, 168). While amber and Beakers were being deliberately fragmented and circulated in southern Britain (C Fowler 2004, 72), in East Yorkshire, fragmentation and enchainment was also occurring. Jet-working and exchange was the cornerstone of the Later Neolithic and Bronze Age Yorkshire Wolds, south-east Scotland and north-east England.

7.7 CONCLUSIONS AND FURTHER RESEARCH OPPORTUNITIES

The Yorkshire Wolds chalk landscape is beautiful, sparsely populated in the modern era and yet has been ploughed and levelled by successive generations of agriculturalists. Monuments of the Yorkshire Wolds have been allowed to be deleted from the surface by the action of the plough (Figure 148). Only 15 barrows are definitely upstanding, clearly

definable mounds, according to Pastscape's data (May/June 2019). For the rest of the barrows, the height data from formal visits in the 1970s and 1990s may now be out-of-date, as the majority have continued to be ploughed. Barrows recorded as upstanding from those visits now demonstrate a lack of definition within the area of their supposed location. Ashbee noted this issue, with regards to earthen long barrows. He found them to have been subjected to 'biological, chemical and physical factors', encompassing 'weathering, denudation, change and decay' (1984, 24), as well as to deliberate, often complete destruction by agricultural and infrastructural processes. So, what has changed in the last 35 years, other than the slow and deliberate loss of these structures? If Alistair Marshall can posit the following statement regarding the Cotswold-Severn megalithic long mounds, then what of the lost monuments of the Yorkshire Wolds? 'General study and care of this important group seems to have bypassed the usual phase of basic data collection...no acceptable data exists for the majority of monuments' and 'general statements about the group draw repeatedly on limited sources...Most sites still lie unprotected...and at threat from plough-damage in this highly agricultural area despite their obvious archaeological interest' (1998, 101-2). How much valuable archaeology might therefore have been lost and ploughed away from the forecourts, mounds and surrounding areas of each monumental complex? Certainly, further research is needed on mound construction and composition. Some of the barrows contained smaller, internal mounds; stone circles; stone-slabbed platforms and dividers above and below bodies; cists; and two possible re-used dwellings.

Nevertheless, other data from this case study is very enlightening. The early dates of the mounds and the quantity and variety of burials and artefacts placed within the known, excavated barrows help to highlight the Yorkshire Wolds' region as nationally important. With so many incomplete and disarticulated skeletons, all factors need to be considered. We need to remember that Neolithic and Bronze Age people experienced their world as a 4D event with sights, smells, feelings and experiences, all bound up with and contributing to their daily lives. If we study landscapes of the dead, such as the 1,127 barrows of the Yorkshire Wolds, we can uncover aspects of behaviour which can tell us huge amounts about the Later Neolithic and Bronze Age people. Studies of the deceased are known to enlighten the social identity and memory of the person and the group's history to which

they belonged (Last 1998, 44). It has long been clear that Neolithic monuments had long biographies and were probably used for multiple events each year, experienced by people in different ways, depending on the context (Brück 2001, 661). This concept might also be applied to the Later Neolithic or Earlier Bronze Age barrows of the Yorkshire Wolds. Although sites of burial, there were numerous instances of keen attention in the placing of bodies within the burial mounds. The most obvious is Esh's Barrow, mentioned above, where three skulls were found in a trefoil shape, facing each other, having what appeared to be a continuing discussion. This fragmentation and enchainment of these three minds, placed deliberately, must have encouraged future discussions between three verbose people – the sages and intellectuals of the age.

It is surprising that this dataset has not been identified before now. The burial practices in East Yorkshire and elsewhere in northern England now need a comprehensive new investigation. As fragmentation has been suggested as the only possible explanation for some of the burials found by the excavators, other northern barrows also need to be re-considered, looking from this perspective. There are numerous types of 'deviancy' within these barrows, far more than any explanations of plough damage, poor antiquarian excavation techniques nor indeed taphonomic loss can warrant; far more, in fact, in percentage terms, than others have found in well-published accounts of fragmentation from elsewhere in the world. The dataset is so significant that each time a new analysis is attempted, even more examples of this behaviour are uncovered. This study has barely begun to understand the many examples and huge variety of deviancy in the Yorkshire Wolds' barrows.

Further analyses of funerary practices within each barrow, similar to Fowler and Wilkin (2016, 113), need to be completed. The first challenge would be to properly identify the excavated remains of primary and secondary burials (human & animal bones and artefacts) from Greenwell and Mortimer's collections and as these are spread around 28 museum collections in England, this would be challenging. Elgee mentioned the labour involved in tracing the flint, stone and metal implements, pottery and human remains (1930, viii) and Manby *et al.* confirmed that this continued to be the case (2003, 6). These items then need to be assessed, for the age and sex of the bones; for the provenance of the artefacts and for the possibility of refitting of the pottery, flint and artefactual sherds, to consider object

biographies and mobility, fragmentation and enchainment throughout the Wolds landscape both spatially and temporally. Secondly, lithic petrology and isotope analysis might indicate the wider geographical networks of these objects and the buried people, associated with them. Thirdly, a major radio-carbon dating analysis, through Bayesian modelling, needs to be undertaken, to create a chronological timeline for these barrow events, as suggested by Gibson and Bayliss (2010). Their recent radiocarbon dates from 14 long and round barrows in the Great Wold Valley have already started to add to the known sequence (Ibid., 104-5). Although they found that the antiquarian archives had suffered 'a great degree of loss' over the years, due to wartime damage and a diminishing of collections over time (Ibid., 73), they used English Heritage funding to confidently date Neolithic long mound activity to 4190-3725 cal BC (95% probability) using 16 determinations and the Bronze Age barrow activity to 2420-2150 cal BC (95% probability) with 16 further determinations (Ibid., 101-102). Yet, the few monuments studied for that publication are only a small part of the vast, wider landscape of the Wolds, for which a substantial, holistic re-evaluation is imminently needed, to re-place its N/EBA landscapes within a national and British context. Fourthly, landscape survey, fieldwalking and test-pitting can now be undertaken at the sites of many soon to be de-scheduled barrows, to ascertain survival of any grave contents. Both Mortimer and Greenwell excavated graves which were 1.8-2.4m deep, so some preservation of burials within ploughed out barrows may still be possible if the remains are sealed within a chalk context. Fifthly, a study of monument structure and cemetery construction would assist in the examination of social connections, broad trends, networking and would provide comparisons with neighbouring regions. Colour and location (Owoc 2002, 130) could be used to tie natural features of the landscape, such as streams, wolds or valleys, into the broader picture (cf. Bradley 200). Finally, a comprehensive field survey and evaluation of the whole Wolds landscape, in the style of that achieved around Stonehenge over the last ten to twenty years, is the only way to provide the convincing evidence required to encourage further discussions about the monuments of northern England and their place within the wider Neolithic context in Britain. Catherine Stoertz' RCHME aerial survey of the Wolds started this process, reiterated by Julian Thomas (2013, 320). Despite the region being of great interest to antiquarians, recent interest has been patchy. At the moment, archaeologists working in the region are still using Greenwell and Mortimer's excavation details, as the only evidence

available to them (such as Gibson & Bayliss 2010; Kinnes *et al.* 1983). However, with this study and the two other upcoming publications, the situation may hopefully improve by providing much more up-to-date data from which to base discussion. Answers are needed to demonstrate the unique position that these monuments held within wider Neolithic travel throughout northern England and within Britain as a whole. It also remains crucial to the full understanding of these enigmatic structures. It is true that in modern landscapes, as Lynch stated, megalithic structures 'make a greater impact...than their wooden counterparts' (1997, 35). The study of absent monuments is fraught with difficulties. It is difficult to ascertain their original height, the construction sequence and the movement and use of these structures within these lost landscapes. Whether created from stone, earth, wood or a combination of these, these N/EBA structures were monumental, having taken great foresight, planning, time and effort to construct. Regional variations, even within similar monument types, are evident, with local patterns and diversity.

This chapter has overwhelmingly demonstrated that northern England has much to offer to future research projects. This analysis has provided a wealth of new and, potentially, controversial data about Later Neolithic and Early Bronze Age burial practices in the Yorkshire Wolds. The data uncovered above can help to piece together further knowledge and understanding of the Neolithic and Bronze Age of East Yorkshire. It helps us to better relate to and help to shape the lives of individuals in the past, who were responding to and influencing their altering environments.

Through his fragmentation analysis, John Chapman was able to consider the cultural order of the communities of north-eastern Bulgaria, using artefacts as vehicles to bring past biographies of both humans and artefacts into the present (1996, 227-8). This idea was largely adopted using burial remains for this short study but it is now important for future research, from the Yorkshire Wolds' perspective, to consider barrow clusters within the landscape. Will burial types or artefact concentrations demonstrate pockets of behaviour associated with jet-working or will these prestige items be shared throughout the Wolds' region, imbuing many communities with the special, electrostatic and magical properties of jet? Will radiocarbon and other dating begin to answer questions around network lineage and enchainment? What might the study of sets of objects reveal about people in the N/EBA in East Yorkshire, for example, the 79 saws found within the barrow fill of South

Side Mount Barrow, Greenwell LXVII, Rudston Parish (1877, 257-262). Which, of any, of the 22 adult, young people and child burials, were they associated and why? It is probable that the items were deposited with the dead person as gifts from the mourners (Brück 2006, 77). Yet, if knives were seen as signifying the cutting of ties with the dead (C Fowler 2004, 103), what do these 79 saws indicate? It is interesting to observe that both disturbed and incomplete burials were found as part of the mortuary assemblage within this barrow. Contra the concept of containment of the inhumed dead, this seems to suggest fractal relationships and uncertain social and economic times.

There is a wealth of information in Yorkshire, which awaits investigation and understanding. Despite similar soils on the Yorkshire Wolds to those in Wessex, there is no explanation of how the monuments within these landscapes melded together. In southern England, the long barrows, for the deposition of the dead, are situated within regions which also contained causewayed enclosures and henges, associated with ceremonies for the living (Ashbee 1984; Lynch 1997; Whittle *et al.* 2011; Parker Pearson 2012). The deliberately constructed 'flue' within many long mounds may have been used as a focus for gatherings, used as a way of closing one barrow before building the next. We can assume that if Early Neolithic people were meeting in the south, they were also grouping together in the North. But where? What were the relationships between the builders of the Early Neolithic long and round barrows in North and East Yorkshire? Where did those groups meet, if not within causewayed enclosures or henges? How did the four cursuses and the largest standing stone in Britain at Rudston, or the large and impressive Neolithic round barrows fit into this picture? How and where did jet-workers and associated groups congregate? Can there now be numerous undiscovered N/EBA structures, hitherto not found, or might the industrious Yorkshire communities have congregated and celebrated in a different way from the groups in southern England? A study of the exchange networks and social processes of obtaining and depositing jet items from Whitby, just to the north of the Yorkshire Wolds, is long overdue.

This chapter has demonstrated how an in-depth desk-based assessment of a landscape in northern England can yield ground-breaking results. Firstly, in East Yorkshire, cremation and inhumation were undoubtedly practised concurrently, although specific analysis of this topic is needed. Through pottery assemblages, a gradual move from inhumation to

cremation is seen over time (Lucas 1996, 108). In north-east England, this process was demonstrated through the change from food vessels, to urns and finally to bones with no container (Fowler 2013, 8-10). Can this sequence be shown in East Yorkshire, where there are also examples of each deposition type? Urns provide a new form of corporeality for the cremated body, an inversion of fragmentation and dispersion (Rebay-Salisbury 2010, 68). On the other hand, there are at least 16 examples of the scattering of a few burnt bones within barrows (Appendix C).

Patterns of continuity and change need to be considered for the whole region, with regards to mortuary practices, pottery and other burial assemblages, to further understand this issue. This is especially important as pottery biographies alone, through abrasion analysis, can provide a substantive narrative (Edwards 2016, 86) on the life of objects and therefore on the people who coveted, used and later deposited or discarded them. Secondly, and even more importantly, while it is clear that elements of personhood, fragmentation and enchainment were being enacted in Later Neolithic and Earlier Bronze Age East Yorkshire, further research, as detailed above, will be needed to ascertain the level of dividuality and partibility of past communities. This short analysis has only scratched the surface of the potential for future investigations within this region. Northern England now awaits the same level and depth of research as has been afforded elsewhere.

The following chapter (Chapter 8) will provide the conclusions of this thesis and offer some further unique qualities of other Neolithic and Bronze Age landscapes of northern England, to see whether landscapes of monument survival can be identified and given the status needed to be protected for future generations.

8 CONCLUSION

The fundamental aim of this thesis was to explore reasons for the neglect of interest in the Neolithic and Bronze Age monuments of northern England within the modern era. The study has highlighted numerous possible reasons for this inattention. This conclusion will endeavour to show what has been achieved and then will consider possible avenues of research focus for the future through an assessment of specific landscapes of interest within the region of northern England.

The first part of this thesis looked into the past, to identify when England's Neolithic and Early Bronze Age (N/EBA) monuments began to be noticed archaeologically; to look at what forms this interest might have taken; to uncover if there were notable reasons why some regions were favoured over others; and to highlight the barriers to the creation of a fully documented collection of monuments, in books or journal articles by antiquarians, other early travellers and early excavators over the past 500 years. It was surprising how much could be gleaned from a focus on past experiences.

The four antiquarians studied, John Leland, William Camden, John Aubrey and William Stukeley, all had very different reasons for their pursuits of ancient monuments in England. At that time, these men seemed keen to investigate the historical and archaeological sites they visited. They followed very different trajectories, lines of enquiry and focussed their attentions on very different structures, each learning from their predecessors. All four were based in southern England, which meant that they each only ventured into northern England once during their lifetimes. However, their journeys were influenced by a series of factors that affected what they saw and what they missed on their travels. Firstly, as with other early travellers, John Speed, John Ogilby and Celia Fiennes, they covered the same counties on their journeys to and from their homes in southern England, which meant that the same routes were traversed over and again, which obviously improved their knowledge of those regions, over others. This can be seen most clearly on Leland's map (Figure 3). For the antiquarians, this meant that they had the opportunity to visit new prehistoric sites around their own regions, during each journey. They all visited the counties of central and southern England far more frequently than those in the north of England. Secondly, the routes taken by the four antiquarians must have been hampered by issues, such as those

dealt with by the other early travellers, but they discussed these less than expected. Fortunately, as the other early travellers' experiences had also been logged, there was ample data from their journeys to provide a picture of overall travel at that time. Only John Mortimer, in East Yorkshire, of the early excavators, wrote a detailed account of the weather and other conditions as he dug through 277 barrows on the Yorkshire Wolds. It is clear that all early excavators must have encountered similar issues to those faced elsewhere.

At the time of their visits, these antiquarians were attempting to piece together the prehistory and history of Britain, from upstanding monuments, artefacts from the ground and comments from classical authors. Yet, it quickly became clear that the early antiquarians were unsure as to what they would find as they travelled. Certainly, Leland and then Camden, who were the first to create itineraries around England, to visit towns and note monuments they passed on their way, seemed constantly surprised by what they saw. This implies that, at that time, there was no real discussion of prehistoric structures. These forerunners therefore struggled to age these monuments. We may now know and recognise them as the first to recognise ancient monuments, but they often noted observations with no knowledge of their origin nor age. They barely recognised what they saw. All they could do was to make a visual assessment and to attempt to date it. Yet, it is interesting to note that while Stukeley was able to correctly place monuments within the pre-Roman period, as late as 1872, Fergusson was still attributing them to the medieval period, on the grounds that they were not referenced by classical authors.

Today, travellers use detailed maps and the internet to travel around the countryside. Yet these antiquarians were working without the detail and knowledge provided by Ordnance Survey maps. The earlier itineraries were made without even the use of a map, other than Matthew Paris' early map of Britain, created during the 13th century but published in 1480. Speed and Ogilby's maps were too late for three out of four of the antiquarian itineraries. Yet, all prehistoric and historic periods had, thanks to Bishop Ussher's proclamation, to be fitted into a very short timeline, from 4004BC to the sixteenth century. The antiquarians speculated about the origins of the structures they saw *en route*, trying to make sense of what they encountered. In some cases, our modern knowledge has been able to prove that their theories, such as about Roman camps, were correct. However, in other cases, they

mis-identified the age of monuments, such as barrows, which they considered, 'British', 'Celtic', 'Roman' or 'Saxon', often without further evidence. Nevertheless, their contribution to our current-day knowledge is overwhelming and hugely positive. Each of the antiquarians: Leland, Camden, Aubrey and Stukeley had their own agenda, according to their financial freedom and social status; the time and space they could allow for such adventures; and their knowledge of where they might be accommodated *en route*. The analysis of their travels focussed on the collection of prehistorical data from their itineraries and chorographical discussions as they meandered around the countryside. Some had a pre-determined purpose, such as Leland, who was required by King Henry VIII to uncover what had happened to the money, treasures and books from the monasteries after the Dissolution, whereas others had a more balanced, open and holistic perspective of what they visited and saw.

Piggott expected those travelling through the countryside to have been attracted to ancient structures, such as the setting of stones in a deliberate circle, 'which were in some degree recognizable as architectural performances in themselves, however rough and primitive' (1985, 18). The less obvious artificial remains of barrows and earthworks would have been more difficult to identify (*Ibid.*, 19). By the 1700s, the majority of monuments had been named, if only by the locals, but were not necessarily recognised in the field. There could numerous possible reasons for this, all of which are discussed below. It is interesting to consider though, whether the monuments were actually able to be seen from the road; whether the British weather played a part in the monument's visibility, or lack thereof; or whether the antiquarians actually visited each and every location or relied on secondary sources.

Leland was the first antiquarian to set out to visit Britain. King Henry VIII had granted him a commission to spend six years touring the antiquities of the realm. During the Spring and Summer, over six years from 1538/9 to 1545, Leland created itineraries which would take him all around England. He toured from county to county, exploring the towns and libraries of England for information about their worth, observing and noting what he saw. He made detailed accounts of prehistoric structures, as well as medieval edifices. He wrote an excellent description of the Devil's Arrows in Boroughbridge, for example (Chandler 1993, 559), which he identified as Roman, '4. great maine stones wrought above *in conum* by

mannes hand...I take to be *trophea à Romanis posita* in the side of Watheling-Streat, as yn a place moste occupied yn yorneying, and so most yn sighte' (Smith 1907, 84-5). As there are now only three remaining stones, Leland provided valuable archaeological data, which is yet to be tested. Yet, despite referencing county boundary markers and making good observations about other structures, Leland failed to mention any Cornish quoits, stone circles or standing stones. Chandler stated that Leland was 'fascinated by...standing stones' (1993, xxi), so it is a shame that some of Leland's manuscripts were water-damaged, which might have revealed further information. It is possible that, at times, he relied on other people's descriptions of the routes, rather than visiting the locations himself. He may have travelled by sea from town to town in some counties, therefore relying on the knowledge of the locals to complete his itinerary. This theory is added to when one considers that he did not reference Dorset's prehistoric structures either. We also know that Leland visited both Cumbria and Northumberland by sea, which meant that many of the key archaeological sites, which might have been visited, went unseen. The other possible reason for the lack of Cornish quoit references is that tree cover or vegetation may have obscured his views. Piggott commented of eighteenth-century Avebury in Wiltshire that, 'the subdivision of the present fields into small, hedged, and tree-lined 'closes' must have rendered the ground-plan very difficult to disentangle'. He added that even in a coach or on horseback, 'few of the travellers along this highway noticed the prehistoric monument through which they passed' (1985, 47).

Camden, who was the first to travel for travel's sake, published his main works in 1586 and 1607. His particular route structure was to follow each river from source to sea, observing what he saw. Of all four antiquarian travellers, Camden was the most industrious in his work. He used classical authors to underpin his commentary. He invited the reader to laugh at his 'expensive diligence and curiosity' (Gibson 1722, I, Leicestershire), as he traced Watling Street through England. He also altered his routes to incorporate new information about places to visit, such as in Northumberland. Camden was by far the most conscientious and thorough of the antiquarians studied, despite being one of the earliest. keen to visit every parish *en route*. He would surely be surprised and possibly dismayed to see the towns and monuments he valued to be so altered or destroyed. He gained the best coverage of Britain, referencing thousands of sites in England alone. His dedication was

very admirable. As Camden himself stated, he intended to describe each county, including 'the ancient inhabitants, what was the reason of the name, what are the bounds of the County, the nature of the soil, the places of greatest antiquity, and of greatest eminence at present; and lastly, who have been Dukes or Earls of each, since the Norman Conquest' (Gibson 1722, Part 31). He rode around each county, using its waterways as directional indicators and noted all he could see *en route*, his *raison d'être* being that towns required a riverine water supply for survival. An example is in Hertfordshire, where Camden referenced some barrows south of Wimondley, near the high road between Stevenhaugh and Knebworth, 'I saw certain hills cast-up, of a considerable bigness'. He then speculated as to their origins, 'such as the old Romans were wont to raise for Soldiers slain in battle...for it was an ancient custom to raise such little hills to mark out the bounds of places, and underneath them to lay ashes, coals, line, broken potsherds, &c' (Ibid., I, Hertfordshire), so he knew they were burial sites but did not analyse the finds to consider their actual dates.

Aubrey had a really clear idea of what he wanted to achieve. However, his complex private life and money worries prevented him from furthering the excellent work he had completed on Wiltshire and Surrey into a nationwide study. Aubrey's work on prehistoric monuments was extremely partial, with Wiltshire covered much more widely than other English counties. Considering his frequent visits to Brecon and Monmouthshire in Wales, it is disappointing that he did not reference more prehistoric monuments there. Many of the monuments mentioned by Aubrey, in fact, were sent to him in note form, from interested parties elsewhere in England and therefore never actually visited by him. Balme considered Aubrey 'wildly optimistic', 'hyperactive' and 'in a state of euphoria', regarding these plans (Ibid., 50), but I think this shows the inner desires and ambitions of Aubrey. It demonstrates what he might have achieved, had he not been dogged by debts, family and property issues. Aubrey was excellent at dating hillforts by their shape and size. He wrote that he had explained to Dr Robert Plot about how to distinguish a Roman from a Danish camp (Fowles & Legg 1982, 288). Two Wiltshire examples are Figsbury Ring, Winterbourne, which Aubrey dated as, 'a Danish camp: as appears by its circular figure'; and Vespasian's Camp, near Amesbury, which Aubrey noted, 'is without doubt the camp of the emperor Vespasian, for it is a perfect Roman fortification' (Ibid.; Ibid., 292). Yet, Aubrey's mind was frequently

teeming with ideas. He moved onto subsequent ventures without completing those he had started. Everything he wrote remained unfinished and he was unable to keep to any deadline (Balme 2001, 86, 82). Perhaps my hopes for him are therefore baseless. Maybe more time and money would have provided him with scope for more incomplete adventures and more procrastination. Nevertheless, although one cannot follow Aubrey around the countryside, one does get an insight into his geographical areas of interest, as well as the time periods he studied.

Aubrey, Stukeley and Camden's translator, Gibson, did have the opportunity to learn from previous antiquarians. Each frequently commented on the views of Leland and Camden, adding in their own viewpoints. They built up their pictures from many sources: local finds; early excavations; acquired viewpoints from other antiquarians. During the previous 100 to 180 years, views had changed. Pre-Roman societies were much more readily accepted and therefore, Stukeley, for example, could discuss the ancient Britons with much more confidence than the earlier antiquarians.

Even in the 1500s to 1700s, there was a lack of care of the monuments created by our ancestors. Leland and Camden noted what they saw, without any prior description of the state of their preservation. However, when Aubrey and Stukeley went to visit the same structures, they immediately noted the changes and the destruction, based on these previous descriptions. This made them more alert as they travelled. Stukeley, in particular, bemoaned the destruction of so many monuments, such as the Shap Avenue, in Cumbria.

Stukeley also used the previous travels of other antiquarians as a basis for his own knowledge, such as at St Margaret's in Dover. Travelling later in time, such as, his journey to northern England, which was completed in the Summer of 1725, he was able to incorporate new theories into his visits. I could not help but imagine how Stukeley might feel now, if he only knew how many Roman sites he must have walked or ridden over, in his quest to visit British antiquities, such as Caster Roman site, Suffolk. This is well known to us today but not mentioned by Stukeley. How amazed would he have been by their quality and number. He was the first to correctly compare the Shap landscape in Cumbria, with its great (now lost) stone avenue and stone circles, to Avebury in Wiltshire, 'which it resembles very much', calling Shap 'a great temple of the Old Britons' (*Iter Boreale*, 1776,

42). However, he was 'hindered' and could not survey the monuments as he had done at Avebury, due to the appalling weather (Ibid.). Stukeley has been described as one of the main figures in British antiquarianism, despite his inconsistencies, antiquarian and religious speculations in his later years (Piggott 1985, 7). He was a doctor, writing in the mid-1700s. He was diligent and had read widely, including previous antiquarian accounts of prehistoric monuments. His range of interests was vast, from science to architecture. He was very keen to portray the beauty of the landscape. He knew the great thinkers of the time, such as Isaac Newton, so he incorporated his wide interests into his discussions, plus excellent architectural drawings of the places he visited. Stukeley was exceptionally observant. In his discussion on some Lincolnshire barrows, he noted, 'the great quantity of *tumuli* or barrows in all these parts, scarce a parish without one or more of them. They are generally of a very considerable bulk, much too large for *roman*, nor has any thing *roman* been discovered in cutting them thro...I guess they were the high places of worship among our *Cimbrian* predecessors purposely cast up, because there are no natural hills in these parts, and we know antiquity affected places of elevation for religious rites.' (1724, 5-6).

Stukeley, like Camden before him, was immensely proud to be British. Like Aubrey, he bemoaned the constant loss of monuments. Between 1719 and 1724, Stukeley frequently visited Avebury, as he wanted to prepare 'a record in writings and in drawings' of Avebury's prehistoric monuments 'before all should be lost' and the stones broken up (Piggott 1985, 50). His drawings provide current-day archaeologists with an outstanding source of knowledge of the state of the monuments of the time. Stukeley sketched most of the monuments he saw, and on re-visits, he changed and dated his alterations on his engravings (Ibid., 36-7). It is therefore a shame that on his visit to the Shap landscape in Cumbria, the weather was so awful that architectural sketches and drawings could not be made, despite Stukeley's comparison of Shap with Avebury and his intention to do so. From present-day research by Paul Frodsham (pers. comm.), Stukeley's drawing of Long Meg and her Daughters stone circle, also in Cumbria, was placed next to a bird's eye photograph (by drone) of the monument today. All of the main stones in the foreground were placed and drawn accurately, whereas the stones which were further away, were less precise. This may have been due to weather conditions or to possibly due to poor eyesight.

Stukeley's meticulous behaviour was far ahead of its time. These drawings of antiquities, provided by Stukeley (and Aubrey, among others), became a kind of currency in the eighteenth century (Sweet 2004, 64). The pictorial qualities of monuments endowed them with cultural and economic values, promoting their preservation rather than destruction. 'The illustration of monuments of antiquity allowed the public to possess these antiquities, albeit vicariously' (Ibid., 297-8). Richard Gough, another antiquarian of the time, was convinced of the value of visual imagery as a way of safeguarding the past and preserving details on and within monuments for posterity (Ibid., 303). The visual representations created by these antiquarians have certainly provided a more lasting emphasis on certain locations around Britain than what was written about them. These images were primarily from Wiltshire, and of the upstanding megaliths from the landscapes around Stonehenge and Avebury. Had Stukeley's acquaintances lived within several miles of Penrith and Shap, rather than Stonehenge and Avebury, would there have been publications highlighting those monuments too? Stukeley clearly found Shap's stone avenue very similar to Avebury's. Monuments with drawn images are certainly now very well-known. If a prehistoric monument has no drawn antiquarian image and only a written description, if any, might that have led to a de-valuation of those monuments in the current era? Do we consider the pioneer visitors to these structures to have had a power of recognition of their value, which transcends our own ability to recognise nationally or internationally significant monuments? If so, the locations visited by the image creators have inadvertently provided a biased emphasis on and interest in certain locations over others. There was definitely a proliferation in antiquarian literature and engravings, from the seventeenth century onwards. This visual and literary mapping of the landscape of Britain would begin to alter perceptions of monuments. It would begin to dictate the journeys people took to see landscapes of interest and would shape thought processes from that period until today. The descriptions and images of monuments by the antiquarians show that these structures have altered over time. The Devil's Arrows have reduced from possibly four or five stones, to three upstanding menhirs. Yet, they have not been excavated nor surveyed within the modern era.

Early antiquarians focussed much of their travel and interest on southern England. This emphasis may have been primarily due to the location of England's capital and of Britain's

universities, of which only two were available at that time. From the early thirteenth century onwards, students had been accepted at both Oxford and Cambridge. The next English university to open was Durham, but not until 1832. This meant that there was an enormous focus on life in south-eastern England for all antiquarians. Without a degree, the value of an academic's work was much reduced. Anthony à Wood publicly humiliated John Gadbury, the leading astrologer of the time, as someone who had pretended to have attended Oxford University, but in fact had not (Balme 2001, 138-9). The Royal Society was also based in London. These antiquarians and travellers debated with their influential male friends in the many coffee houses and men's clubs. It was therefore key for one's standing in society, as an antiquarian, to be seen in London, presenting papers and formulating debates about the key archaeological issues of the time. The origins of the key figures of the time is interesting. Many came to study at Oxford or Cambridge, and then remained in London, at least part of the year. While William Camden, John Leland and Francis Grose were born in London itself, John Aubrey and Christopher Wren were born in Wiltshire; Edmund Halley in Middlesex; William Stukeley and Isaac Newton were born in Lincolnshire. They were therefore mostly within reach of these prestigious universities. Nevertheless, we must not, as emphasised above, underestimate the dangers of travel at the time.

Travelling around England in the period between 1500 and 1900 was fraught with difficulty and challenges for everyone, whether working or on holiday. A study of the earlier travails of those trying to complete the First Series maps provides a good insight into the issues faced by the early antiquarians and travellers, as the OS surveyors had a vast number of challenges (Hewitt 2010). Other early travellers were also studied and added hugely to our knowledge of the difficulties of travel at that time. Through their references to the weather and the state of the roads, be it the surface quality or road width, or vegetation close to or on the road, water, bridges, or lack thereof and the help or hostility they faced, a more complete picture was gained. Despite all the hazards and difficulties faced *en route* by these early tourists and travellers, they visited or passed by many of the places referenced as sites still needing further investigation in northern England and elsewhere, even 300 years later. Thomas Platter wrote in 1599, 'England is...a horse's hell or purgatory, because they are mostly hacks and ridden hard owing to the flat sandy country' (Williams 1937, 182). Travel at the time was precarious, even close to large towns. There were threats from

locals; problems with the poor state of the roads; and the weather continued to be a major issue. Rye, in his *England as seen by foreigners*, discussed travel in southern England, 'We now-a-days term Oxford and Cambridge "short distances" but what an undertaking was it to reach those places in the reigns of Elizabeth and James! We remark in these Journals how slowly the travellers went over the ground, how wretched the state of the roads...Journeys were undertaken mostly on horseback; coaches were a very expensive luxury, and not to be hired anywhere but in London. This may serve to explain why the foreigners did not extend their tours into more distant parts of England' (1865, lix). The perils of early travel in Britain could not have been more humorously and poignantly outlined than through the eyes of Celia Fiennes, published by Morris, and the Ordnance Survey mapmakers, told by Rachel Hewitt. At the turn of the eighteenth century, Fiennes braved perilous sea and river crossings; and she was set upon by highwaymen. The mapmakers for the Ordnance Survey had to work in all weathers, throughout the year. They were hampered by poor climate and roads; inaccurate instruments; hostility from the locals, who sometimes perceived them as a threat; and faced such complex language barriers that they had to learn Welsh and Gaelic, to understand local place names. Their examples also serve to demonstrate the perseverance of these early travellers and therefore of the early antiquarians. Each traveller in this period must have been very driven and resilient to survive the many obstacles they would have faced. It is thanks to 'the tedious pedantry of antiquarianism' (Sweet 2004, xiv) that so many monuments today are known.

Analysis for this thesis became more complex when details of the first antiquarian excavators of prehistoric stone circles, Neolithic non-megalithic long and round mounds, and the first county publications of Victoria County Histories and local journals were added to the picture. The geographical foci of early excavations and interest in British prehistoric monuments was noted. Local county histories, whether produced by the Victoria County History, or earlier, and the later county journals, all showed a growing awareness of the importance of documenting the past. Yet, they also demonstrated that interest, both in prehistoric landscapes and individual structures, waxed and waned throughout the years 1600 to 2000 throughout Britain, depending on the means, time and abilities of the local people, usually middle-class males, who were clerics or landowners.

Early county histories, including the Victoria County Histories and local journals were found to have been often completed for financial gain rather than for the preservation of local knowledge. Camden felt the need to apologise in his introduction to *Britannia* for any missing landowner, house, castle etc. This can be construed as a thoughtful gesture but unfortunately, this apology underpinned the real issues of county and regional data collection. Camden would have been aware that publication was important, both to cover the costs of his work, but also for his reputation. The completion of both itineraries and county histories was a costly business, both in terms of time and finance. Whilst working to honour their country, antiquarians, early travellers and local historians needed time to unjumble their masses of notes collected *en route* and, in many cases, payment for the work undertaken. When Treadway Nash was struggling to complete the history of Worcestershire, the Somerset Herald John Charles Brooke had counselled him, 'the more pedigrees you enrich your work with, the better it will sell'. Yet, John Hodgson, whilst trying to complete Northumberland's history, would not exploit his collections for financial gain (Sweet 2004, 67). If the lack of an early history is a slight on a county, as stated by Sweet in the Analysis above, then it is clear that local gentry desired this outcome as much as the local historian or antiquarian. These works were not completed altruistically.

The early excavators of stone circles, long and round mounds also seem to have completed their work for personal gain. In the search for 'buried treasure', in as much as this is understood, numerous monuments were defaced and often completely destroyed. Some of those which survived have been destroyed since then (see Chapter 5's and Chapter 7's discussions of the destruction of the Early Neolithic monuments of northern England). In the modern era, there continues to be a lack of interest and focus on the preservation of megalithic and non-megalithic monuments and their surrounding landscapes. Ploughing, quarrying and infrastructure developments, among other issues, all threaten monument survival. Michell, discussing the loss of monuments in Cornwall added, 'the same destructive processes have continued in force up to the present...it is still only the more famous monuments (in Cornwall) that are safe from anyone's whim to destroy them' (2007, 116-117). Unfortunately, he does not provide any examples to back this up, so we cannot further this discussion. Monument dating continues to be partial and regionally-biased. During the analysis of early excavations of English stone circles, it was noted that between

1750 and 1950, there was a clear interest in the stone circles of Cumbria, with several excavations. Since that time, however, only *Long Meg and her Daughters* stone circle, to the north-east of Penrith, has had any modern-day investigations (in 2013 and 2015). Surely, it is time to re-look at these former excavations and ascertain if any new light might be shed on their results.

The knowledge gained from the past antiquarians, excavators and early travellers, as well as early county and journal writers demonstrated that, although references to the monuments of southern England far outweighed interest in northern England, the factors surrounding this issue were much more complex than expected. Many salient issues have been highlighted, regarding the motivations and foci of the early travellers, whether antiquarian or not. It is curious to think that over four hundred years ago, there were people touring our island and writing down their observations. Each author offered something, but their attitudes towards ancient structures was crucial to this research. Sweet argues that antiquaries 'strove...to maintain a position of studied objectivity' (Ibid., 18). Whilst it is true that at least three of the four antiquarians studied toured around the countryside, observing structures and noting their finds, one cannot say that they were objective. Early antiquarians, although very keen to view all monuments around Britain, were constrained. The very nature of their itineraries, being seasonal and from their home-base, meant that the central English counties were visited multiple times *en passant*, whereas each antiquarian ventured into the northern wilds of Cumbria and Northumberland only once. As Piggott commented, 'It is hardly surprising to find that the study of prehistoric antiquities in the late seventeenth century was largely centred on megalithic monuments and was carried out in the main by men whose accident of birth or residence connected them with the areas of western Britain in which conspicuous stone circles or chambered tombs form a striking part of the local scene' (1985, 19).

Today we have so many means of different transport, yet we fail to see that the use of Satellite Navigation Systems actually reduces us back to the limited scope of the past, as only the roads, like Ogilby's strip maps, are visible on screen. The early travellers were limited, in their own way, to the available vehicles of the time: horses, post coaches, ferries and other boats. As mentioned, our current-day travel knowledge is vast whereas to travel in the past must have entailed a mentally different attitude, with so many unknowns. These

people were real adventurers, who placed clear values on the past. They wished to preserve the memory of past events and monuments within their work. They achieved this through chorography and pedantry: they logged minute details about great battles; they listed upstanding monuments within towns and throughout the landscape; they wrote about their and others' finds and discussed the origins of what they observed; they made meticulous drawings; they noted local families, their lands and their importance within their communities. They had a vested interest in this pursuit, however. The more facts and details; the more likely their publication would attract the attention of others and be appreciated, valued and ultimately sold.

Leland and Camden started this journey. In the sixteenth century, they had opened the eyes of scholars and the wider public to the vast landscapes within Britain, with their ancient sites and monuments. Roads and waterways had been used to create tangible links around Britain. By the 1700s, types of ancient monuments were recognisable to both antiquarians and other early travellers. Antiquarians had appealed to a certain audience through their painstaking journeys around the countryside. On a national scale, by the end of the eighteenth century, the idea of a national heritage was forming. The history, landscape, buildings and monuments of the nation were deemed important as part of the nation's history and therefore the property of the nation at large. Deeply entrenched attitudes surrounding the sanctity of private property needed to be changed for the preservation of items of historical interest or cultural value (Sweet 2004, 277, 279). Stukeley tried to encourage the privileged to complete a Grand Tour in Britain, rather than journeying abroad. He bemoaned England's fate, with regards to these, 'yearly tours of France and Italy, 'whilst our own country lies like a neglected province...the renowned *England*...is flighted and difregarded' (Image 14, 1724, 3). Stukeley was immensely proud of being British and wished to promote its monuments. In fact, his comments did encourage people to travel around Britain. The Seven Year's War in Europe (1755-62) meant that Englishmen, who were unable to visit sites on the Grand Tour abroad, instead had the opportunity to discover Britain's antiquities. The insecurity of travelling abroad worsened in the later eighteenth century with the French Revolution and subsequent 'scenes of destruction' in France, which led to an urgency to preserve domestic antiquities (Sweet 2004, 297). Over the next few decades, Britain benefitted from an improvement in

stagecoach travel and in its road networks; as well as 'a new dawn in the British tourist industry' (Hewitt 2010, 4).

However, what was not addressed even in Stukeley's time, was the need for the actual preservation of the physical remains of prehistoric and other monuments. Whilst prints and engravings educated the wider public, they 'could also foster the attitude that once an antiquity had been drawn its physical preservation was thereafter of less importance; its destruction could be contemplated with equanimity' (Sweet 2004, 305). As has been mentioned above, the Yorkshire Wolds' monuments and stone circles of the Lake District have fallen foul of this fate. Even in 1830, when France's monuments were being protected by law, Britain failed to implement similar legislation at home. This was despite the work of these antiquarians, who through their tireless recording of ancient structures, had provided a vast wealth and variety of data. This data had the potential to demonstrate to the government and the wider public that these monuments were evidence of the ancient inhabitants of Britain. The government had the opportunity to, as Camden stated, restore Britain to its antiquity. The antiquarian interest into stone circles, among other monuments, 'placed these monuments to the forefront of any tourist itinerary' (Ibid., 307). Yet, the government of the time failed to act. As England was divided up into parcels of land owned by gentlemen, it must not have seemed prudent to hand parts of it back into public ownership, which would have surely been an unpopular move at that time. In fact, Stonehenge was the first monument to be in public ownership, when it was formally donated to the nation by the Chubb family in October 1918.

An analysis of present-day data was used to assess the numbers of prehistoric monuments in northern England, and the total references to them, as compared to regions elsewhere. Historic England's Pastscape database highlighted the significant numbers of Neolithic and Early Bronze Age (N/EBA) monuments in northern England (Figure 184). However, the format of the Pastscape database system, as referred to above (Chapter 5), made it very difficult to be sure of accurate monument numbers within each region, an issue which was further elucidated in Chapter 7. Each county's data was entered differently, so that the results were either a composite grouping of many monument records or else an individual reference to each structure. As the NHLE and HER records are currently undergoing a process of amalgamation, this situation will hopefully resolve many of these issues.

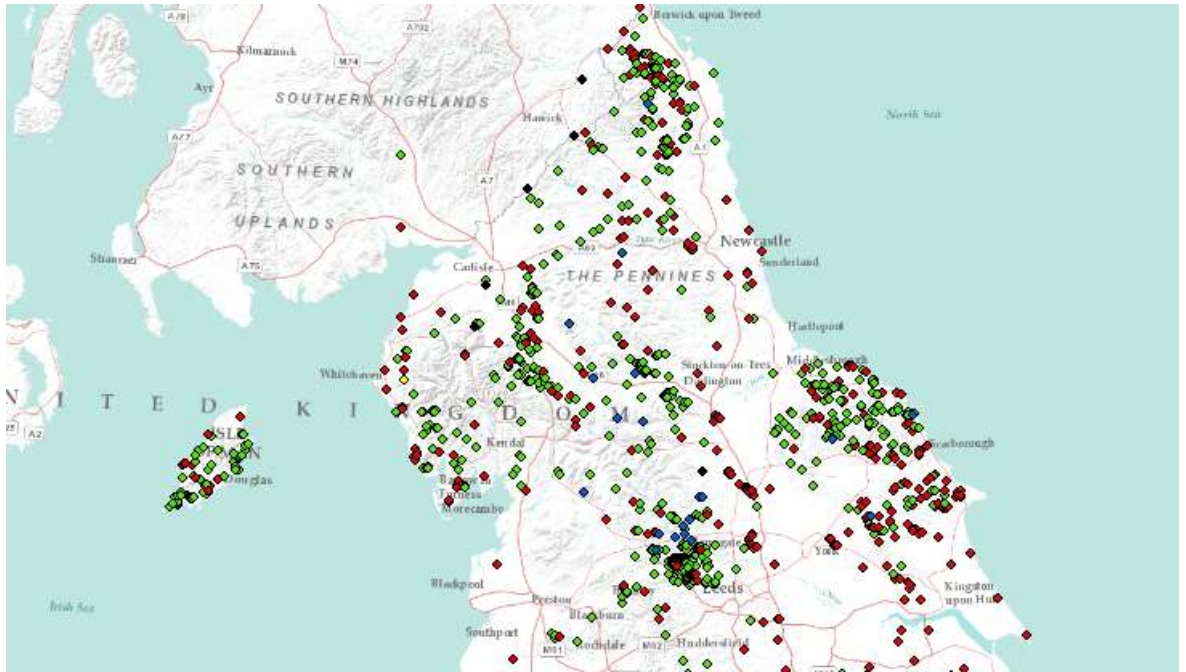


Figure 184 - All extant and lost Neolithic and Early Bronze Age monuments in northern England

A focus on the present-day also demonstrated that the N/EBA structures of northern England are largely left out of and barely referred to at a national and international level. This was most keenly evident during the assessment of the REF2014 for the British universities involved, where global projects weighted far more heavily than local projects, however great their significance might be for that region. This pattern continued with the assessment of the British Archaeological Reports (BAR), British Series, and of PPS' and Antiquity's online journal article titles. These overwhelmingly favoured sites and landscapes in southern England, with 80% of all BAR entries, 63% of PPS article titles and 86% of the title references from Antiquity. The Archaeology Data Service's (ADS) and COPAC's (Consortium of Online Public Access Catalogues) entries for northern England were also far fewer than for counties in the south. This was possibly due to the lack of large-scale, recent infrastructure and housing developments in the north, as compared to southern England. However, as mentioned in Chapter 5, the way the data was requested, through the site's search engines, may have inadvertently further biased the results. Another researcher may have uncovered different result totals for each region, depending on how they framed their data search. When compared with previous research by the author (Watson 2016), it is clear that more emphasis and investigations are critically

needed, to get a more holistic and balanced perspective of the Neolithic and Early Bronze Age period of northern England, as compared to the rest of Britain and further afield.

To add further weight to the current-day neglect of the N/EBA monuments of northern England, a literature review and analysis was completed, regarding English and British barrow publications. This study also highlighted the same issues, that is, that authors have unintentionally marginalised the non-megalithic structures of northern England within their wider research. Even when the north was mentioned, the reference was often generalised and did not specifically cite the particular barrow name or exact location.

During the analysis, it became clear that a case study of a landscape of northern England was needed, to highlight what might be uncovered through in-depth research. The landscape chosen was the Yorkshire Wolds, as this had been so plainly under-represented in the tomes on barrows in England and Britain. The case study showed the level of data available to researchers, should they choose to focus on a landscape in northern England. The chapter considered the huge numbers of barrows and related monuments within the Yorkshire Wolds and the huge loss of upstanding earthen structures through intensive ploughing. However, the case study unearthed much more than expected, which will be discussed after the following discussion on ploughing.

It has long been accepted that prehistoric monuments have not always been protected or revered within Britain and that the process of neglect and, in some cases, destruction of the Neolithic and Early Bronze Age monuments of northern England has been occurring for over 400 years (Chapter 4). In Cumbria, the Shap landscape was decimated through the removal of the 2-kilometre long Shap stone avenue of stunning pink, huge granite menhirs, for the manufacturing of chimney breasts, millstones and building foundations (Stukeley 1776, 42-3; Nicholson & Burn 1777, 477). Aubrey Burl commented on the destruction by dynamite of stone circles in the 1800s. Frank Elgee discussed the continuing issues in north-east Yorkshire in 1930, 'Indeed the prehistoric settlement sites of the moors would be in an even better state of preservation were it not for ignorant, thoughtless and even wanton destruction in modern times' (1930, vii). Cultivation encroached on ancient sites; gamekeepers had 'no scruples about pulling down and breaking up prehistoric standing stones from circles and ramparts' to secure solid foundations for their grouse butts;

farmers dug into barrows and removed stones from settlement sites to build walls or make gate-posts; people deposited their rubbish in 'burial circles'. He added, 'No site seems to be immune from this vandalism', which only ends with 'the premature disappearance of numerous deeply interesting remains' (Ibid.).

Even in 1960, Ashbee was aware of the situation which still prevails today. He stated, 'We live in an age of totalitarian land usage for agricultural and industrial purposes by persons possessed of powers of destruction, against which the official bodies responsible for the record and preservation of our national historical heritage enshrined in barrows and other field monuments are largely emasculate...Unless...methods of field recording are applied without delay in certain areas, little knowledge will remain for future generations'. Barrows are 'devoured' by the 'voracious plough' (1960, 23, 28). He continued, the very existence of barrows 'is threatened' by 'an almost insatiable demand for land, which has resulted...in a more intensive utilization of existent enclosures but also in a major encroachment upon land which was hitherto marginal. Secondly, the very number of round barrows has encouraged...a cavalier attitude towards them by those charged...with their protection'. As a result...there was until recently a myopic reluctance to recognize modern deep-ploughing as a destructive agent'. He went on to bemoan 'the progressive razing of barrows' and 'rate of destruction' (Ibid., 196). 'Bulldozing followed by deep-ploughing will leave a barrow as though it had never been...This is the dismal record of totalitarian agriculture' (Ibid., 200).

Ashbee thought that scheduling would lead to protection from damage (Ibid.). 'Barrows and other monuments embody the national prehistory and are thus its people's heritage. They should be available for all to see and study, not be regarded as excrescences to be destroyed or damaged, whether in ignorance or deliberately' (Ibid.).

In 1972, UNESCO (United Nations Educational, Scientific and Cultural Organization) discussed archaeological destruction within the British landscape and the ongoing threat to and awareness of the destruction of major natural and cultural sites all over the world (P Fowler 2004, 2). The World Heritage Convention was therefore adopted by UNESCO at that time, 'to encourage the identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity' (www.whc.unesco.org). Their premise continues today:

'The cultural and natural heritage is among the priceless and irreplaceable assets, not only of each nation, but of humanity as a whole. The loss, through deterioration or disappearance, of any of these most prized assets constitutes an impoverishment of the heritage of all the peoples of the world.' (Operational Guidelines for the Implementation of the World Heritage Convention 2017, 9).

The 1970s and the 1990s saw massive programmes of fieldwork in England. Vast numbers of monuments were visited and assessed, leading to the scheduling of monuments and landscapes of national value. However, despite this interest, ploughing continued over the monuments of East Yorkshire, which are now largely destroyed. Lessons must be learnt from the situation in the Wolds. If over eleven hundred upstanding monuments can be annihilated, many under the premise of scheduled protection (Chapter 7), what else might be inadvertently destroyed? How can these issues be prevented? Historic England, and English Heritage before it, are the bodies focussed on the protection of unique monuments and landscapes for the benefit of future generations. Yet, the Yorkshire Wolds landscape is gone. In the past, monuments were scheduled for their protection. However, this process needs immediate consideration. There is little point in the scheduling of monuments if, as shown above, they are permitted to be ploughed flat and effectively destroyed. These locations now need to be subject to a new rescue programme, to archaeologically recover any available structural or artefactual evidence, through fieldwalking, test pitting and ultimately, excavation. For other landscapes, it is worth considering whether further protection and investigation might help to safeguard them before they too are destroyed intentionally or unintentionally.

Yet, despite the loss of these Neolithic and Bronze Age monuments in the Yorkshire Wolds, the most unexpected data within this thesis came from the detailed case study of each of the 490 individual barrow excavations, from the commentary from William Greenwell and John Mortimer's legacy data. There were frequent examples of expected scenarios within these barrows, such as cremation or inhumation, individual and collective burial rites, all of which are detailed in Chapter 7 above. However, it is the unusual which led to so many surprising results.

As stated above, the concept of cremation seems to have originated within the Yorkshire Wolds barrows, within the Later Neolithic period. At a similar time, people also began to place grave goods and artefacts with the deceased in Neolithic round mounds, a practice later adopted elsewhere. Added to this, both cremations and inhumations were found together within 30% of the previously excavated barrows and 13.5% in broadly contemporaneous, secure contexts. (A context was considered 'secure', if the excavator wrote about having got down to undisturbed layers, or if they puzzled as to why the situation had come about, or offered specific explanations about their interpretation of the context, which led to these deviant or more unusual results). In-situ burning, 'crematoria' and burning using 'flues' was also present in 6% of barrows. This differing treatment of the dead, a complete change from many other contexts throughout Britain, deserves further work and study.

Yet, the most puzzling set of results pertains to the more specific treatments of the corpses after death. As John Chapman found in the Balkan MNCA, human skeletal material and objects were subjected to deviant practices in East Yorkshire (2000, 6). Rather than 'competitive individualism' as the overarching ethos of exchange, as found in much of the European Bronze Age (Brück 2006, 74), the fragmentation and enchainment of body parts and objects in East Yorkshire implied friction, discontent and the enchainment of genealogy and exchange through social relations (Chapman 1996, 214). In fact, 64% of human bodies were found within barrows which also contained incomplete, disarticulated or disturbed cremations or inhumations. In many cases, the excavators failed to adequately explain the instances of incomplete bodies or of additional or replacement body parts. While ploughing and taphonomic loss accounted for some of the disturbance and loss within these barrows, there were numerous situations where those reasons failed to fully explain the contents of graves, hollows or holes within these barrows.

Fragmentation has been accepted as occurring within some MNCA Balkan and Mesolithic Scandinavian contexts, yet it is scarcely discussed as a phenomenon of the British Neolithic and Bronze Ages, despite the examples found both here and elsewhere. Although some cases have been discussed within British contexts (Brück 2006, 81; McKinley 1997, 138; Lucas 1996, 103), other possible and probable examples have instead been explained through taphonomic loss or later removal, even if those explanations do not fully clarify

the excavated burial contexts. Mortimer's empty graves, hollows and holes and Greenwell's 'enigmatic holes' were present in 22% of all barrows, further complicating the picture. Once again, plough damage, later removal and taphonomic loss were likely to have accounted for some of the scenarios. However, there are too many occurrences of the survival of animal bones, antlers or, in one case, fine rope, but without a human burial or cremation, for every situation to have been explained in this way. As already referenced, these 'cenotaph' graves, hollows or holes were only included within the case study, if the excavator stated that the context was secure and that they were puzzled as to why these had been deliberately dug and re-filled, without the addition of a human body. This confusion was added to when the excavators uncovered incomplete bodies within 28% of barrows, or replacement or additional human bones within 9.5% of barrows. In 15% of barrows, animal bones, antlers or horns were also deliberately placed in burial contexts with the dead. Clearly, far more research is needed as well as rescue excavations of ploughed out barrows, to try to uncover more evidence to be able to fully answer this issue.

Grave goods were found within 84% of excavated barrows. Of those, as mentioned above, over eight per cent of barrows contained 1,320 artefacts made from Whitby jet, with a further possible 10% of barrows containing items which may have been used within the jet-working process. It is possible that the new jet-working ability made a major difference to the definition of prestige, accumulation and identity of the people, as also happened in North-East Bulgaria in the Copper Age (Chapman 1996, 120, 136). This might account for one of the major reasons for body and object fragmentation in East Yorkshire in the Later Neolithic and Earlier Bronze Age. The jet-working capabilities may have met with resistance from within local social groups, leading to the deposition of fragmented, inalienable objects and body parts, to enchain social relations and ancestral standing.

Sheridan *et al.* noted that flint saws were the most likely tool for jet-cutting, with sandstone used for roughing out and shaping (2000, 823). During the analysis above, 90 barrows contained jet or possible items for working, cutting, shaping and polishing jet (Chapter 7, Appendix). The creation of these highly composite and complex jet necklaces was probably more easily achieved once bronze could be accessed, as the perforation stage is extremely difficult. A fine object, such as bronze wire or a solid bronze bit would make the process easier, without breakage (*Ibid.*). The complexity of this process demonstrates the skilful

exploitation of raw materials achieved by the Whitby jet-workers, which adds to each object's intrinsic and overall value. Each jet bead can therefore be classed as a unique and precious object requiring great skill and delicacy in its creation. Their magical static-electrical properties may have imbued the owner or wearer with special significance, making them highly desirable items for ceremonial purposes. As, the 'generative substances of the land and the body are tied together in a continuous cycle' (C Fowler 2004, 109), it makes sense that the objects such as flint, jet and sandstone, found on the land and washed up by the sea in East Yorkshire, would have been incorporated into the lifestyles of the people.

This PhD has been hugely enlightening and rewarding, although also exhausting and frustrating at times. The data provided by the analysis of the early antiquarians, travellers and excavators uncovered important details about travel during the period 1500 and 1900. Current research then demonstrated the wealth of Neolithic and Early Bronze Age monuments in northern England, which are currently failing to gain the national and international significance they deserve. By highlighting what can be learnt from a focussed case study of legacy data, the landscape of the Yorkshire Wolds revealed surprising and ground-breaking results, which can provide many research opportunities for the future.

8.1 FUTURE RESEARCH

The itineraries followed by the antiquarians have already been considered, along with their own home locations and therefore their partial focus, which at the time was understandable. However, travel is easy now. Universities and their Archaeology Departments are nationwide. The reasons for the lack of interest in the past cannot be held to account in the modern era. Clare Fell's comment about, 'The long distance of [Cumbria] from universities which include archaeology amongst their subjects for study' (1972, 9) now no longer applies, with GIS, Google Earth and LiDAR. The many BA, BSc, MA, MSc, MPhil and PhD students at each British institution can be encouraged, perhaps through the current emphasis on the revised and updated Regional Research Frameworks, to fill in the gaps in current-day research. Marginalised and forgotten monuments and their regions can be covered with field survey, remote sensing and targeted excavation. The patchy view of the Neolithic and Early Bronze Age periods in England (and indeed, around Britain) can

become a comprehensive, detailed, very up-to-date survey of survival and loss. Numerous radio-carbon dates, environmental, bone and artefactual evidence can help to form new patterns of habitation and the movement of people around Britain. Now is the time for a focussed re-examination of the available evidence for the whole of Britain, and not just a few selected areas. In some regions, vital evidence continues to be ploughed or quarried away, as has been shown. Figure 85 and Table 26 show the data for the Yorkshire Wolds but this will be reflected in many other regions. Assessment of survival is long overdue. English Heritage last completed a nationwide survey in the 1990s. Protection of what remains is now key, especially as Brexit is already affecting our job market. Promotion of prehistoric monuments and regions could add valuable tourism to areas which are suffering. The lesson learnt from a re-evaluation of legacy data from the Yorkshire Wolds serves to remind us of the opportunities that can be uncovered in areas where research has been partial and has lacked the co-ordinated over-arching focus of a major project. Many other areas in northern England are ripe and ready for such a study.

We need to learn from the benefits of the attention given to Stonehenge over so many years. It is acknowledged as the 'most enigmatic' (Parker Pearson & Ramilisonina 1998, 308), 'most important' (Wainwright 1996, 9), 'most famous' (Lawson 1992, 934) and one of the 'most intensively explored prehistoric monuments in western Europe', yet it 'continues to hold surprises' (Banton *et al.* 2014, 733). It is 'a 'honey-pot' attraction everyone wants to visit' (Chippendale 1983, 177). Yet, does one monument deserve the label of '*cause favorisée*' (Chippendale *et al.* 2014, 645)? Can this intentional bias be justified, especially when the 'changing fortunes...down the ages' of Stonehenge are also bemoaned (Ibid., 644)? The monuments of northern England too have seen many changes in their fortunes. Now is the time for their structures to become nationally if not universally recognised; for their fortunes to change; and for them to be protected and safeguarded properly for the future, with new legislation and management plans.

In 1996, Wainwright discussed the challenges facing Stonehenge, describing its care and protection at that time as a cause for national shame (1996, 9). While this statement may hold for a globally recognised monument, it does not support the cause of hundreds of other, similarly unprotected monuments in northern England. These monuments have no car park, no sign-post nor sign-board on site. They are not noticed, nor their intrinsic worth

recognised and valued. Yet, they too required the labour of our ancestors. They too deserve to be protected and cared for. They too need a management plan which acknowledges their value, both to the state as well as to local and regional communities. In an uncertain Brexit period, valuing our local and national heritage is hugely important. It leads to feelings of belonging and pride, which are crucial during this uncertain time. Stonehenge's silent siblings deserve their moment in the spotlight, their fifteen minutes of fame and ultimately, their preservation for future generations to also enjoy.

The state is trying to encourage people to be more healthy, to walk and cycle more and the lockdown walks of 2020 enabled people to explore their own neighbourhoods. Information boards, signposts, leaflets and books on routes and monuments could be most useful to allow people to incorporate these structures within their travels. Will these sites, however, be suitable for the 'tourism economy'? Will the visitors be prepared to tramp or cycle in the rain or heat? (Baxter & Chippindale 2000, 945). They are, at present, 'encountered in sublime majesty undistracted by a crowd' (Ibid.), contra the situation at Stonehenge in 2000. They are 'magical and lonely' places (Ibid.), unencumbered by roads, facilities or even visitors. Historic England continues to focus much of its N/EBA efforts on the promotion of one monument, rather than the safeguarding and management of many. Now that Stonehenge has the potential to be self-funding, should not the focus disperse towards a wide variety of N/EBA monuments elsewhere in England, which also need protection, as well as promotion? Should the distance from its own headquarters preclude interest elsewhere? The Yorkshire Wolds' countryside has been annihilated by the lack of interest in its 1,147 monuments. How many other landscapes need to suffer from this ennui?

Google Earth would benefit from a combined Ordnance Survey mapping project to include Aerial Photographs and current LiDAR images. During a critical time of British and English self-awareness, due to our impending exit from the European Union, we are entering into an age of self-containment and self-regulation. Other countries venerate their heritage and promote their prehistory, within regions. At this time, it is critical that we analyse, protect and revere our own valuable prehistoric landscapes. We need to have a re-evaluation of the worth and significance of such landscapes to our current-day economy, whether for British day-trippers or as a means of attracting a different kind of holidaymaker to Britain, that is, one interested in the nature of these magnificent structures and landscapes. We

also need to safeguard these structures for future generations. They need to be protected now. Ploughing and infrastructure needs must take a lesser, backseat over the preservation of what remains. As Clare Fell stated, we do have a 'general increased awareness of our early heritage and of the need to record and conserve' our heritage (1972, 9). With the right advertising, promotion and sign-posting, some N/EBA monuments around England could be selected to be 'honey-pot' attractions that many people would want to visit. As this thesis has focussed specifically on northern England, the four landscapes discussed below for immediate further research are also within northern England. However, this could be applied to numerous landscapes elsewhere, which have been shown, through this thesis, to also have been marginalised. The four chosen landscapes in northern England will now be briefly discussed, to demonstrate the wealth of opportunity and resource within these particular Neolithic and Bronze Age landscapes.

LANDSCAPE A – Shap Neolithic landscape, Cumbria

The Shap landscape in Cumbria has numerous examples of Earlier Neolithic to Bronze Age monuments (Table 63). There are 22 stone circles within the wider region, of which 18 remain upstanding (including the 4-Poster stone circle within the huge henge at Mayburgh); two varieties of upstanding, impressive henges; 12 Earlier Neolithic long mounds (barrows or cairns), all of which are extant and two lost Neolithic round mounds; standing stones; and an almost lost, prehistoric stone avenue. The Bronze Age timber circle, found during works at Hardendale Quarry, has an accompanying, nearby concentric stone circle at Oddendale. This may be northern England's only known example of lithicisation of timber to stone within a single landscape (Parker-Pearson & Ramilisonina 1998, 308, 320).

Neolithic monuments of the Shap-Eden wider landscape			
	Lost	Preserved	Total
Cist	1		1
Cursus	1		1
Ditched enclosure	1		1
Enclosure		1	1
Hengiform enclosure	1	1	2
Long barrow		2	2
Long cairn		10	10
Neolithic Round Barrows/Ring-ditches	2		2
Standing stone	2	7	9
Stone alignment		1	1
Stone avenue		1	1
Stone circle	4	18	22
Total	12	41	53

Table 63 - Neolithic monuments of the wider Shap landscape



Figure 185 - Location of monuments within wider Shap landscape

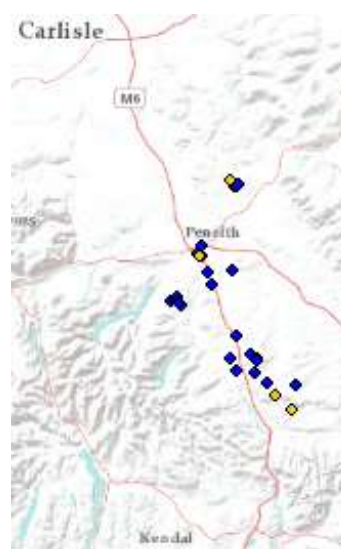


Figure 186 - Key monuments within the Shap landscape. Extant (blue) and lost (yellow)

It is clear that the Shap landscape has much potential (Table 63; Figure 185; Figure 186). Yet, no modern archaeological investigation has been made of this incredible cluster of monuments and they fail to be even mentioned in most studies of N/EBA Britain (Watson 2016). Tom Clare completed a research assessment of the Shap stone avenue in 1972. It detailed twenty-six large stones, or portions thereof, over three kilometres, roughly following a south-west to north-easterly direction, with a sharp turn north-westwards to avoid Skellaw Hill (1978, 7, Fig.1; 8, Fig.2). In 2007, Clare reassessed the situation, concluding that, ‘without geophysical survey and/or excavation, it is now impossible to determine the original arrangements of all the stones’ (2007, 82). There has been little further interest in the area until the author’s recent re-assessment (Watson, forthcoming) (Figure 187).



Figure 187 - The remaining stones of the Shap avenue

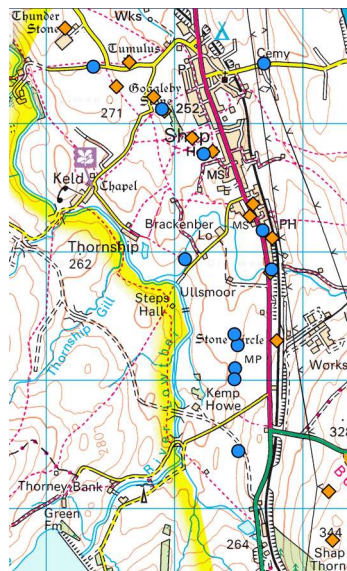


Figure 188 - The remaining stones of the Shap avenue (orange diamonds), with all springs in the locality (blue circles)



Figure 189 - Spring at conjunction of Force Beck and stone avenue (close to A6, south of Shap)

As has been discussed in Chapter 2, Stukeley visited the Shap Avenue in 1725 (1776, 17, 42-48) and described further monuments which have now disappeared, including Wilson Scar, excavated in 1952, prior to its destruction (Sieveking 1984, 33). However, despite Stukeley's consideration that the landscape was remarkable, with numerous N/EBA monuments, all geographically close to one another (1776, 42), the weather during his visit was appalling and the illustrations completed by his surveyor have since been lost. Stukeley even noted the presence of springs during his visit, 'even the springs burst out of the ground and rise into the air with a surprising push' (Ibid.), as still occurs at the A6/Force Beck location today (Figure 189). As can be seen (Figure 188), springs within the immediate landscape were clearly hugely influential in the siting of the stone avenue.

Despite much destruction in the 1770s, documented by Nicholson and Burn (1777, 447), the Shap avenue was still a 'remarkable monument' in the early 1800s, with its long avenue of very large stones, placed at equal intervals, heading northwards and curving westwards, and passing a number of stone circles *en route* (Hall 1824, 3).

To the north-east of the region, also close to the river Eden, is Long Meg and her Daughters. Stukeley and Pennant both visited it and were amazed by the stone circle (1776, 43; 1774, 41-7). Subject to the first modern-day excavation of a stone circle in Cumbria, in 2015, the monument was dated to 3300BC (Frodsham, forthcoming).

To the south-east of the region is the large (44m by 37m), impressive Gamelands stone circle. It has the dimensions of a Bradley 'early' circle (Bradley, pers. comm.) (Figure 190; Figure 191). With its 32 stones of pink Shap granite and one of porous limestone, this circle is actually oval-shaped. Its northern-most stones mirror the scarp slope of Knott Scar to the north and the southern stones the Lune Valley, symbolising the wider landscape beyond. Bradley observed that similar circular monuments were deliberately placed in order to be at the centre of a circular landscape (2007, 136), mirrored the domed effect of the sky (2012, 35), which Burl had also noted (1988, 202).



Figure 190 - Gamelands stone circle, view to the north, from west to east (Watson 2014)



Figure 191 - Gamelands stone circle, view to the south, from east to west (Watson 2014)

Back in the 1990s, Bradley and Edmonds (1993, 202) were calling for a campaign of fieldwork in the Cumbrian lowlands. The author's re-assessment and other upcoming projects may be finally able to answer some of the questions surrounding the Neolithic monuments within the Shap corridor. Certainly, with modern-day Geophysics and GPR techniques, this landscape could be proven to have major N/EBA potential. An evaluation of the terrain data and a major programme of study within this complex environment is long overdue. Through the consolidation of currently-known monuments and an investigation beneath the surface, between the different sites, with field-walking, geophysics and trial trenching where possible, a chronology for the entire landscape may be ascertained and numerous questions answered as to why this Shap region has such a concentration of monuments. There are also numerous examples of Bronze Age barrows and structures, both within the valley, that of the Skellaw Hill barrow, located within the vicinity of the Avenue (Clare 1978, 6), as well as many barrows on higher land, close to the Oddendale concentric stone circle. Further assessment and analysis of the entire landscape is needed to come to any conclusions about this superlative region.

LANDSCAPE B - North Yorkshire Moors N/EBA landscape

The North Yorkshire Moors is a remote and beautiful landscape of N/EBA burial mounds, standing stones, stone circles and stone rows. They 'still retain the same wild primeval aspect that they had in prehistoric times', as most of the landscapes have not been occupied by later groups of people (Elgee 1930, vii).

It contains at least 1,250 Neolithic and Bronze Age monuments (Table 64; Table 65; Figure 192; Figure 193) (North Yorkshire HER data, September 2019). Just to the north-east of the region, the famous Street House long cairn, with its burnt timber post façade and stone-kerbed, paved mortuary enclosure, was excavated in 1979, 1980 and 1981, revealing an unexpected multi-phase structure, with close links to the sub-rectangular stone-banked enclosure attached to the east side of the round cairn on Great Ayton Moor, excavated by Hayes (1967, 11-12). Great Ayton Moor contains a linear complex, which includes a chambered cairn and attached linear tail, as well as a Bronze Age cairn, another associated feature at Street House. Recent robbing of stone structures on Great Ayton Moor increases the importance of a new landscape survey, to assess survival and offer specific protection to these vulnerable structures. Given the photograph of the Street House site before excavation of the long cairn, a site barely discernible on the ground (Vyner 1984, Plate 2(a)), there could be numerous other Early Neolithic monuments awaiting discovery on the North York Moors. A thorough desk-based assessment, concentrated landscape and fieldwalking surveys, using LiDAR, aerial photography and targeted geophysics and excavations, need to be completed.

Neolithic monuments NY Moors	Total
NEOLITHIC	102
CAIRN	2
CUP AND RING MARKED STONE	21
CUP MARKED STONE	45
INHUMATION	2
LITHIC SCATTER	10
LONG BARROW	7
LONG CAIRN	
OCCUPATION SITE	2
ROCK CARVING	2
ROUND BARROW	9
STONE CIRCLE	2
Grand Total	102

Table 64 - Neolithic monument types and totals, NY Moors

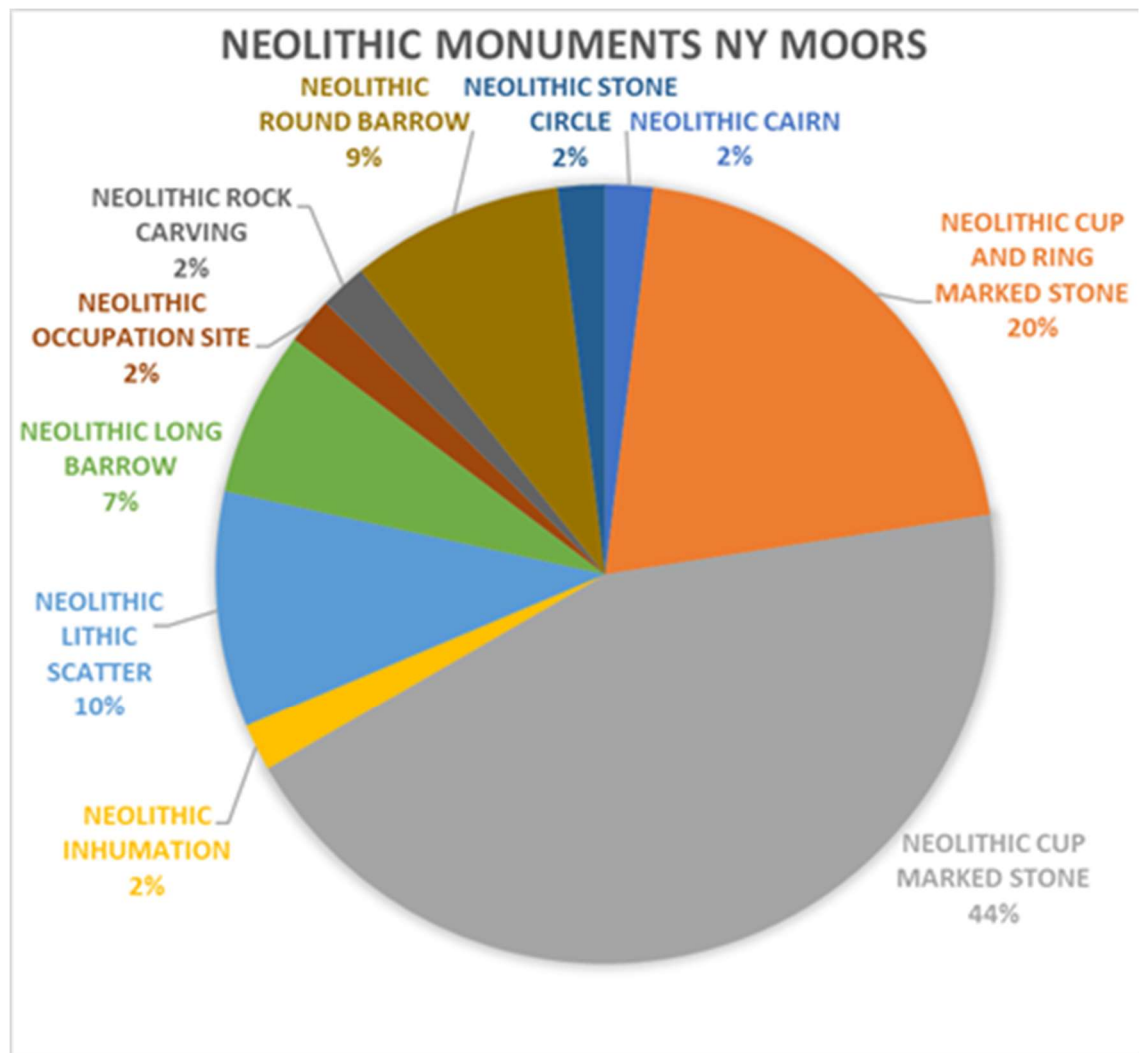


Figure 192 - Pie chart of the Neolithic monument types and percentages on the NY Moors

Bronze Age Monuments - North York Moors	
	Totals
BARROW	2
BARROW CEMETERY	41
CAIRN	101
CAIRN CEMETERY	11
CAIRN CIRCLE	1
CAIRNFIELD	65
CIST	14
EMBANKED STONE	
CIRCLE	1
RING CAIRN	17
RING DITCH	30
ROUND BARROW	664
ROUND CAIRN	181
STANDING STONE	14
STONE	1
STONE ALIGNMENT	1
STONE CIRCLE	4
Grand Total	1148

Table 65 - Bronze Age monument types and totals, NY Moors

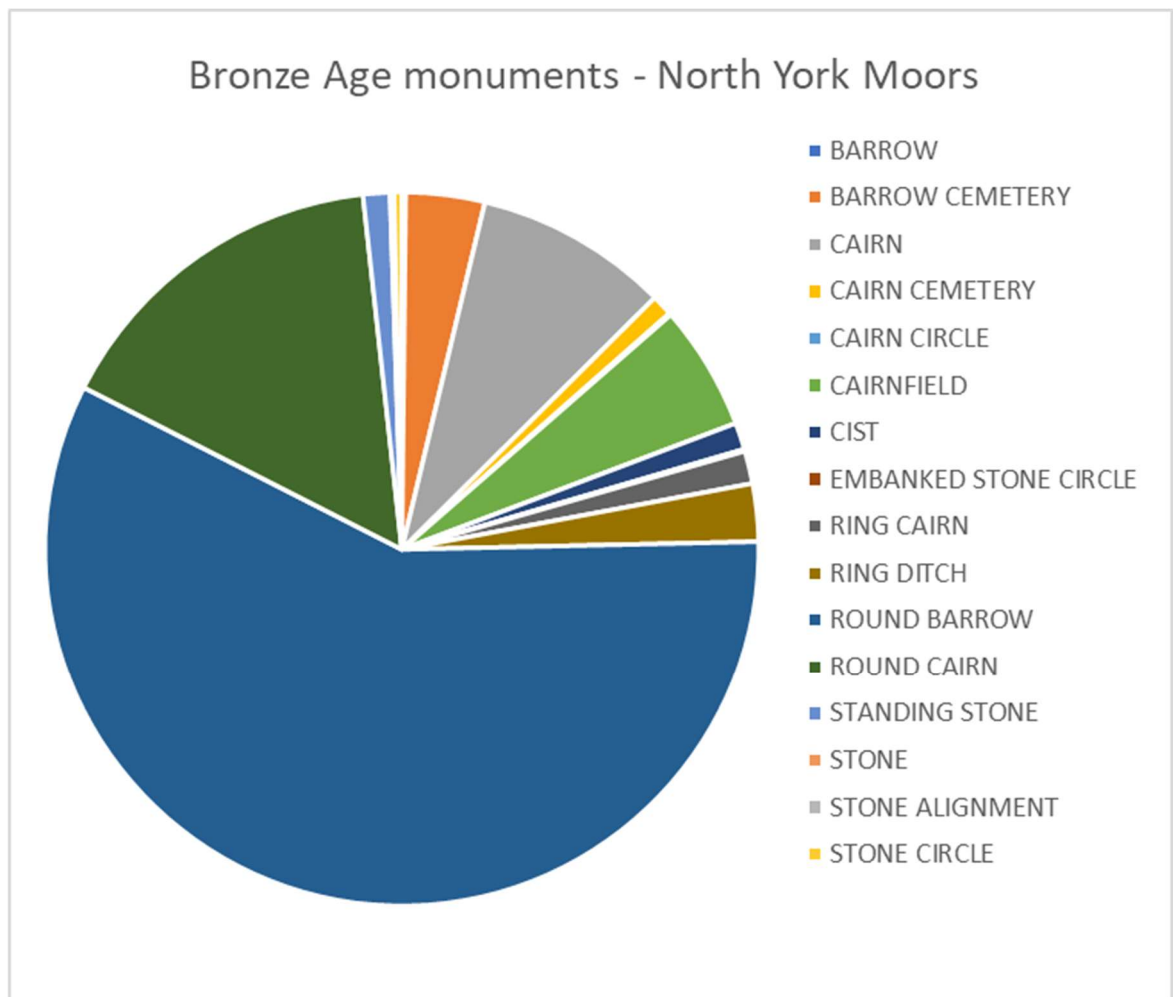


Figure 193 - Pie chart of the Bronze Age monument types and percentages on the NY Moors

There are over a thousand Bronze Age monuments on the North York Moors, the majority of those being round barrows or cairns (Table 65; Figure 193). These form alignments throughout the upper moorlands and like Lilla Howe, the majority have been excavated in the past (Figure 194).



Figure 194 - Lilla Howe Bronze Age round barrow, Grosmont, North York Moors. Photograph – Emma Watson

Work done by Don Spratt in the 1980s revealed that the barrows followed the watersheds of each small valley, visible from great distances within the landscape (Spratt 1989, 33) (Figure 195). Cairnfields, hollow-ways and early field systems are still upstanding on Near Moor, Iron Howe and Danby Rigg, but the nearby settlements remain elusive (Ibid., 33-36).

Although the above HER data only reference 66 rock art panels, the gazetteer in Brown and Chappell's *Prehistoric Rock Art in the North York Moors* lists 371 panels, within following areas: Fylingdales Moor, Goathland, East Moor, Southern region, Western sites, Near Moor, Eston Hills, Northern sites and the Cleveland Coast (2005, 227-282).

Manby *et al.* (2003, 82) noted that the North York Moors are 'the most extensively published area of Yorkshire', yet most of the investigations pertain to last century and may not reflect current-day issues. In all cases, they offer a partial account, either referencing only one monument type or one location. Once again, a widespread landscape and field-walking survey and desk-based assessment, similar to those suggested above, could assess survival and damage of monuments through animal grazing, grouse butt placement and issues with vegetation and their roots.

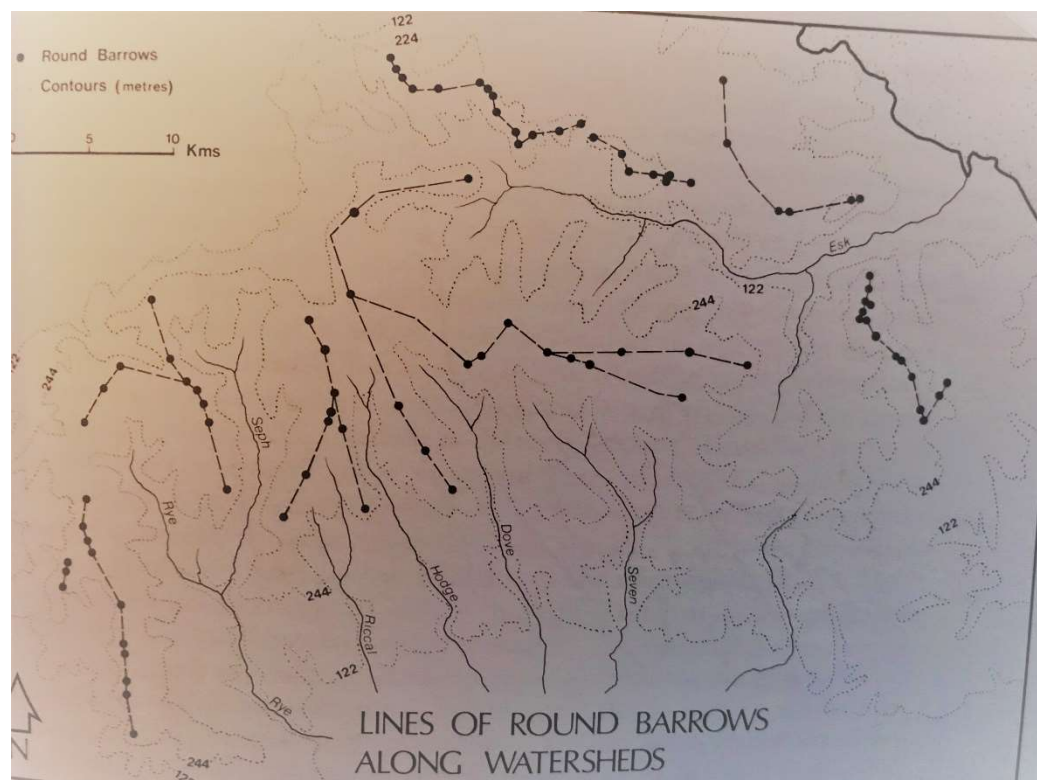


Figure 195 - Bronze Age barrows on the NY Moors and their locations (from Spratt 1989, 33)

LANDSCAPE C – Barningham Moor Bronze Age landscape, County Durham

In County Durham, Barningham Moor is home to a complex Bronze Age landscape of carved rocks, stone cairns, burnt mounds, enclosures and a stone circle (Figure 196).

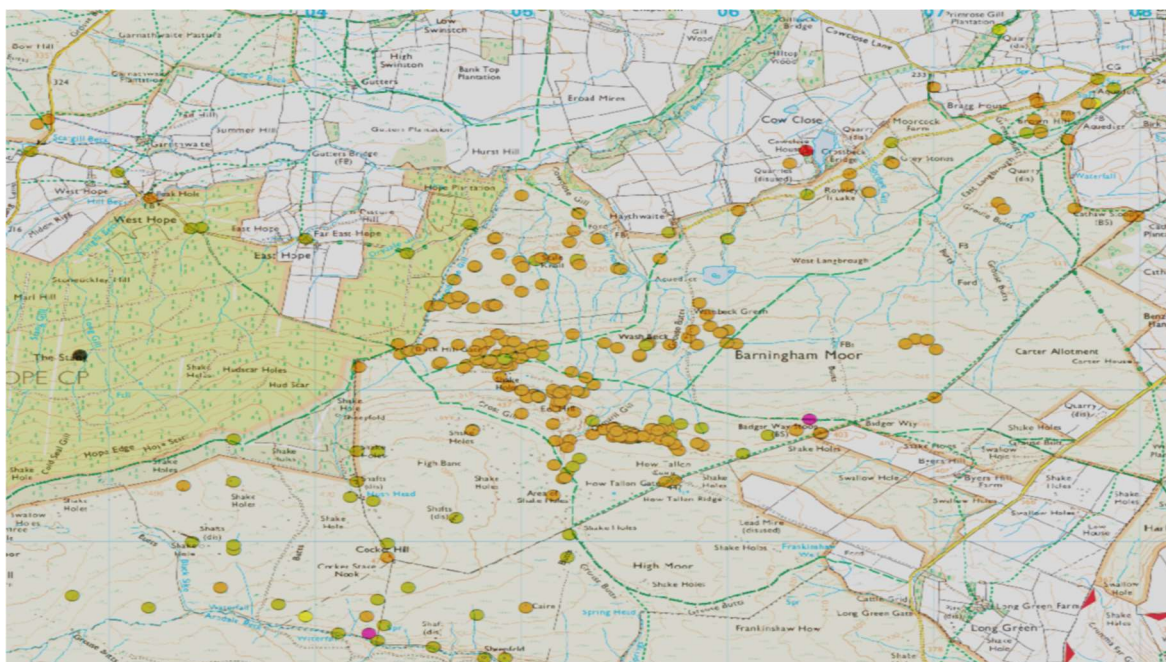


Figure 196 - Concentrations of rock art and other monuments on Barningham Moor



Figure 197 - Barningham rock art panel 100 (England's Rock Art no: 903; Durham County Council HER no: H1011)

Barningham 100 (ERA
903/H1011)



Figure 198 - Barningham rock art panel 57 (England's Rock Art no: 856; Durham County Council HER no: H1003)

Barningham 57 (ERA
856/H1003)



Figure 199 - Barningham rock art panel 52 (England's Rock Art no: 851; Durham County Council HER no: H1007)

Barningham 52 (ERA 851/H1007)

With 142 panels, it has one of the largest concentrations of rock art in Britain. The carvings are varied (Figure 197, Figure 198, Figure 199) and are located in open clusters and single sites in groups on the highest slopes over 250m above sea level (Beckensall 1999, 53), the

more elaborate of which lie close to streams, their springs rising from Osmonds (Osमारil) Gill and Eel Hill (Ibid., 56). Burnt mounds, a stone circle, enclosures, trackways and cairns add to the complex picture, yet no systematic survey has been completed to understand the relationships between the rock art panels themselves, between different monument types and how the surrounding landscape affected the siting and choice of location of each structure. Panel and monument viewsheds might throw light on possible settlement locations, which remain elusive for this period.

LANDSCAPE D – A1 N/EBA landscape, North Yorkshire

The landscape of the A1 corridor, North Yorkshire, contains eleven henges, a stone row (standing stones), three cursuses, a timber circle, numerous barrows and other N/EBA monuments (Table 66), seen on the map (Figure 200). These monuments are grouped along a twenty-four mile stretch of prime agricultural land within the A1 corridor.

N/EBA monuments of the A1 corridor	Lost	Preserved	Total
Causewayed enclosure	1		1
Cursus	3		3
Enclosure	1		1
Hengiform enclosure	6	5	11
Long barrow	1		1
Mortuary enclosure	2		2
Neolithic Round Barrows/Ring-ditches	29	3	32
Oval enclosure	1		1
Standing stones		1	1
Timber circle	1		1
Total	45	9	54

Table 66 - N/EBA monuments of the A1 corridor

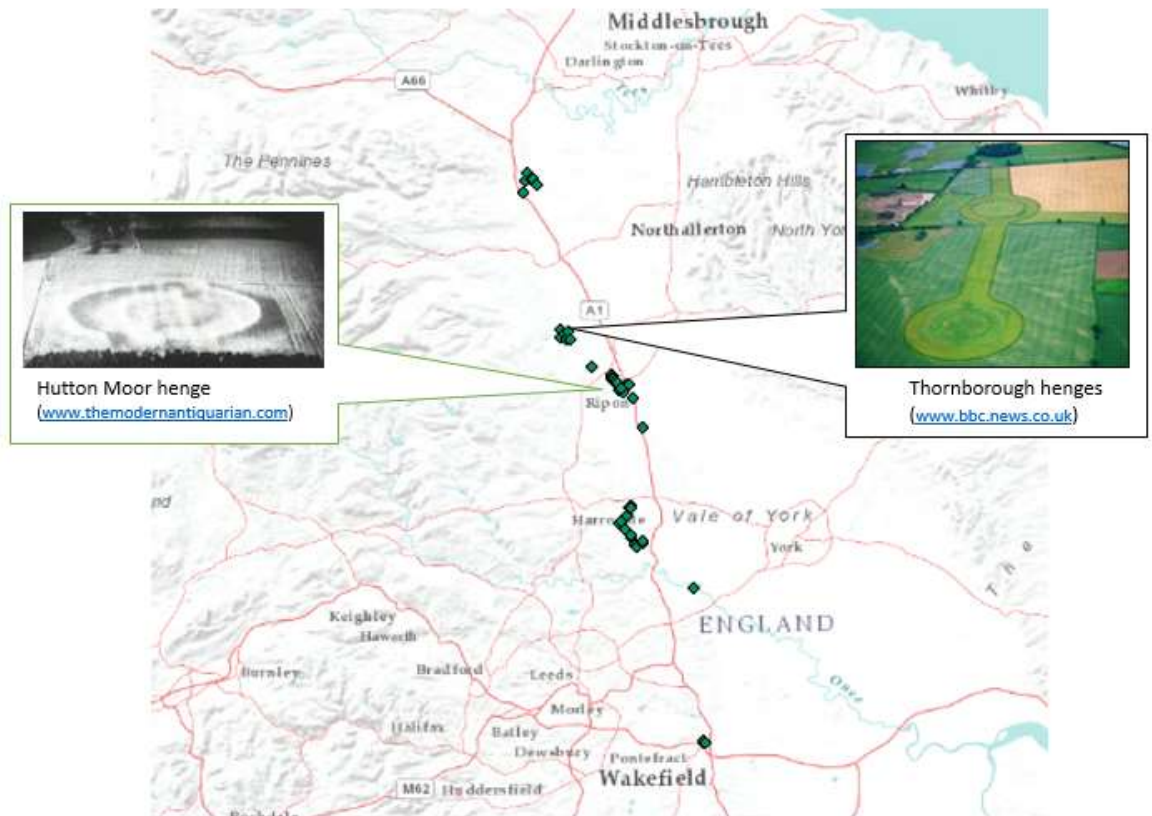


Figure 200 - Map of the monuments on the A1 corridor

It is a shame that in the modern era, there has been no overarching survey of the entire riverine landscape especially when, from the mid-1990s onwards, the landscape surveys and investigations carried out firstly by contractors in advance of quarrying and later by Jan Harding and his team at Thornborough and published in 2013, demonstrated such outstanding results. Using geophysical and magnetometry surveys, fieldwalking, aerial photography, topographical surveys, test-pitting, excavation and radio-carbon dating, they demonstrated the huge potential and longevity of that landscape. Harding stated that, 'It is regrettable that Thornborough...failed to attract the attention of others...Collectively, they [the three henges] represent one of the largest earthmoving episodes ever undertaken in Later Neolithic Britain, yet their history is best characterised by neglect' (2013, 1). With the importance of such a landscape as the Thornborough henges, it seems unbelievable that quarrying has been allowed to encroach so close to these hugely significant prehistoric structures. As stated above, the value of scheduling is negated if it does not lead to the total protection of these unique landscapes.



Figure 201 - Devil's Arrows stone row, Boroughbridge

Within the same 24-mile stretch of land are the Devil's Arrows (Figure 201). Aligned on the Thornborough henges, these three aligned standing stones and further henges are clustered within the Swale-Ure valleys, to the east of the Pennines (Figure 203; Figure 203).

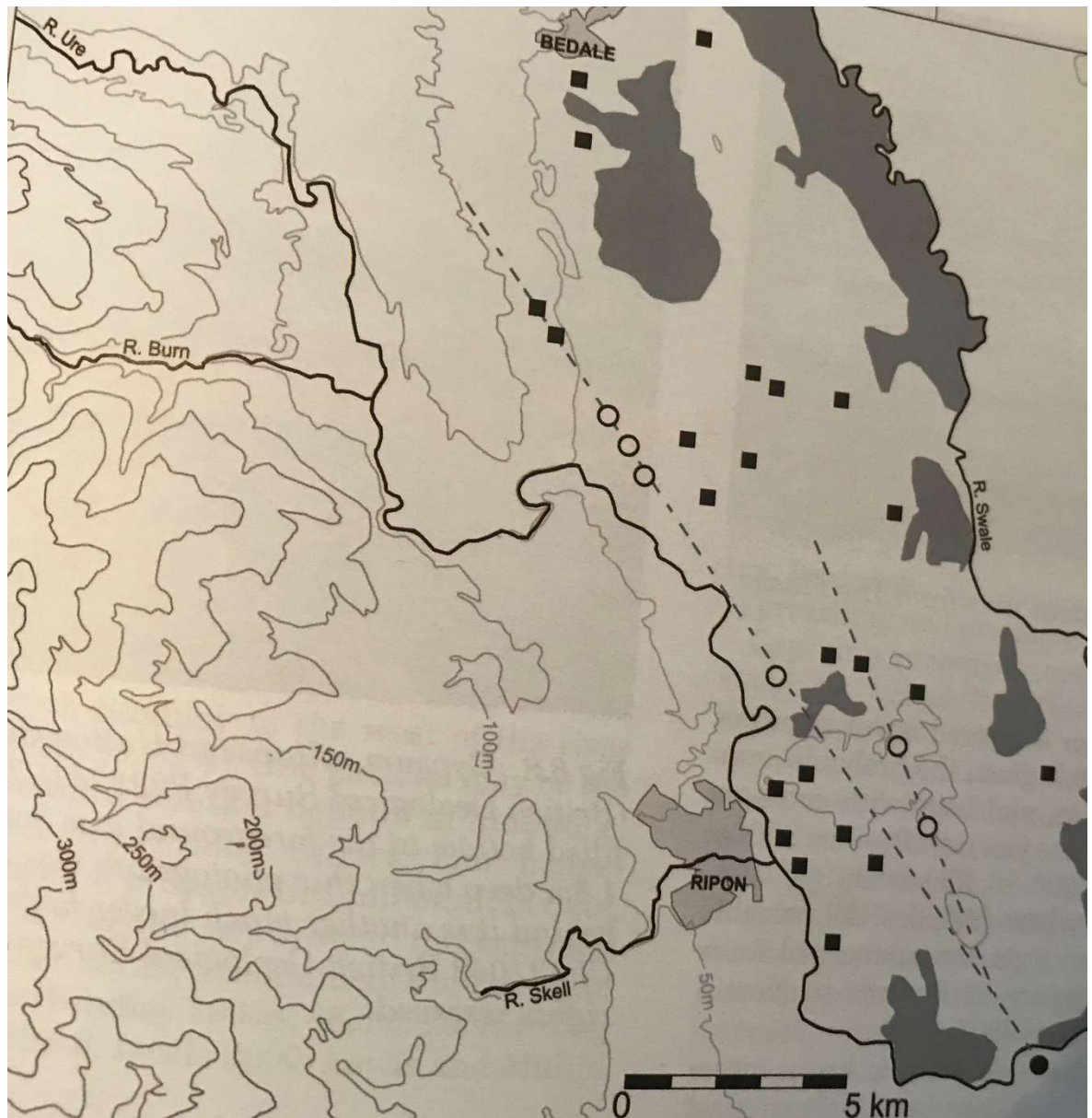


Figure 202 - Alignment of Thornborough henges, Devil's Arrows and other henges (circles), as well as location of mires and springs (black square) within the A1 corridor landscape (from Harding 2013, 207, Fig 6.6)

The excavations further south at Ferrybridge uncovered two henges with internal timber circles and a double pit alignment. This ceremonial complex is so similar to that of Thornborough to warrant further investigations. Might all the A1 corridor henges demonstrate similar longevity, with timber and earthen structures and might they be proven to be all connected within the wider landscape? Certainly, the diagrams of the Yorkshire double-entrenched henges (Harding 2013, 204) imply an overarching style of construction.

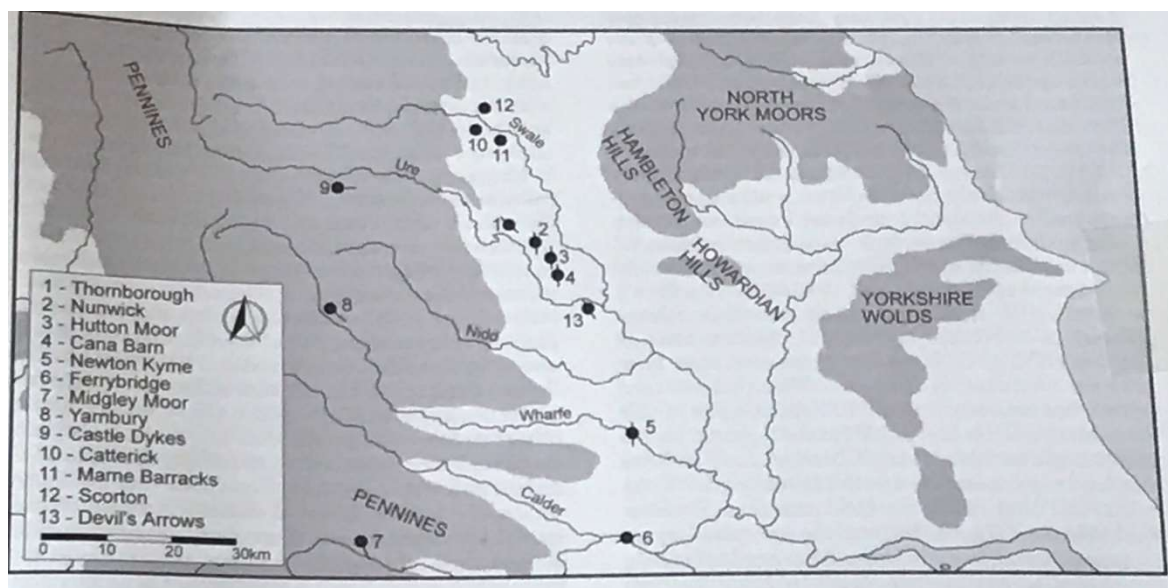


Figure 203 - Alignment of henge monuments and Devil's Arrows stone row, A1 corridor, North Yorkshire (from Harding 2013, 201, Fig 6.2)

Added to the excavations further south at Ferrybridge, where two timber circles were identified outside of a major henge monument, this wealth of new data could be further exploited. It would be the ideal time to use the information as a springboard to research the other henges and alignments within the same riverine landscape.

One of these, Hutton Moor, is in a completely open and accessible landscape and the monument survives above ground. It can be located via a minor valley, which runs from the road to the henge, which looks like it could have been a routeway up to the henge in Neolithic times. It is a superlative henge, unspoilt, except for the usual weather and animal erosion. It is left untouched, rarely visited, behind the farm. This, among other monuments within northern England, is a prime structure and location for further research.

As can be seen from Figure 200, their landscapes contain a wealth of upstanding, N/EBA monuments, all of which deserve to be promoted, regionally and nationally, and potentially internationally.

It is evident that these four landscapes have valuable characteristics. To quote Peter Fowler, 'every landscape is local to, and valued by, someone' (2004, xvii). Yet, although these four landscapes have social and personal values within their own communities, they are frequently unappreciated by a wider audience. Just as historic landscapes 'provide some of the most valued places for public recreation and education, but...are often

vulnerable' and require conservation (Historic England 2015, 5), we now 'need to work from the 'bottom up'' (Evans 2011, 41) to protect, promote, safeguard and manage these four N/EBA landscapes, among others in Britain. They need to be shown in a context which explores these local and regional traditions and how they are tied into and related to broader trends, to 'understand the social and geographical scales at which they operated' (Ibid.). This would help to maintain these N/EBA monuments within their natural environment and educate others about their sustainable worth and value. These monuments and their associated landscapes are 'tangible links to our past' (Historic England 2015, 8) and therefore irreplaceable. There is a real need to protect and preserve these ancient monuments, to uncover the varying theories about their construction and changing roles, about how and when they were built, through surveys and excavation. These points come from Andrew Lawson's discussion about Stonehenge (1992, 934) but they are equally valid about all Neolithic and Bronze Age structures. The focus of this research is northern England but could equally be about other British regions.

Any small venture might bring much needed benefits to the local economy through tourism. Job creation could be achieved through landscape promotion, site preservation and interpretation. However, one must always be aware that advertising a monument may attract too many visitors, 'spoiling' local amenities and degrading social life (P Fowler 2004, 12-13).

This would be an opportunity to promote positive feelings of national pride, during such an uncertain period in our nation's history. With Brexit and the concept of fragmenting the whole, perhaps this is a time to place particular and intrinsic values on locally significant, meaningful landscapes, with potentially outstanding, universal value. A re-evaluation of such possibilities is certainly needed, if not overdue. Critical importance must be placed on the protection, safe-guarding and possible promotion of individual and grouped monuments in northern England, and elsewhere. As has been discussed, 'landscape awareness, appreciation and conservation' (Ibid., xix) has long been called for.

9 REFERENCES

9.1 ONLINE

<http://archaeologydataservice.ac.uk/http://gridreferencefinder.com/batchConvert/batchConvert.php>

<http://pastscape.org.uk/default.aspx>

<http://www.biab.ac.uk>

<http://www.bodley.ox.ac.uk/dept/scwmss/wmss/online/1500-1900/gibson/gibson.html>

<http://www.gatehouse-gazetteer.info/home.html>

<http://www.megalithic.co.uk>

<https://www.nationaltrust.org.uk/avebury>

<http://www.nearby.org.uk/>

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/249695/SM_policy_statement_10-2013_2_.pdf

<https://digimap.edina.ac.uk/roam/map/historic>

<https://ebooks.adelaide.edu.au/c/camden/william/britannia-gibson-1722/contents.html>

<https://englaid.wordpress.com/portal-to-the-past/>

<https://historicengland.org.uk/images-books/publications/easy-access-historic-landscapes/>

<https://nrhe-to-her.esdm.co.uk/>

<https://whc.unesco.org/archive/opguide11-en.pdf>

<https://www.antiquity.ac.uk/>

<https://www.barpublishing.com/>

<https://www.google.co.uk/>

<https://www.ordnancesurvey.co.uk/docs/outline-maps/gb-outline-admin-maps.pdf>

<https://www.ref.ac.uk/2014/media/ref/content/pub/REF%20Brief%20Guide%202014.pdf>

<https://www.thecompleteuniversityguide.co.uk/league-tables/rankings?s=archaeology>

<https://www.victoriacountyhistory.ac.uk/>

<https://www.wikipedia.org/>

<https://www.woodlandtrust.org.uk>

9.2 BIBLIOGRAPHY

Appleby, J (2010) 'Ageing as fragmentation and dis-integration', in Rebay-Salisbury, K, Sørensen, M & Hughes, J (eds) *Body Parts and Bodies Whole. Changing Relations and Meanings*. Oxbow Books. Oxford, 46-53.

Ashbee (1970, 1984) *The Earthen Long Barrow in Britain. An Introduction to the Study of the Funerary practice and Culture of the Neolithic People of the third Millennium B.C.* Cambridge University Press. Norwich. 2nd Edition.

Ashbee (1960) *The Bronze Age Round Barrow in Britain. An introduction to the study of the funerary practice and culture of the British and Irish Single-Grave People of the second millennium B.C.* London. Phoenix House Ltd.

Aubrey, J (1718) *The natural history and antiquities of the county of Surrey*. Begun in the year 1673.

Aubrey, J (1696) *Miscellanies upon the following subjects, collected by J. Aubrey Esq.* Printed for Edward Castle. London.

Bale, J (?) *The New Years Gift, 1546. 'The laboriouse journey and serche of Johan Leylande for Englandes Antiquitees giuen of hym as a newe yeares gyfte to kyng henry the viii*, in Chandler, J (1993) *John Leland's Itinerary. Travels in Tudor England*. Alan Sutton Publishing Ltd. Stroud. Glos, 1-15.

Balme, M (2001) *Two Antiquaries*. Durham Academic Press. Durham.

Banton, S, Bowden, M, Daw, T, Grady, D & Soutar, S (2014) 'Parchmarks at Stonehenge, July 2013', *Antiquity* 88 (341), 733-739.

Barber, J (1997) *The excavation of a stalled cairn at the Point of Cott, Westray, Orkney*, with contributions by J Coy, N Finlay, E Halpin, S Hamilton-Dyer, M Harman, F Lee & A MacSween. Scottish Trust for Archaeological Research. Great Britain.

Barclay, G & Brophy, K (2020) "A veritable chauvinism of prehistory": nationalist prehistories and the 'British' late Neolithic mythos', *Archaeological Journal* 177 (1), 1-31, DOI: 10.1080/00665983.2020.1769399.

Barker, G (1981) (ed) *Prehistoric Communities in northern England. Essays in social and economic reconstruction*. Dept. of Prehistory and Archaeology, University of Sheffield. Sheffield.

Barnatt, J (1989) *Stone Circles of Britain*. BAR Brit Series 215. Oxford.

Bateman, T (1861) *Ten years' diggings in Celtic and Saxon grave hills, in the counties of Derby, Stafford and York, from 1848 to 1858, With Notices of some former discoveries, hitherto unpublished, and remarks on the crania and pottery from the mounds*. London. George Allen & Sons.

Baxter, I & Chippindale, C (2000) 'The Stonehenge we don't deserve', *Antiquity* 74 (286), 944-946.

Bayliss, A (2010) 'Radiocarbon dating', in Gibson, A & Bayliss, A 'Recent work on the Neolithic round mounds of the upper Great Wold Valley, Yorkshire', in Leary, J, Darvill, T & Field, D (eds), *Round Mounds and Monumentality in the British Neolithic and Beyond*. Neolithic Studies Group Seminar Papers 10. Oxford. Oxbow Books, 72-107.

Beckensall, S (1999) *British Prehistoric Rock Art*. Tempus. Stroud.

Booth, T J & Brück, J (2020) 'Death is not the end: radiocarbon and histo-taphonomic evidence for the curation and excarnation of human remains in Bronze Age Britain', *Antiquity* 94 (377), 1186–1203.

Bradbury, J & Scarre, C (2017) (eds) *Engaging with the dead, exploring changing human beliefs about death, mortality and the human body*. Oxbow Books. Oxford.

Bradbury, J & Scarre, C (2017) 'Beyond the Invisible Dead: Future priorities, opportunities and challenges', in Bradbury, J & Scarre, C (eds) *Engaging with the dead, exploring changing human beliefs about death, mortality and the human body*. Oxbow Books. Oxford, 217-219.

Bradley, R, Watson, A & Style, P (2019) 'After the Axes? The Rock Art at Copt Howe, North-west England, and the Neolithic Sequence at Great Langdale', *Proceedings of the Prehistoric Society*, 1-16.

- Bradley, R (2019) *The Prehistory of Britain and Ireland*. 2nd edition. Cambridge. CUP.
- Bradley, R (2012) *The Idea of Order. The Circular Archetype in Prehistoric Europe*. Oxford. OUP.
- Bradley, R (2007) *The Prehistory of Britain and Ireland*. Cambridge. CUP.
- Bradley, R (2002) 'The Neolithic and Bronze Age Periods in the North – Some Matters Arising', in Brooks, C, Daniels, R & Harding, A (eds) *Past Present and Future. The Archaeology of Northern England*. Architectural and Archaeological Society of Durham and Northumberland. Research Report 5. Durham. R. Booth Associates, 37-41.
- Bradley, R (2000) *An Archaeology of Natural Places*. London. Routledge.
- Bradley, R (1984) *The social foundations of prehistoric Britain, themes and variations in the archaeology of power*. Essex. Longman.
- Bradley, R & Edmonds, M (1993) *Interpreting the axe trade: production and exchange in Neolithic Britain*. Cambridge. CUP.
- Bradley, R & Gardiner, J (1984) (eds) *Neolithic Studies. A Review of Some Current Research*. Reading Studies in Archaeology No.1. Oxford. BAR British Series 133.
- Brennand, M (2006) (ed) *The Archaeology of North West England. An Archaeological Research Framework for the North West Region. Volume 1. Resource Assessment*. CBA North West. Loughborough.
- Brewster, TCM (1984) *The Excavation of Whitegrounds Barrow 1, Burythorpe, North Yorkshire*. East Riding Research Committee Publications. Malton.
- Brittain, M & Harris, O (2010) 'Enchaining arguments and fragmenting assumptions: reconsidering the fragmentation debate in archaeology', *World Archaeology* 42 (4), 581-594.
- Brooks, C, Daniels, R & Harding, A (eds) (2002) *Past Present and Future. The Archaeology of Northern England*. Architectural and Archaeological Society of Durham and Northumberland. Research Report 5. Durham. R. Booth Associates.

Brophy, K, MacGregor, G & Ralston, I (2016) (eds) *The Neolithic of Mainland Scotland*. Edinburgh University Press. Edinburgh.

Brophy, K & Barclay, G (2009) (eds) *Defining a Regional Neolithic: The Evidence from Britain and Ireland*. Neolithic Studies Group Seminar Papers 9. Oxbow. Oxford.

Brophy, K (2005) 'Not my type: discourses in monumentality', in Cummings, V & Pannett, A (eds), *Set in Stone. New approaches to Neolithic monuments in Scotland*. Oxford. Oxbow Books, 1-13.

Brown, PM & Chappell, G (2005) *Prehistoric Rock Art in the North York Moors*. Tempus. Stroud.

Brück, J (2006) 'Death, exchange and reproduction in the British Bronze Age', *European Journal of Archaeology* 9 (1), 73–101.

Brück, J (2001) 'Monuments, Power and Personhood in the British Neolithic', *Journal of the Royal Anthropological Institute* 7 (4), 649-667.

Burl, A (2000) *The Stone Circles of Britain, Ireland and Brittany*. London. Yale University Press.

Burl, A (1988) "'Without sharp North..." Alexander Thom and the great stone circles of Cumbria', in Ruggles, CLN (ed) *Records in Stone. Papers in memory of Alexander Thom*. Cambridge. CUP, 175-205.

Burl, A & Mortimer, N (2005) (eds) *Stukeley's Stonehenge. An unpublished manuscript 1721-1724*. London. Yale University.

Camden, W (1722) *Britannia: or a Chorographical Description of Great Britain and Ireland, Together with the Adjacent Iflands*. Written in Latin By William Camden, Clarenceux, King at Arms'. 2nd Edition. Translated into English, with Additions and Improvements by Edmund Gibson, Rector of Lambeth; now Bishop of Lincoln, and Dean of His Majesty's Chapel-Royal.

Carver, G (2011) 'Pits and Place-making: Neolithic Habitation and Deposition Practices in East Yorkshire c.4000-2500BC', *Proceedings of the Prehistoric Society* 78, 111-134.

Chandler, J (1993) *John Leland's Itinerary. Travels in Tudor England*. Alan Sutton Publishing Ltd. Stroud. Glos.

Chapman, J (2010) 'Deviant' burials in the Neolithic and Chalcolithic of Central and South-Eastern Europe', in Rebay-Salisbury, K, Sørensen, M & Hughes, J (eds) *Body Parts and Bodies Whole. Changing Relations and Meanings*. Oxbow Books. Oxford, 30-45.

Chapman, J (2000) *Fragmentation in Archaeology. People, places and broken objects in the prehistory of South Eastern Europe*. London. Routledge.

Chapman, J (1996) 'Enchainment, commodification, and gender in the Balkan Copper Age', *Journal of European Archaeology* 4, 203-242.

Chapman, J. C. and Gaydarska, B. I. (2007) *Parts and wholes: fragmentation in prehistoric context*. Oxford. Oxbow Books.

Childe, V G (1940) *Prehistoric Communities of the British Isles*. London. W & R Chambers, Ltd.

Chippendale, C (1983) 'What future for Stonehenge?' *Antiquity* 57 (221), 172-180.

Chippendale, C, Gosden, C, James, N, Pitts, M & Scarre, C (2014) 'New era for Stonehenge', *Antiquity* 88 (340), 644-657.

Clare, T (1978) 'Recent work on the Shap "avenue"', *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society*, Volume LXXVIII, Article II, 5-15.

Clare, T (2007) *Prehistoric monuments of the Lake District*. Tempus. Stroud.

Cook, M, Ellis, C, McSweeney, K, Mills, C & Rees, T (2000) 'An Early Bronze Age multiple burial cist from Mill Road Industrial Estate, Linlithgow, West Lothian', *PSAS* 130 (2000), 77-91.

Cook, M (2000) 'Radiocarbon dating', in Cook, M, Ellis, C, McSweeney, K, Mills, C & Rees, T, 'An Early Bronze Age multiple burial cist from Mill Road Industrial Estate, Linlithgow, West Lothian', *PSAS* 130 (2000), 77-91.

- Coombs, D (1976) 'Callis Wold round barrow, Humberside', *Antiquity* 50 (198), 130-1.
- Cooper, A & Green, C (2016) 'Embracing the Complexities of 'Big Data' in Archaeology: the Case of the English Landscape and Identities Project', *Journal of Archaeological Method and Theory* 23 (2016), 271–304.
- Croucher, K (2010) 'Bodies in pieces in the Neolithic Near East', in Rebay-Salisbury, K, Sørensen, MLS & Hughes, J (eds) *Body Parts and Bodies Whole. Changing Relations and Meanings*. Oxbow Books. Oxford, 9-16.
- Crellin, R, Fowler, C & Tipping, R (2016) (eds) *Prehistory without Borders. The Prehistoric Archaeology of the Tyne-Forth Region*. Oxbow Books. Oxford.
- Croxford, B (2003) 'Iconoclasm in Roman Britain?', *Britannia* 34, 81–95.
- Crozier, R (2016) 'Fragments of death. A taphonomic study of human remains from Neolithic Orkney', *Journal of Archaeological Science Reports* 10, 725-734.
- Cummings, V (2017) *The Neolithic of Britain and Ireland*. Routledge. London.
- Cummings, V & Fowler, C (2007) *From cairn to cemetery: an archaeological investigation of the chambered cairns and early Bronze Age mortuary deposits at Cairnderry and Bargrennan White Cairn, south-west Scotland*. BAR Report 434. Oxford. Archaeopress.
- Cummings, V & Pannett, A (eds) (2005) *Set in Stone. New approaches to Neolithic monuments in Scotland*. Oxford. Oxbow Books.
- Daniel, G E (1950) *The Prehistoric Chamber Tombs of England and Wales*. Cambridge. The University Press.
- Darvill, T (2006) 'Early Prehistory', *Bristol Gloucestershire Archaeological Report No.3, part 1*, Bristol and Gloucestershire Archaeological Society and Cotswold Archaeology, 5-60.
- Darvill, T (2004) *Long Barrows of the Cotswolds and surrounding areas*. Tempus. Port Stroud.

Darvill, T (1987) *Ancient Monuments in the Countryside. An archaeological management review*. English Heritage. Archaeological Report no. 5. London. Historic Buildings & Monuments Commission for England.

Durden (1995) 'The production of specialised flintwork in the Later Neolithic: a case study from the Yorkshire Wolds', *Proceedings of the Prehistoric Society* 61, 409-432.

Edmonds, M (1995) *Stone tools and society: working stone in Neolithic and Bronze Age Britain*. London. Batsford.

Edwards, B (2016) 'Fragmenting Society: Pottery Biographies from Neolithic Northumberland', in Crellin, R, Fowler, C & Tipping, R, *Prehistory without Borders. The Prehistoric Archaeology of the Tyne-Forth Region*. Oxbow Books. Oxford, 82-94.

Elgee, F (1930) *Early Man in North-East Yorkshire*. Gloucester. John Bellows.

Ereira, A (2016) *The Nine Lives of John Ogilby. Britain's Master Map Maker and His Secrets*. Duckworth. Richmond.

Evans, H (2011) 'Social and geographical scale: regionality and the Cumbrian stone circles', in Jones, AM & Kirkham, G, *Beyond the core. Reflections on regionality in prehistory*. Oxbow. Oxford, 41-54.

Fell, C (1972) *Early Settlement in the Lake Counties*. Dalesman Books. Clapham (via Lancaster).

Fergusson, J (1872) *Rude Stone Monuments in All Countries; their Ages and Uses*. Re-published as *Old Stone Monuments* by The Lost Library. Glastonbury.

Fowler, C (2016) 'Early Bronze Age mortuary practices in North-East England and South-East Scotland', in Crellin, R, Fowler, C & Tipping, R (eds) *Prehistory without Borders. The Prehistoric Archaeology of the Tyne-Forth Region*. Oxbow Books. Oxford, 112-135.

Fowler, C (2013) *The Emergent Past. A Relational Realist Archaeology of Early Bronze Age Mortuary Practices*. Oxford. OUP.

Fowler, C (2004) *The Archaeology of Personhood*. Routledge. London.

Fowler, P (2004) *Landscapes for the World. Conserving a Global Heritage*. Windgather Press. Macclesfield.

Fowles, J & Legg, J (1982) (ed) *Monumenta Britannica or, ; A miscellany of British antiquities*, by John Aubrey. 2v. v2. v2. Annotated by Legg, J.

Fowler, C & Wilkin, N (2016) 'Early Bronze Age Mortuary Practices in North-East England and South-East Scotland: Using Relational Typologies to Trace Social Networks', in Crellin, R, Fowler, C & Tipping, R (eds) *Prehistory without Borders. The Prehistoric Archaeology of the Tyne-Forth Region*. Oxbow Books. Oxford, 112-135.

Frodsham, P (forthcoming) *Long Meg. At the heart of Neolithic Britain*.

Gamble, M & Fowler, C (2013) 'A re-assessment of Early Bronze Age human remains in Tyne and Wear Museums: results and implications for interpreting Early Bronze Age burials from north-east England and beyond', *Archaeologia Aeliana* 42, 47-80.

Gibson, A (2016) 'Who were these people?', in Brophy, K, MacGregor, G & Ralston, I (eds) *The Neolithic of Mainland Scotland*. Edinburgh University Press. Edinburgh, 57-73.

Gibson, A, Allan, M, Bradley, P, Carruthers, W, Challinor, D, French, C, Hamilton, D, Mainland, I, McCarthy, M, Ogden, A, Scaife, R, Sheridan, A & Walmsley, C (2011) 'Report on the Excavation at the Duggleby Howe Causewayed Enclosure, North Yorkshire, May-July 2009', *Archaeological Journal* 168:1, 1-63.

Gibson, A & Bayliss, A (2010) 'Recent work on the Neolithic round mounds of the upper Great Wold Valley, Yorkshire', in Leary, J, Darvill, T & Field, D (eds), *Round Mounds and Monumentality in the British Neolithic and Beyond*. Neolithic Studies Group Seminar Papers 10. Oxford. Oxbow Books, 72-107.

Gibson, A & Bayliss, A, Heard, H, Mainland, I, Ogden, AR, Bronk Ramsey, C, Cook, G, van der Plicht, J & Marshall, P (2009), 'Recent Research at Duggleby Howe, North Yorkshire', *Archaeological Journal* 166:1, 39-78.

Gibson, E (1722) *Britannia: or a Chorographical Description of Great Britain and Ireland, Together with the Adjacent Iflands*. Written in Latin By William Camden, Clarenceux, King

at Arms'. 2nd Edition. Translated into English, with Additions and Improvements by Edmund Gibson, Rector of Lambeth; now Bishop of Lincoln, and Dean of His Majesty's Chapel-Royal.

Gillings, M & Pollard, J (2004) *Avebury*. Duckworth. London.

Goffart, W (2003) *Historical Atlases. The First Three Hundred Years, 1570-1870*. The University of Chicago Press. London.

Greenwell, W (1890) 'Recent Researches in Barrows in Yorkshire, Wiltshire, Berkshire, etc.' *Archaeologia: or, Miscellaneous Tracts, &c.* 52, 1-72.

Greenwell, W (1877) *British barrows: a record of the examination of sepulchral mounds in various parts of England*. Clarendon Press. Oxford.

Grinsell, L (1953, 1975) *The Ancient Burial-Mounds of England*. Methuen & Co. London. 2nd Edition.

Hall, G (1824) 'Carl Lofts at Shap, Westmoreland', *The Gentleman's Magazine*, January 1824. British Periodicals.

Hamilton, D (2011) 'The Radiocarbon Dates', in Gibson, A, Allan, M, Bradley, P, Carruthers, W, Challinor, D, French, C, Hamilton, D, Mainland, I, McCarthy, M, Ogden, A, Scaife, R, Sheridan, A & Walmsley, C, 'Report on the Excavation at the Duggleby Howe Causewayed Enclosure, North Yorkshire, May-July 2009', *Archaeological Journal* 168:1, 27-30.

Harding, J (2013) *Cult, Religion and Pilgrimage: Archaeological investigations at the Neolithic and Bronze Age monument complex of Thornborough, North Yorkshire*. Council for British Archaeology. York.

Harding, J (1996) 'Reconsidering the Neolithic Round Barrows of Eastern Yorkshire', *Neolithic Studies in No-Man's Land. Northern Archaeology* 13/14, 67-78.

Haycock, DB (2002) *William Stukeley: Science, Religion and Archaeology in Eighteenth Century England*. Boydell Press. Woodbridge.

Hayes, RH (1967) *Chambered Cairn and Adjacent Monuments on Great Ayton Moor, North-east Yorkshire*. Scarborough Archaeological & Historical Society (Dec. 1967). Scarborough.

Hewitt, R (2010) *Map of a Nation. A Biography of the Ordnance Survey*. Granta Publications. London.

Historic England (2014) <https://historicengland.org.uk/images-books/publications/scheduled-monuments-guide-for-owners-and-occupiers/guideforownersofscheduledmonuments>.

Hodgson, J & Brennand, M (2006) 'The Prehistoric Period Resource Assessment', in Brennand, M (ed) *The Archaeology of North West England. An Archaeological Research Framework for the North West Region. Volume 1. Resource Assessment*. CBA North West. Loughborough, 23-58.

Hunter, M (1975) *John Aubrey and the Realm of Learning*. Duckworth. London.

Insoll, T (2004) *Archaeology, ritual, religion*. Routledge. London.

Jay, M & Scarre, C (2017) 'Tracking the dead in the Neolithic: the 'Invisible Dead' in Britain', in *Engaging with the dead, exploring changing human beliefs about death, mortality and the human body*. Oxbow Books. Oxford, 7-23.

Jones, A (2002a) *Archaeological Theory and Scientific Practice*. CUP. Cambridge.

Jones, A (2002) 'A Biography of Colour: Colour, Material Histories and Personhood in the Early Bronze Age of Britain and Ireland', in Jones, A & MacGregor, G (eds) *Colouring the Past. The Significance of Colour in Archaeological Research*. Berg. Oxford, 159-174.

Jones, A (1998) 'Where Eagles Dare. Landscape, Animals and the Neolithic of Orkney', *Journal of Material Culture* 3(3), 301-324.

Jones, A & MacGregor, G (2002) (eds) *Colouring the Past. The Significance of Colour in Archaeological Research*. Berg. Oxford.

Jones, AM & Kirkham, G (2011) *Beyond the core. Reflections on regionality in prehistory*. Oxbow. Oxford.

Kinnes, I (1992) *Non-Megalithic Long Barrows and Allied Structures in the British Neolithic*. British Museum Occasional Paper 52. London.

Kinnes, I (1979) *Round Barrows and Ring-ditches in the British Neolithic*. British Museum Occasional Paper 7. London.

Kinnes, I & Longworth, (1985) *The Greenwell Collection. Catalogue of the excavated prehistoric and Romano-British material in the Greenwell Collection*. British Library Cataloguing in Publication Data. London.

Kinnes, I, Schadla-Hall, T, Chadwick, P & Dean, P (1983) 'Duggleby Howe Reconsidered', *Archaeological Journal* 140 (1983), 83-103.

Last, J (1998) 'Books of Life: Biography and Memory in a Bronze Age barrow, Barnack, Cambridgeshire', *Oxford Journal of Archaeology* 17(1), 43-53.

Lawson, AJ (1992) 'Stonehenge: creating a definitive account', *Antiquity* 66 (253), 934-941.

Leary, J, Darvill, T & Field, D (2010) (eds) *Round Mounds and Monumentality in the British Neolithic and Beyond*. Neolithic Studies Group Seminar Papers 10. Oxford. Oxbow Books.

Legg, J (1982) *Monumenta Britannica or, ; A miscellany of British antiquities*, by John Aubrey. 2v. v2. v2. Annotator.

Lelong, O & Pollard, T, with contributions by Roberts, J A & Shepherd, I A G (1998) 'Excavation of a Bronze Age ring cairn at Cloburn Quarry, Cairngryffe Hill, Lanarkshire'. *Proceedings of the Society of Antiquaries of Scotland* 128, 105-142.

Lelong, O (1998) 'The Pottery', in Lelong, O & Pollard, T, with contributions by Roberts, J A & Shepherd, I A G 'Excavation of a Bronze Age ring cairn at Cloburn Quarry, Cairngryffe Hill, Lanarkshire'. *Proceedings of the Society of Antiquaries of Scotland* 128, 123-130.

Lorentz, KO (2010) 'Parts to a whole: Manipulations of the body in prehistoric Eastern Mediterranean', in Rebay-Salisbury, K, Sørensen, MLS & Hughes, J (eds) *Body Parts and Bodies Whole. Changing Relations and Meanings*. Oxbow Books. Oxford, 20-29.

Loveday, R (2009) 'From ritual to riches – the route to individual power in later Neolithic East Yorkshire', in Brophy, K & Barclay, G (eds) *Defining a Regional Neolithic: The Evidence from Britain and Ireland*. Neolithic Studies Group Seminar Papers 9. Oxbow. Oxford, 35-52.

- Loveday, R (2006) *Inscribed Across the Landscape. The Cursus Enigma*. Tempus. Stroud.
- Loveday, R (2002) 'Duggleby Howe Revisited', *Oxford Journal of Archaeology* 21 (2), 135-146.
- Lucas, G (2001) *Critical approaches to fieldwork: contemporary and historical archaeological practice*. NetLibrary, Inc. London.
- Lucas, GM (1996) 'Of death and debt. A history of the body in Neolithic and early Bronze Age Yorkshire'. *Journal of European Archaeology* 4, 99-118.
- Lynch, F (1997) *Megalithic Tombs and Long Barrows in Britain*. Shire. Princes Risborough.
- Mackey, R (2003) 'The Iron Age in East Yorkshire: A Summary of Current Knowledge and Recommendations for Future Research', in Manby, TG, Moorhouse, S & Ottaway, P (eds) *The Archaeology of Yorkshire. An assessment at the beginning of the 21st century*. Yorkshire Archaeological Society Occasional Paper No. 3. Leeds, 117-121.
- Manby, TG, Moorhouse, S & Ottaway, P (2003) *The Archaeology of Yorkshire. An assessment at the beginning of the 21st century*. Yorkshire Archaeological Society Occasional Paper No. 3. Leeds.
- Manby, TG, King, A & Vyner, BE (2003), 'The Neolithic and Bronze Ages: a Time of Early Agriculture', in Manby, TG, Moorhouse, S & Ottaway, P, *The Archaeology of Yorkshire. An assessment at the beginning of the 21st century*. Yorkshire Archaeological Society Occasional Paper No. 3. Leeds, 35-116.
- Manby, TG (ed) (1988) *Archaeology in eastern Yorkshire: essays in honour of TCM Brewster*. Sheffield. University of Sheffield.
- Manby, TG (1976) 'Excavation of The Kilham Long Barrow, East Riding of Yorkshire', *Proceedings of the Prehistoric Society* 42, 111-159.
- Manby, TG (1971) 'Rudston Barrow LII; Beaker-Cremation Associations', *Yorkshire Archaeological Journal* 42, 254-258.
- Manby, TG (1963) 'The Excavation of the Willerby Wold Long Barrow, East Riding of Yorkshire', *Proceedings of the Prehistoric Society* 29, 173-204.

- Marshall, AJ (1998) 'Neolithic long barrows: use of integrated remote sensing at high resolution to establish general layout and detect foreground structures'. *Archaeol Prospection* 5(2), 101-116.
- McKinley, J (1997) 'Bronze Age 'Barrows' and Funerary Rites and Rituals of Cremation', *Proceedings of the Prehistoric Society* 63, 129-145.
- McSweeney, K (2000) 'Human Bone', in Cook, M, Ellis, C, McSweeney, K, Mills, C & Rees, T, 'An Early Bronze Age multiple burial cist from Mill Road Industrial Estate, Linlithgow, West Lothian', *PSAS* 130 (2000), 77-91.
- Megaw, JVS & Simpson, DDA (1979) *Introduction to British Prehistory from the arrival of Homo Sapiens to the Claudian invasion*. Leicester. Leicester University Press.
- Mellars, P (1987) *Excavations of Oronsay: prehistoric human ecology on a small island*. Edinburgh University Press. Edinburgh.
- Melton, N, Montgomery, J, Knüsel, CJ, Batt, C, Needham, S, Parker Pearson, M, Sheridan, A, Heron, C, Horsley, T, Schmidt, A, Evans, A, Carter, E, Edwards, H, Hargreaves, M, Janaway, R, Lynnerup, N, Northover, P, O'Connor, S, Ogden, A, Taylor, T, Wastling, V & Wilson, A (2010) 'Gristhorpe Man: an Early Bronze Age log-coffin burial scientifically defined', *Antiquity* 84 (325), 796-815.
- Michell, J (2007) *Megalithomania. Artists and Antiquarians at the Old Stone Monuments*. The Squeeze Press. Glastonbury.
- Milner, N, Conneller, C and Taylor, B (2018) *Star Carr Volume 1: A Persistent Place in a Changing World*. White Rose University Press. York.
- Milner, N, Conneller, C and Taylor, B (2018) *Star Carr Volume 2: studies in technology, subsistence and environment*. White Rose University Press. York.
- Milner, N, Taylor, B, Conneller, C & Schadla-Hall, T (2013) *Star Carr. Life in Britain after the Ice Age*. Archaeology for All. Council for British Archaeology. York.

Mizoguchi, K (1993) 'Time in the Reproduction of Mortuary Practices', *World Archaeology* 25, 223-235.

Morgan Vatcher, Faith de Mallet (1959) 'Excavations of a Long Barrow at Nutbane', *PPS* 25, 15-51

Morris, C (1947) (ed) *The Journeys of Celia Fiennes*. The Cresset Press. London.

Mortimer, N (2003) *Stukeley Illustrated. William Stukeley's Rediscovery of Britain's Ancient Sites*. Green Magic. Sutton Mallett.

Mortimer, JR (1905) *Forty years' researches in British and Saxon burial mounds of East Yorkshire: including Romano-British discoveries, and a description of the ancient entrenchments of a section of the Yorkshire wolds. With over 1000 illustrations from drawings by Agnes Mortimer*. A. Brown and sons. London.

Nicholson, J & Burn, R (1777) *The History and Antiquities of the Counties of Westmorland and Cumberland*. London.

Oestigaard, T (2000) 'Sacrifices of Raw, Cooked and Burnt Humans', *Norwegian Archaeological Review* 33(1), 41-58.

Oestigaard, T (1999) 'Cremations as transformations: when the dual cultural hypothesis was cremated and carried away in urns', *European Journal of Archaeology* 2(3), 345-364.

Ogilby, J (1675) *Britannia, volume the first, or, An illustration of the Kingdom of England and dominion of Wales [electronic resource] : by a geographical and historical description of the principal roads thereof, actually admeasured and delineated in a century of whole-sheet copper-sculps : accomodated with the ichnography of the several cities and capital towns, and compleated by an accurate account of the more remarkable passages of antiquity : together with a novel discourse of the present state*. Printed by the author. London.

Ogilby, J (1698) *Britannia: or, the kingdom of England and dominion of Wales, actually survey'd [electronic resource]: with a geographical and historical description of the principal roads; explain'd by one hundred maps on copper-plates. With the ichonography, or*

draught of the several cities, chief towns, &c. and a view of the churches, houses, and places of note on the road. Also an account of the remarkable passages of antiquity relating to them, and in their present state. Printed for Abell Swann, at the Unicorn in Peter-noster-row, MDCXCVIII. London.

Ogilby, John (1719) *An actual survey of all the principal roads of England and Wales; described by one hundred maps from copper plates. On which are delineated all the cities, ... As also directions to the curious traveller ...* First perform'd and publish'd by John Ogilby, Esq; and now improved, very much corrected, and made portable by John Senex. Volume 1. Eighteenth Century Collections Online. Gale. London.

Olade, I, Lalueza-Fox, C, Reich, D, *et al.* (2018) The Beaker phenomenon and the genomic transformation of northwest Europe. *Nature* 555, 190-196. doi:10.1038/nature25738.

Olland, R (2001) 'Foreword', in Balme, M, *Two Antiquaries*. Durham Academic Press. Durham, vii-viii.

Owoc, MA (2002) 'Munselling the Mound: The Use of Soil Colour as Metaphor in British Bronze Age Funerary Ritual', in Jones, A & MacGregor, G (eds) *Colouring the Past. The Significance of Colour in Archaeological Research*. Berg. Oxford, 127-140.

Pacitto, AL (1972) 'Rudston Barrow LXII: The 1968 Excavation', *Yorkshire Archaeological Journal* 44, 1-22.

Pacitto, AL (1968) 'Rudston, E.R.', *Yorkshire Archaeological Journal* 42, 246.

Parker Pearson, M, Sheridan, A, Jay, M, Chamberlain, A, Richards, M P and Evans, J (2019) (eds), *The Beaker People. Isotopes, mobility and diet in prehistoric Britain*. Prehistoric Society Research Paper 7. Oxbow. Oxford.

Parker Pearson, M, Chamberlain, A, Jay, M, Richards, M, Sheridan, A, Curtis, N, Evans, J, Gibson, A, Hutchison, M, Mahoney, P, Marshall, P, Montgomery, J, Needham, S, O'Mahoney, S, Pellegrini, M & Wilkin, N (2016) 'Beaker people in Britain: migration, mobility and diet', *Antiquity* 90 (351), 620-637.

Parker Pearson, M (2012) *Stonehenge. Exploring the greatest stone age mystery*. The Stonehenge Riverside Project. Simon & Schuster. London.

Parker Pearson, M & Ramilisonina (1998) 'Stonehenge for the ancestors: the stones pass on the message', *Antiquity* 72 (276), 308-326.

Pennant, T (1774) *A Tour in Scotland, and Voyage to the Hebrides; MDCCLXXII*. John Monk. Chester.

Petersen, F (1972) 'Traditions of multiple burial in Later Neolithic and Early Bronze Age England', *The Archaeological Journal* 129, 22-55.

Petersen, F (1971) 'Early Bronze Age timber graves and coffin burials on the Yorkshire Wolds', *Yorkshire Archaeological Journal* 42, 262-267.

Pierpoint, S (1981) 'Land, settlement and society in the Yorkshire Bronze Age', in Barker, G (ed) *Prehistoric Communities in northern England. Essays in social and economic reconstruction*. Dept. of Prehistory and Archaeology, University of Sheffield. Sheffield, 41-55.

Piggott, S (1958) 'The Excavation of the West Kennet Long Barrow: 1955-6', *Antiquity* 32 (128), 235-242.

Piggott, S (1950, 1985) *William Stukeley. An Eighteenth-Century Antiquary*. Thames and Hudson. Hungary.

Platell, A (2013) 'A Bronze Age Cremation Cemetery at Dallam School, Milnthorpe, Cumbria', with contributions from Vyner, B, Caffell, A, Elliott, L, Mole, J & Jones, J, *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society* CW3, xiii, 33-55.

Powlesland, D (2003) 'The Heslerton Parish Project: 20 Years of Archaeological Research in the Vale of Pickering', in Manby, TG, Moorhouse, S & Ottaway, P (eds) *The Archaeology of Yorkshire. An assessment at the beginning of the 21st century*. Yorkshire Archaeological Society Occasional Paper No. 3. Leeds, 275-291.

Powlesland, D (1998) (ed) 'The West Heslerton Assessment'. *Internet Archaeology* 5. <https://doi.org/10.11141/ia.5.4>.

Rebay-Salisbury, K, Sørensen, MLS & Hughes, J (2010) (eds) *Body Parts and Bodies Whole. Changing Relations and Meanings*. Oxbow Books. Oxford.

Rebay-Salisbury, K (2010) 'Cremations: fragmented bodies in the Bronze and Iron Ages', in Rebay-Salisbury, K, Sørensen, MLS & Hughes, J (eds) *Body Parts and Bodies Whole. Changing Relations and Meanings*. Oxbow Books. Oxford, 64-71.

Roberts, J A (1998) 'The Cremated Bone', in Lelong, O & Pollard, T, with contributions by Roberts, J A & Shepherd, I A G, 'Excavation of a Bronze Age ring cairn at Cloburn Quarry, Cairngryffe Hill, Lanarkshire'. *Proceedings of the Society of Antiquaries of Scotland* 128, 119-123.

Russell, M (2002) *Monuments of the British Neolithic. The Roots of Architecture*. Stroud. Tempus.

Rye, WB (1865) *England as seen by foreigners in the days of Elizabeth and James the First*. JR Smith. London.

Saxton, C (1590) *Atlas of the counties of England and Wales*. London. E-resource.

Scarre, C (2014) 'Controversy and compromise', in Chippendale, C, Gosden, C, James, N, Pitts, M & Scarre, C 'New era for Stonehenge', *Antiquity* 88 (340), 647-8.

Schulting, R & Wysocki, M (2005) 'In this Chambered Tumulus were Found Cleft Skulls ...': an Assessment of the Evidence for Cranial Trauma in the British Neolithic', *Proceedings of the Prehistoric Society* 71, 107-138.

Semple, S & Brookes, S (2020) 'Necrogeography and necroscapes: living with the dead', *World Archaeology* 52 (1), 1-15.

Semple, S (1998) 'A Fear of the Past: The Place of the Prehistoric Burial Mound in the Ideology of Middle and Later Anglo-Saxon England'. *World Archaeology*, 30 (1), 109-126.

Senex, J (1719) *An actual survey of all the principal roads of England and Wales: described by one hundred maps from copper plates. On which are delineated all the cities, ... As also directions to the curious traveller.* First perform'd and publish'd by John Ogilby, Esq: and now improved, very much corrected, and made portable by John Senex. London.

Sheridan, A, Woodward, A & Hunter, J (2015) 'Necklaces I: Disc Beads and Spacer Plate Necklaces', in Woodward, A & Hunter, J (eds.) *Ritual in Early Bronze Age grave goods: an examination of ritual and dress equipment from Chalcolithic and Early Bronze Age graves in England.* Oxbow. Oxford, 261-277.

Sheridan, A, Davis, M, Clark, I & Redvers-Jones, H (2002) 'Investigating jet and jet-like artefacts from prehistoric Scotland: the National Museums of Scotland project', *Antiquity* 76 (293), 812-825.

Sieveking, G de G. (1984) 'Excavation of a Stone Circle at Wilson Scar, Shap North 1952', *TCWAAS* 52, 31-40.

Smith, IF (1965) *Windmill Hill and Avebury: excavations by Alexander Keiller, 1925-1939.* Clarendon Press. Oxford.

Smith, LT (1906-1910) (Arranged and edited) *The Itinerary of John Leland in or about the years 1535-1543.* 5 Volumes. Parts I to XI. London. G. Bell & Sons.

Sørensen, MLS (2010) 'Bronze Age bodiness – maps and coordinates', in Rebay-Salisbury, K, Sørensen, MLS & Hughes, J (eds) *Body Parts and Bodies Whole. Changing Relations and Meanings.* Oxbow Books. Oxford, 54-63.

Speed, J (1676) *An epitome of Mr. John Speed's theatre of the empire of Great Britain: And of his prospect of the most famous parts of the world. In this new edition are added, the descriptions of His Majesties dominions abroad, viz. New England, New York, 226 Carolina, Florida, 251 Virginia, Maryland, 212 Jamaica, 232 Barbados, 239 as also the empire of the great Mogol, with the rest of the East-Indies, 255 the empire of Russia, 266, with their respective descriptions.* London. Printed for Tho. Basset at the George in Fleet-street, and Ric. Chiswel at the Rose and Crown in St. Paul's Church-yard.

Speed, J (1668) *A prospect of the most famous parts of the vworld Viz. Asia, 3 Affrica, 5 Europe, 7 America, 9 With these kingdomes therein contained*. John Dawson for George Humble. London.

Speed, J (1611/12) *The theatre of the empire of Great Britaine: presenting an exact geography of the kingdomes of England, Scotland, Ireland, and the iles adioyning: with the shires, hundreds, cities and shire-townes, within ye kingdome of England*. Divided and described by Iohn Speed. Imprinted at London: and are to be solde by Iohn Sudbury & Georg Humble. E-resource.

Speed, J (1610) (Edition 1676) *The theatre of the empire of Great-Britain, presenting an exact geography of the kingdom of England, Scotland, Ireland, and the isles adjoyning: as also the shires, hundreds, cities and shire-towns within the kingdom of England and principality of Wales; with a chronology of the civil-wars in England, Wales and Ireland. Together with a prospect of the most famous parts of the world, viz. Asia, Africa, Europe, America*. Printed for Basset, T and Chiswel, R. London.

Spratt, DA & Harrison, BJD (1989) (eds) *The North York Moors Landscape Heritage*. Guisborough. North York Moors National Park.

Spratt, DA (1989) 'The prehistoric remains', in Spratt, DA & Harrison, BJD (eds) *The North York Moors Landscape Heritage*. Guisborough. North York Moors National Park, 28-44.

Stead, I (1991) *Iron Age Cemeteries in East Yorkshire*. English Heritage Archaeological Report 22.

Stoertz, C (1997) *Ancient Landscapes of the Yorkshire Wolds*. Swindon. RCHME.

Stukeley, W (1724) *Itinerarium curiosum [electronic resource]. Or, an account of the antiquitys and remarkable curiositys in nature or art, observ'd in travels thro' Great Brittan*. Printed for William Stukeley. London.

Stukeley, W, M.D., Rector of All Saints, Stamford (1743) *Abury, a temple of the British drujds, with some others, described. Wherein is a more particular account of the first and*

patriarchal religion; and of peopling the British Islands. Volume 2. London: Printed for the author: and sold by W. Innys, R. Manby, B. Dod, J. Brindley, and the booksellers in London.

Stukeley, W (1740) *Stonehenge a temple restor'd to the British druids*. London. Printed for Innys, W & Manby, R.

Stukeley, W (1776) *Itinerarium curiosum: or An account of the antiquities, and remarkable curiosities in nature and art, observed in travels through Great Britain*. Printed for Messrs Baker and Leigh. London.

Sweet, R (2004) *Antiquaries. The Discovery of the Past in Eighteenth-Century Britain*. Cambridge University Press. London.

Thomas, J (2013) *The Birth of Neolithic Britain. An Interpretive Account*. Oxford. OUP.

Thompson, M (1979) *Rubbish theory: the creation and destruction of value*. Oxford University Press. Oxford.

Thorpe, IJ & Richards, CC (1984) 'The Decline of Ritual Authority and the Introduction of Beakers into Britain', in Bradley, R & Gardiner, J (eds) *Neolithic Studies. A Review of Some Current Research*. Reading Studies in Archaeology No.1. Oxford. BAR British Series 133, 67-84.

Thorpe, RS & Williams-Thorpe, O (1991) 'The myth of long-distance megalithic transport', *Antiquity* 65 (246), 64-73.

Tilley, C (1996) *An ethnography of the Neolithic. Early prehistoric societies in southern Scandinavia*. Cambridge University Press. Cambridge.

Topping, P (1982) 'Excavation at the Cursus at Scorton, North Yorkshire, 1978', *Yorkshire Archaeological Journal* (54), 7-21.

Treherne, P (1995) 'The Warrior's Beauty: The Masculine Body and Self-Identity in Bronze-Age Europe', *Journal of European Archaeology* 3 (1), 105-144.

Tyacke, S & Huddy, J (1980) *Christopher Saxton and Tudor map-making*. British Library Series No.2. The British Library. London.

- Vatcher, F de M & HL (1965) 'East Heslerton Long Barrow, Yorkshire: The Eastern Half', *Antiquity* 39 (153), 49-52.
- Vyner, B (1984) 'The Excavation of a Neolithic Cairn at Street House, Loftus, Cleveland', *Proceedings of the Prehistoric Society* (50), 151-195.
- Wainwright, GJ (1996) 'Stonehenge saved?', *Antiquity* 70 (267), 9-12.
- Watson, Emma (2016) *The neglect of northern England's Neolithic and Early Bronze Age structures in the archaeological literature of Britain*. MA by Research, Durham University.
- Watson, E (2014) *An investigation into the Neolithic and Early Bronze Age circular ceremonial structures of Northern England, and the reasons behind their choice of location, shape and building material*. BA Dissertation, SWAAG website.
- Whittle, AWR, Healy, F & Bayliss, A (2011) *Gathering time: dating the early Neolithic enclosures of southern Britain and Ireland*. Oxbow Books. Oxford.
- Wilkin, NCA (2014) *Food vessel pottery from Early Bronze Age funerary contexts in Northern England: a typological and contextual study*. University of Birmingham. Unpublished PhD thesis.
- Williams, C (1937) *Thomas Platter's Travels in England 1599*. J.Cape. London.
- Williams, J H, Howard-Davis, C, Allison, E, Bamford, H, Henderson, J, Huntley, J, Longworth, I H, Mays, S, Moore, D T, Sanderson, R, Stallibrass, S, Thew, N, Tweddle, D & the Oxford University Research Laboratory for Archaeology (2004) 'Excavations on a Bronze Age Cairn at Hardendale Nab, Shap, Cumbria', *Archaeological Journal*, 161 (1), 11-53.
- Woodward, A & Hunter, J (2015) (eds.) *Ritual in Early Bronze Age grave goods: an examination of ritual and dress equipment from Chalcolithic and Early Bronze Age graves in England*. Oxbow. Oxford.
- Woodward, A (2002) 'Beads and Beakers: heirlooms and relics in the British Early Bronze Age', *Antiquity* 76 (294), 1040-1047.
- Woodward, A (2000) *British Barrows. A Matter of Life and Death*. Tempus. Stroud.

Appendix A

English Counties

Bath and NE Somerset	Milton Keynes
Bedford	Norfolk
Bedfordshire	North Lincolnshire
Birmingham	North Somerset
Bournemouth	North Tyneside
Bradford	North Yorkshire
Brighton and Hove	Northamptonshire
Bristol	Northumberland
Buckinghamshire	Nottinghamshire
Calderdale	Oxfordshire
Cambridgeshire	Reading
Central Bedfordshire	Redcar and Cleveland
Cheshire	Rotherham
Cheshire East	Rutland
City of Brighton and Hove	Sheffield
City of Peterborough	Shropshire
City of Portsmouth	Somerset
Cornwall	South Gloucestershire
Cumbria	South Oxfordshire
Derbyshire	South Tyneside
Devon	South Yorkshire
Doncaster	Staffordshire

Dorset	Stockton-on-Tees
Durham	Suffolk
East Sussex	Sunderland
East Yorkshire	Surrey
Essex	Sussex
Gateshead	Swindon
Gloucestershire	Thurrock
Greater London	Torbay
Hampshire	Wakefield
Herefordshire	Walsall
Hertfordshire	Warrington
Isle of Man	Warwickshire
Isle of Wight	West Berkshire
Isles of Scilly	West Oxfordshire
Kent	West Sussex
Kirklees	West Yorkshire
Lancashire	Wiltshire
Leeds	Windsor and Maidenhead
Leicestershire	Wokingham
Lincolnshire	Worcestershire
Liverpool	York
Luton	

Country	COUNTY	Name of site	Site type	Site Type 2	Site Type 3	Origin	Pastscap monument number	Grid Ref	Eastings	Northings	Preservation	Scheduled S/not scheduled N/ de-scheduled D, according to Pastscap text	Last extant, interest showed or excavated, from Pastscap-More Information and Sources	Secondary Pastscap Monument Number for same site

Pastscape Monument Types	Totals
Avenue	1
N	1
Bank barrow	8
N	4
Y	4
Barrow	19
N	4
Y	15
Barrow cemetery	2
Y	2
Barrows	6
N	1
Y	5
Bell barrow	2
N	1
Y	1
Bowl barrow	40
N	8
Y	32
Burnt mound	2
N	1
Y	1
Cairn	14
N	3
Y	11
Cairnfield	1
Y	1
Cairns	8
Y	8
Causewayed enclosure	129
?	1
N	97
Y	31
Cave	2
N	1
Y	1
Chambered round cairn	1
Y	1
Chambered tomb	36
N	12
Y	24
Cist	26
?	1
N	21
Y	4
Cove	1
Y	1
Cremation cemetery	1
Y	1
Cross dyke	1
Y	1
Cursus	101
N	96
Y	5
Ditched enclosure	2
N	2
Earthwork	2
Y	2
Embanked avenue	2
Y	2
Enclosure	15

Pastscape Monument Types	Totals
N	8
Y	7
Four-poster	1
Y	1
Hengiform enclosure	247
?	1
N	192
Y	54
Hillfort	1
Y	1
Holed stone	2
Y	2
Hut circle	1
Y	1
Kerb cairn	1
Y	1
Linear earthwork	4
N	1
Y	3
Linear feature	1
N	1
Long barrow	715
?	5
N	341
Y	369
(blank)	
Long cairn	49
N	3
Y	46
Mortuary enclosure	69
N	66
Y	3
Museum	16
N	16
Neolithic Cairn	2
N	2
Neolithic Round Barrows/Ring-ditches	396
?	2
N	255
Y	139
(blank)	
Oval barrow	84
N	52
Y	32
Oval cairn	1
Y	1
Oval enclosure	9
N	5
Y	4
Pillow mound	1
Y	1
Pit defined enclosure	1
N	1
Quincunx	5
Y	5
Quoit	16
?	1
N	8
Y	7
Rectangular enclosure	3
N	2

Pastscape Monument Types	Totals
Y	1
Rectilinear enclosure	1
N	1
Ring cairn	3
Y	3
Ring ditch	1
N	1
Rock art	486
?	6
N	59
Y	421
Rock shelter	1
Y	1
Settlement	2
N	1
Y	1
Standing stone	718
?	20
N	214
Y	484
Standing stones	5
N	1
Y	4
Stone alignment	137
?	4
N	17
Y	116
Stone avenue	2
Y	2
Stone circle	389
?	5
N	130
R	1
Y	253
(blank)	
Stone circles	1
?	1
Stone row	23
?	2
N	5
Y	16
Stone setting	2
Y	2
Timber circle	18
N	16
Y	2
Timber structure	1
Y	1
Timber trackway	19
N	15
Y	4
Tor cairn	1
Y	1
Tor enclosure	7
N	1
Y	6
Tower	1
Y	1
Trapezoidal enclosure	1
N	1
Grand Total	3866

Total Neolithic and Early Bronze Age Pastscape entries per county per region

North-East England

Durham	96
Barrow	1
Cairns	1
Cursus	1
Long barrow	2
Neolithic Round Barrows/Ring-ditches	1
Oval barrow	1
Rock art	77
Standing stone	6
Stone circle	6
East Yorkshire	69
Barrow	1
Cursus	6
Hengiform enclosure	14
Long barrow	20
Mortuary enclosure	2
Neolithic Round Barrows/Ring-ditches	22
Oval barrow	2
Rock art	1
Standing stone	1
Gateshead	4
Cist	1
Rock art	3
Lincolnshire	120
Causewayed enclosure	3
Cursus	1
Hengiform enclosure	10
Long barrow	92
Mortuary enclosure	8
Neolithic Round Barrows/Ring-ditches	4
Standing stone	2
North Lincolnshire	5
Hengiform enclosure	1
Long barrow	3
Oval barrow	1
North Tyneside	1
Hengiform enclosure	1

North Yorkshire	373
Barrow	4
Barrows	5
Cairn	2
Cairns	6
Causewayed enclosure	3
Cist	1
Cremation cemetery	1
Cross dyke	1
Cursus	3
Enclosure	1
Hengiform enclosure	12
Linear earthwork	3
Long barrow	25
Long cairn	2
Mortuary enclosure	3
Neolithic Round Barrows/Ring-	
ditches	74
Oval barrow	2
Oval enclosure	2
Rock art	105
Standing stone	86
Standing stones	1
Stone alignment	4
Stone circle	27
Northumberland	217
Avenue	1
Barrow	2
Barrows	1
Cairn	3
Cairns	1
Cave	2
Cist	6
Ditched enclosure	1
Enclosure	1
Four-poster	1
Hengiform enclosure	25
Hut circle	1
Long barrow	3
Long cairn	5
Mortuary enclosure	2
Museum	9
Neolithic Round Barrows/Ring-	
ditches	2
Rock art	88
Rock shelter	1
Settlement	1

Standing stone	35
Standing stones	1
Stone alignment	1
Stone circle	23
Tower	1
Redcar and Cleveland	21
Barrow	3
Bowl barrow	1
Cairn	2
Long barrow	1
Neolithic cairn	1
Neolithic Round Barrows/Ring-ditches	1
Rock art	8
Standing stone	3
Stone alignment	1
South Tyneside	1
Cist	1
Stockton-on-Tees	1
Hengiform enclosure	1
Sunderland	5
Barrow	1
Causewayed enclosure	1
Cursus	1
Neolithic Round Barrows/Ring-ditches	2
York	6
Long barrow	2
Mortuary enclosure	2
Neolithic Round Barrows/Ring-ditches	1
Timber circle	1
Grand Total	919

North-West England

Cheshire	2
Long barrow	1
Long cairn	1
Cheshire East	4
Standing stone	2
Stone circle	2
Cumbria	198

Cairnfield	1
Causewayed enclosure	2
Cist	3
Cursus	1
Ditched enclosure	1
Enclosure	1
Hengiform enclosure	4
Long barrow	8
Long cairn	22
Mortuary enclosure	1
Museum	4
Neolithic Round Barrows/Ring-	
ditches	13
Oval cairn	1
Oval enclosure	1
Pit defined enclosure	1
Rock art	8
Standing stone	40
Standing stones	1
Stone alignment	4
Stone avenue	1
Stone circle	80
Isle of Man	64
Barrow	1
Bowl barrow	2
Burnt mound	1
Chambered round cairn	1
Chambered tomb	1
Cist	4
Enclosure	1
Long barrow	2
Long cairn	4
Neolithic cairn	1
Neolithic Round Barrows/Ring-	
ditches	4
Rock art	8
Standing stone	25
Stone alignment	2
Stone circle	7
Lancashire	19
Cairn	1
Long cairn	3
Rock art	2
Standing stone	1
Stone circle	11
Timber trackway	1

Liverpool	2
Standing stone	1
Standing stones	1
Warrington	1
Neolithic Round Barrows/Ring-	
ditches	1
Grand Total	290

North Central England

North Central England	377
Bradford	127
Enclosure	1
Ring cairn	2
Rock art	118
Stone circle	6
Calderdale	4
Standing stone	1
Stone circle	3
Derbyshire	109
Cairn	3
Causewayed enclosure	1
Cursus	3
Enclosure	1
Hengiform enclosure	6
Long barrow	4
Long cairn	4
Museum	3
Neolithic Round Barrows/Ring-	
ditches	19
Oval barrow	2
Rock art	6
Standing stone	16
Stone circle	40
Stone circles	1
Doncaster	3
Long barrow	3
Kirklees	1
Oval enclosure	1
Leeds	17
Barrow	1
Rock art	15
Standing stone	1
Leicestershire	9
Bowl barrow	1

Causewayed enclosure	1
Cursus	1
Hengiform enclosure	1
Long barrow	1
Neolithic Round Barrows/Ring-	
ditches	1
Standing stone	3
Nottinghamshire	12
Cursus	2
Hengiform enclosure	3
Long barrow	4
Neolithic Round Barrows/Ring-	
ditches	1
Standing stone	1
Timber circle	1
Rotherham	1
Long cairn	1
Rutland	2
Long barrow	1
Neolithic Round Barrows/Ring-	
ditches	1
Sheffield	5
Cairn	1
Rock art	1
Standing stone	1
Stone circle	2
Shropshire	49
Causewayed enclosure	2
Enclosure	1
Hengiform enclosure	3
Long barrow	2
Neolithic Round Barrows/Ring-	
ditches	1
Standing stone	29
Standing stones	1
Stone circle	10
South Yorkshire	1
Long barrow	1
Staffordshire	28
Bank barrow	1
Causewayed enclosure	3
Chambered tomb	1
Cursus	2
Hengiform enclosure	3
Long barrow	1
Mortuary enclosure	2

Neolithic	Round	Barrows/Ring-	
ditches			7
Rock art			3
Standing stone			4
Stone circle			1
Wakefield			7
Cursus			1
Enclosure			1
Hengiiform enclosure			3
Neolithic	Round	Barrows/Ring-	
ditches			1
Timber circle			1
West Yorkshire			2
Stone circle			2
Grand Total			377

South Central England

Bedford			39
Causewayed enclosure			1
Cursus			5
Hengiiform enclosure			4
Linear feature			1
Mortuary enclosure			5
Neolithic	Round	Barrows/Ring-	
ditches			18
Oval barrow			4
Oval enclosure			1
Bedfordshire			11
Causewayed enclosure			2
Enclosure			1
Long barrow			2
Neolithic	Round	Barrows/Ring-	
ditches			5
Oval enclosure			1
Birmingham			1
Neolithic	Round	Barrows/Ring-	
ditches			1
Cambridgeshire			48
Bank barrow			1
Causewayed enclosure			6
Cursus			10

Hengiform enclosure	6
Long barrow	17
Mortuary enclosure	2
Neolithic Round Barrows/Ring-	
ditches	5
Oval barrow	1
Central Bedfordshire	1
Cursus	1
City of Peterborough	33
Causewayed enclosure	7
Cursus	2
Hengiform enclosure	10
Neolithic Round Barrows/Ring-	
ditches	13
Oval barrow	1
Milton Keynes	4
Mortuary enclosure	1
Neolithic Round Barrows/Ring-	
ditches	1
Oval barrow	1
Rectilinear enclosure	1
Northamptonshire	29
Causewayed enclosure	4
Cursus	1
Hengiform enclosure	7
Long barrow	5
Mortuary enclosure	2
Neolithic Round Barrows/Ring-	
ditches	7
Oval barrow	2
Settlement	1
Oxfordshire	144
Bank barrow	2
Causewayed enclosure	15
Cursus	15
Hengiform enclosure	17
Long barrow	41
Mortuary enclosure	10
Neolithic Round Barrows/Ring-	
ditches	23
Oval barrow	9
Standing stone	10
Timber circle	1
Timber trackway	1
Reading	1
Cursus	1

South Oxfordshire	1
Stone circle	1
Walsall	1
Hengiform enclosure	1
Warwickshire	21
Causewayed enclosure	1
Cursus	5
Hengiform enclosure	4
Long barrow	4
Neolithic Round Barrows/Ring-	
ditches	3
Standing stone	2
Timber circle	2
West Berkshire	16
Causewayed enclosure	1
Cursus	2
Hengiform enclosure	1
Long barrow	4
Mortuary enclosure	2
Neolithic Round Barrows/Ring-	
ditches	1
Oval barrow	2
Standing stone	1
Stone alignment	1
Timber circle	1
West Oxfordshire	4
Neolithic Round Barrows/Ring-	
ditches	2
Stone circle	2
Grand Total	354

South-eastern England

Brighton and Hove	7
Causewayed enclosure	2
Hengiform enclosure	1
Long barrow	4
Buckinghamshire	12
Causewayed enclosure	2
Hengiform enclosure	1
Long barrow	2
Mortuary enclosure	5
Neolithic Round Barrows/Ring-	
ditches	2
City of Brighton and Hove	1

Stone circle	1
City of Portsmouth	1
Long barrow	1
East Sussex	19
Causewayed enclosure	2
Enclosure	1
Hengiform enclosure	2
Long barrow	9
Neolithic Round Barrows/Ring-	
ditches	1
Oval barrow	4
Essex	66
Causewayed enclosure	4
Cursus	7
Hengiform enclosure	16
Long barrow	7
Mortuary enclosure	2
Neolithic Round Barrows/Ring-	
ditches	27
Standing stone	1
Stone circle	1
Timber trackway	1
Greater London	5
Causewayed enclosure	2
Long barrow	3
Hampshire	74
Bowl barrow	8
Causewayed enclosure	1
Cursus	1
Long barrow	53
Neolithic Round Barrows/Ring-	
ditches	3
Oval barrow	3
Oval enclosure	1
Standing stone	1
Stone circle	1
Timber circle	2
Hertfordshire	18
Causewayed enclosure	2
Cursus	4
Hengiform enclosure	2
Long barrow	3
Mortuary enclosure	1
Neolithic Round Barrows/Ring-	
ditches	3
Oval barrow	1

Standing stone	1
Stone circle	1
Kent	32
Causewayed enclosure	5
Chambered tomb	1
Hengiform enclosure	3
Long barrow	13
Mortuary enclosure	1
Neolithic Round Barrows/Ring-	
ditches	2
Rock art	1
Standing stone	4
Stone circle	1
Timber circle	1
Luton	4
Hengiform enclosure	1
Long barrow	3
Norfolk	27
Bowl barrow	1
Burnt mound	1
Causewayed enclosure	3
Enclosure	1
Hengiform enclosure	4
Long barrow	9
Mortuary enclosure	1
Neolithic Round Barrows/Ring-	
ditches	1
Oval barrow	4
Timber circle	1
Trapezoidal enclosure	1
Suffolk	24
Causewayed enclosure	4
Cursus	5
Hengiform enclosure	8
Long barrow	1
Neolithic Round Barrows/Ring-	
ditches	3
Oval barrow	1
Rectangular enclosure	2
Surrey	6
Causewayed enclosure	1
Cursus	1
Hengiform enclosure	1
Long barrow	1

Neolithic	Round	Barrows/Ring-	
ditches			1
Standing stone			1
Sussex			1
Causewayed enclosure			1
Thurrock			3
Causewayed enclosure			1
Hengiform enclosure			2
West Sussex			19
Causewayed enclosure			5
Hengiform enclosure			1
Long barrow			5
Neolithic	Round	Barrows/Ring-	
ditches			1
Oval barrow			7
Windsor and Maidenhead			2
Causewayed enclosure			1
Mortuary enclosure			1
Wokingham			5
Cursus			1
Mortuary enclosure			3
Oval barrow			1
Grand Total			326

South-West England

Bath and NE Somerset	20
Cist	2
Cove	1
Long barrow	6
Standing stone	3
Stone circle	7
Timber circle	1
Bournemouth	1
Long barrow	1
Bristol	4
Chambered tomb	1
Long barrow	1
Standing stone	2
Cornwall	316
Barrow	4
Bell barrow	1
Bowl barrow	2
Cairn	1
Causewayed enclosure	2

Chambered tomb	12
Cist	4
Embanked avenue	1
Hengiform enclosure	3
Holed stone	2
Kerb cairn	1
Long barrow	4
Long cairn	4
Neolithic Round Barrows/Ring-	
ditches	21
Quoit	13
Rectangular enclosure	1
Rock art	27
Standing stone	141
Stone alignment	10
Stone circle	49
Stone row	7
Tor cairn	1
Tor enclosure	5
Devon	413
Bowl barrow	7
Causewayed enclosure	4
Chambered tomb	6
Cist	2
Cursus	1
Enclosure	1
Hengiform enclosure	4
Long barrow	12
Long cairn	1
Mortuary enclosure	3
Neolithic Round Barrows/Ring-	
ditches	13
Oval barrow	10
Quincunx	4
Quoit	3
Ring cairn	1
Rock art	4
Standing stone	157
Stone alignment	85
Stone circle	75
Stone row	16
Stone setting	2
Tor enclosure	2
Dorset	153
Bank barrow	2
Barrow	1

Bowl barrow	6
Causewayed enclosure	9
Chambered tomb	3
Cist	1
Cursus	3
Enclosure	1
Hengiform enclosure	17
Linear earthwork	1
Long barrow	62
Long cairn	2
Mortuary enclosure	1
Neolithic Round Barrows/Ring-	
ditches	16
Oval barrow	5
Standing stone	11
Stone alignment	1
Stone circle	9
Timber circle	2
Gloucestershire	162
Bank barrow	1
Causewayed enclosure	9
Chambered tomb	2
Cursus	3
Hengiform enclosure	8
Hillfort	1
Long barrow	102
Mortuary enclosure	4
Neolithic Round Barrows/Ring-	
ditches	10
Pillow mound	1
Ring ditch	1
Rock art	2
Standing stone	16
Stone alignment	1
Stone circle	1
Herefordshire	31
Bowl barrow	1
Causewayed enclosure	1
Chambered tomb	2
Cursus	2
Earthwork	1
Hengiform enclosure	3
Long barrow	4
Neolithic Round Barrows/Ring-	
ditches	1
Oval barrow	1

Rock art			2
Standing stone			13
Isle of Wight			4
Long barrow			2
Mortuary enclosure			1
Neolithic	Round	Barrows/Ring-	
ditches			1
Isles of Scilly			46
Chambered tomb			3
Neolithic	Round	Barrows/Ring-	
ditches			24
Rock art			4
Standing stone			10
Stone alignment			2
Stone circle			3
North Somerset			10
Cist			1
Long barrow			4
Standing stone			4
Stone circle			1
Somerset			164
Bank barrow			1
Barrow cemetery			2
Bowl barrow			3
Cairn			1
Chambered tomb			3
Cursus			1
Earthwork			1
Hengiiform enclosure			12
Long barrow			23
Mortuary enclosure			1
Neolithic	Round	Barrows/Ring-	
ditches			2
Oval barrow			2
Quincunx			1
Rock art			2
Standing stone			63
Stone alignment			21
Stone circle			8
Timber structure			1
Timber trackway			16
South Gloucestershire			8
Long barrow			5
Neolithic	Round	Barrows/Ring-	
ditches			2
Standing stone			1

Swindon	6
Long barrow	2
Standing stone	3
Stone circle	1
Torbay	1
Neolithic Round Barrows/Ring-ditches	1
Wiltshire	255
Bell barrow	1
Bowl barrow	8
Causewayed enclosure	13
Cursus	4
Embanked avenue	1
Enclosure	2
Hengiform enclosure	18
Long barrow	128
Mortuary enclosure	2
Neolithic Round Barrows/Ring-ditches	25
Oval barrow	16
Oval enclosure	2
Rock art	1
Standing stone	8
Stone alignment	1
Stone avenue	1
Stone circle	20
Timber circle	4
Worcestershire	13
Chambered tomb	1
Cursus	4
Hengiform enclosure	2
Long barrow	2
Mortuary enclosure	1
Neolithic Round Barrows/Ring-ditches	2
Oval barrow	1
Grand Total	1607

Count of Scheduled S/not scheduled N/ de-scheduled D, according to Pastcape site descriptors	S	N	?	D	M	Grand Total
North Eastern England	398	511		2		911
Durham	62	34				96
East Yorkshire	9	60				69
Gateshead		4				4
Lincolnshire	39	80				119
North Lincolnshire		5				5
North Tyneside		1				1
North Yorkshire	185	183		2		370
Northumberland	88	125				213
Redcar and Cleveland	12	9				21
South Tyneside		1				1
Stockton-on-Tees		1				1
Sunderland	3	2				5
York		6				6
Count of Scheduled S/not scheduled N/ de-scheduled D, according to Pastcape site descriptors	S	N	?	D	M	Grand Total
North Western England	95	178	3	6		282
Cheshire	2					2
Cheshire East	2					2
Cumbria	83	105	1	4		193
Isle of Man	1	61	2			64
Lancashire	6	11		1		18
Liverpool	1			1		2
Warrington		1				1
Count of Scheduled S/not scheduled N/ de-scheduled D, according to Pastcape site descriptors	S	N	?	D	M	Grand Total
Northern Central England	170	194	1	5		370
Bradford	94	28	1	4		127
Calderdale	1	3				4
Derbyshire	42	64				106
Doncaster	2	1				3
Leeds	12	5				17
Leicestershire	2	7				9
Nottinghamshire	2	10				12
Rotherham		1				1
Rutland		2				2
Sheffield	3	2				5
Shropshire	5	43				48
South Yorkshire		1				1
Staffordshire	5	22		1		28
Wakefield	2	5				7
Count of Scheduled S/not scheduled N/ de-scheduled D, according to Pastcape site descriptors	S	N	?	D	M	Grand Total
Southern Central England	54	298			1	353
Bedford	14	25				39
Bedfordshire	4	7				11
Birmingham	1					1
Cambridgeshire	13	34			1	48
Central Bedfordshire		1				1
City of Peterborough	1	32				33
Milton Keynes		4				4
Northamptonshire	1	27				28
Oxfordshire	11	133				144
Reading		1				1
South Oxfordshire		1				1
Walsall		1				1
Warwickshire	5	16				21
West Berkshire	3	13				16
West Oxfordshire	1	3				4

Count of Scheduled S/not scheduled N/ de-scheduled D, according to Pastcape site descriptors	S	N	?	D	M	Grand Total
South Eastern England	74	252				326
Brighton and Hove	2	5				7
Buckinghamshire		12				12
City of Brighton and Hove		1				1
City of Portsmouth		1				1
East Sussex	6	13				19
Essex	5	61				66
Greater London		5				5
Hampshire	37	37				74
Hertfordshire	3	15				18
Kent	5	27				32
Luton	1	3				4
Norfolk	6	21				27
Suffolk	1	23				24
Surrey	1	5				6
Sussex		1				1
Thurrock	1	2				3
West Sussex	5	14				19
Windsor and Maidenhead		2				2
Wokingham	1	4				5
Count of Scheduled S/not scheduled N/ de-scheduled D, according to Pastcape site descriptors	S	N	?	D	M	Grand Total
South Western England	385	1209		1		1595
Bath and NE Somerset	7	13				20
Bournemouth		1				1
Bristol	1	3				4
Cornwall	73	241				314
Devon	113	297				410
Dorset	36	117				153
Gloucestershire	34	128				162
Herefordshire	3	28				31
Isle of Wight	1	3				4
Isles of Scilly	25	21				46
North Somerset	1	9				10
Somerset	30	130				160
South Gloucestershire		8				8
Swindon	1	5				6
Torbay	1					1
Wiltshire	56	195		1		252
Worcestershire	3	10				13

Name of Institution – REF 2014	Institution REF 2014 Code	Total Entries Studied	N England N/EBA	Other England N/EBA	Other Britain N/EBA (general)
University of Bradford	10007785	41	0	0	1
University of Worcester	10007139	37	0	2	0
University of Central Lancashire	10007141	31	0	0	2
University of Cambridge	10007788	145	0	0	0
University of Wales Trinity Saint David	10007858	43	0	0	0
University of Winchester	10003614	22	0	0	1
University of Nottingham	10007154	46	0	0	0
University of Sheffield	10007157	60	0	1	0
University of Liverpool	10006842	63	0	0	0
University of Glasgow	10007794	32	0	0	0
University of Chester	10007848	12	0	0	0
University of Durham	10007143	100	0	0	0
University of Leicester	10007796	76	0	1	1
University College London	10007784	212	0	3	0
Bournemouth University	10000824	108	0	5	1
University of Oxford	10007774	115	0	0	0
Cardiff University	10007814	48	0	0	1
University of Exeter	10007792	44	0	0	0
University of Edinburgh	10007790	53	0	0	0
University of the Highlands and Islands	10007114	43	0	0	7
University of Manchester	10007798	37	0	2	0
University of Hull	10007149	4	0	0	0
Queen's University Belfast	10005343	129	0	0	0
University of Birmingham	10006840	5	0	0	0
Newcastle University	10007799	31	2	2	0
University of Aberdeen	10007783	54	0	0	0
University of Reading	10007802	70	0	2	1
University of York	10007167	66	0	0	0
University of Southampton	10007158	76	0	4	2
Totals		1803	2	22	17

Name of Institution	No specific date	Lower Palaeolithic	Upper Palaeolithic	Mesolithic	Mesolithic Neolithic	Neolithic	Neolithic Bronze Age	Neolithic Chalcolithic	Chalcolithic Bronze Age	Bronze Age	Bronze Age Iron Age	Iron Age Roman	Roman Medieval	Roman Medieval	Early Medieval	Late Medieval	Industrial World Wars	
University of Bradford	17	0	0	0	1	0	6	0	0	3	0	5	0	2	0	5	1	0
University of Worcester	8	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
University of Central Lancashire	11	1	0	0	1	1	3	0	0	0	0	0	1	0	0	2	0	3
University of Cambridge	62	0	2	13	2	3	9	0	2	0	13	0	2	2	1	0	12	5
University of Wales Trinity Saint David	11	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	14	2
University of Winchester	6	0	3	0	0	0	2	0	1	0	1	0	0	3	0	0	3	1
University of Nottingham	13	0	3	0	0	0	2	0	2	0	4	0	1	0	13	0	5	1
University of Sheffield	17	1	0	1	0	0	8	1	0	0	10	2	5	1	5	0	7	2
University of Liverpool	20	0	6	0	2	0	6	0	0	15	0	7	1	3	0	0	0	1
University of Glasgow	17	0	0	0	1	0	0	0	0	4	0	0	0	2	0	4	0	4
University of Chester	4	0	0	0	2	0	0	0	0	0	0	2	0	0	0	2	2	0
University of Durham	21	3	6	6	0	1	13	0	0	2	1	16	1	10	0	6	6	3
University of Leicester	30	1	1	2	0	0	4	0	0	2	0	15	0	13	0	1	4	0
University College London	75	4	10	10	2	0	23	0	14	0	9	1	11	1	7	1	10	13
Bournemouth University	78	2	1	2	1	1	9	0	0	1	1	1	0	2	0	0	2	4
University of Oxford	40	4	7	14	1	1	10	0	7	0	3	0	6	3	4	0	9	4
Cardiff University	15	0	0	0	2	0	6	0	0	1	3	7	1	5	0	4	3	1
University of Exeter	16	1	3	4	1	1	0	0	0	3	1	1	0	1	0	4	7	0
University of Edinburgh	11	0	1	7	2	2	10	0	0	3	2	9	0	2	0	0	3	0
University of the Highlands and Islands	31	0	0	0	0	0	6	0	1	0	2	0	1	0	0	1	1	0
University of Manchester	15	1	0	1	2	0	9	0	0	4	0	2	0	0	0	0	1	0
University of Hull	2	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0
Queen's University Belfast	69	0	1	11	10	0	0	0	2	0	1	0	3	0	0	0	4	9
University of Birmingham	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Newcastle University	6	0	0	0	0	0	4	1	0	3	0	2	0	1	9	0	2	0
University of Aberdeen	17	0	2	2	5	0	8	0	1	0	0	0	0	0	0	11	1	1
University of Reading	10	3	2	1	8	1	6	0	2	0	4	0	1	1	12	2	8	9
University of York	35	1	2	4	7	1	1	0	0	1	0	0	0	2	0	3	3	1
University of Southampton	23	1	11	3	2	2	5	2	0	1	0	3	0	1	0	12	0	1
				53	14	150	4	1	40	1	90	11	99	13	109	3	101	40
																		60

Name of Institution	Northern England	England Other	Britain	North Sea	UK Britain Ireland	Ireland Scotland	Scotland	Scotland England	Wales	England Wales	Ireland	England Ireland	Irish Sea	Europe	Middle East	Worldwide	N/A
University of Bradford - Location of REF2014 references	0	3	5	0	0	0	3	0	0	0	2	0	0	9	1	3	14
University of Worcester - Location of REF2014 references	1	4	1	0	0	0	0	0	0	0	0	0	0	2	0	0	1
University of Central Lancashire - Location of REF2014 references	1	2	0	0	4	0	1	0	1	0	0	0	1	0	1	4	9
University of Cambridge - Location of REF2014 references	1	9	0	0	2	0	1	0	0	0	2	0	0	38	25	20	41
University of Wales Trinity Saint David - Location of REF2014 references	0	5	0	0	0	0	3	0	5	1	0	0	0	4	4	2	9
University of Winchester - Location of REF2014 references	0	3	2	0	1	0	0	0	0	0	1	0	0	6	1	4	3
University of Nottingham - Location of REF2014 references	0	8	2	0	0	0	1	0	0	0	0	0	0	19	4	2	11
University of Sheffield - Location of REF2014 references	2	4	4	0	0	0	1	0	1	0	0	1	0	28	0	4	15
University of Liverpool - Location of REF2014 references	0	0	1	0	0	0	1	0	2	0	2	0	0	4	27	5	21
University of Glasgow - Location of REF2014 references	0	0	1	0	0	1	9	0	0	0	0	0	0	9	0	1	11
University of Chester - Location of REF2014 references	4	5	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1
University of Durham - Location of REF2014 references	9	7	9	0	1	0	1	0	1	0	0	0	0	30	11	10	22
University of Leicester - Location of REF2014 references	1	3	5	0	0	0	1	0	0	0	0	0	0	18	7	7	34
University College London - Location of REF2014 references	0	10	1	0	1	0	0	0	0	0	0	0	0	28	48	45	73
Bournemouth University - Location of REF2014 references	1	10	6	0	3	0	0	0	0	0	0	0	0	5	4	16	63
University of Oxford - Location of REF2014 references	0	8	1	0	1	0	1	0	0	0	1	0	1	22	12	24	44
Cardiff University - Location of REF2014 references	0	7	2	0	1	0	1	0	2	0	2	0	0	11	7	0	15
University of Exeter - Location of REF2014 references	1	4	1	1	0	0	2	0	0	0	0	0	0	13	1	12	9
University of Edinburgh - Location of REF2014 references	1	0	3	0	0	0	2	0	0	0	0	0	0	33	4	1	9
University of the Highlands and Islands - Location of REF2014 references	0	0	0	0	1	0	18	0	0	0	0	0	0	5	0	5	14
University of Manchester - Location of REF2014 references	2	4	3	0	2	0	1	0	0	0	0	0	0	8	4	5	10
University of Hull - Location of REF2014 references	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	1
Queen's University Belfast - Location of REF2014 references	0	7	3	0	3	0	2	0	0	0	27	0	2	12	5	18	52
University of Birmingham - Location of REF2014 references	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	2
Newcastle University - Location of REF2014 references	4	5	2	0	1	0	0	0	0	0	0	0	0	8	1	0	10
University of Aberdeen - Location of REF2014 references	0	0	1	0	0	0	6	0	1	0	0	0	0	11	1	20	15
University of Reading - Location of REF2014 references	1	19	5	1	0	0	4	0	0	1	0	0	1	14	8	1	17
University of York - Location of REF2014 references	3	3	2	0	0	0	2	0	0	0	0	0	0	17	1	12	25
University of Southampton - Location of REF2014 references	0	9	3	0	2	0	1	0	0	0	0	0	0	21	6	6	28
	32	139	63	2	23	1	64	0	13	2	37	1	5	381	183	227	579

APPENDIX B

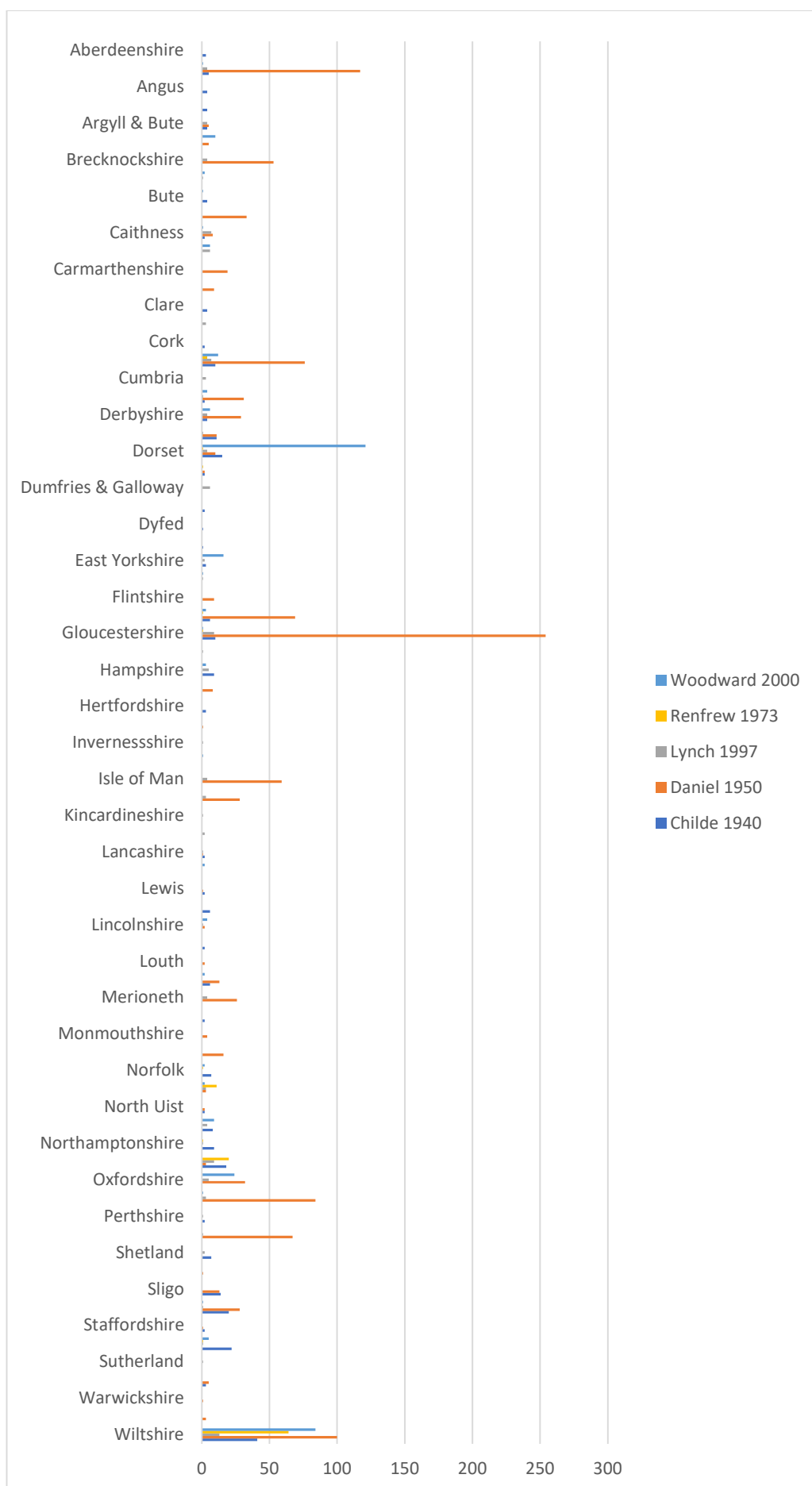
Excavator	Number	Publication Year / Page reference	Monument Height (ft)	Monument Diameter/Length (ft)	Ploughing evidence?	Contents - Organic?	Burial	Cremation	Partial bodies	Disturbed	How many people in total?
-----------	--------	-----------------------------------	----------------------	-------------------------------	---------------------	---------------------	--------	-----------	----------------	-----------	---------------------------

County	District	Name	Barrow type	Kinnes 1979 (Neoround barrows)	Kinnes 1992 (long barrows)	Ashbee 1960 from Index	Ashbee 1970/1984	Extant?	Grid Ref	Pastscape Reference Number	Excavator
--------	----------	------	-------------	--------------------------------	----------------------------	------------------------	------------------	---------	----------	----------------------------	-----------

		Tools- Flint, Chert, Antler		Pot type	Special (specific details)				Later additions		Other	
County	District	Name	Barrow type	Kinnes 1979 (Neo round barrows)	Kinnes 1992 (long barrows)	Ashbee 1960 from Index	Ashbee 1970/1984	Extant?	Grid Ref	Pastscape Reference Number	Excavator	

APPENDIX C

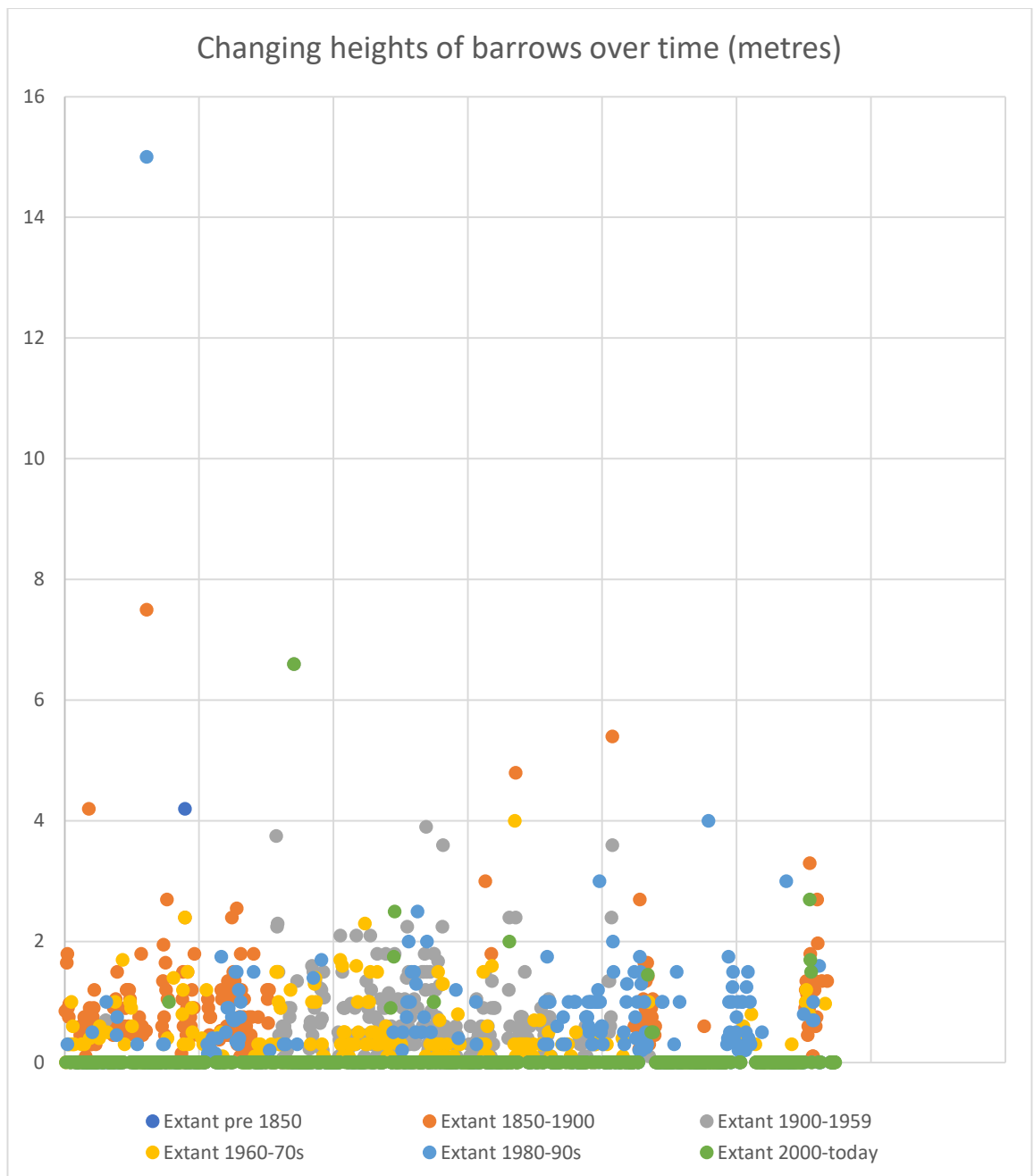
Row Labels	Childe 1940	Daniel 1950	Lynch 1997	Woodward 2000	Ashbee 1960	Ashbee 1970 (1984)	Grinsell 1953 (1975)	Grand Total
England	85	119	55	116	199	377	38	989
Berkshire	1	1		3	5	3	1	14
Buckinghamshire			1	1	1	3	1	7
Cambridgeshire	3		1	4	3	7	1	19
Cheshire		1					1	2
Cleveland			1		1			2
Cornwall	5	20	5	5	5			40
Cumbria			2		3	7		12
Derbyshire	1	5	4	2	8	3	1	24
Devon	4	4	1		11	1	1	22
Dorset	3	3	4	40	28	63	1	142
Durham	1						1	2
East Yorkshire	3		2	5	10	14		34
Gloucestershire	4	29	6	1	1	7	1	49
Hampshire	3		1	2	8	31	1	46
Herefordshire		1					1	2
Hertfordshire	1					2	1	4
IOW	1			1	2	4		8
Isle of Man		9	4		1		1	15
Kent	3	4	3		4	4	1	19
Lancashire	1	1	1		3		1	7
Leicestershire				1	1	2		4
Lincolnshire	2	1	1	1	1	13	1	20
Norfolk	4			1	5	3	1	14
North Yorkshire	5		4	6	16	37		68
Northamptonshire	1		1				1	3
Oxfordshire		5	2	6	8	8	1	30
Scilly Isles	1	13	1		1			16
Shropshire		1					1	2
Somerset	8	3	1	1	11		1	25
Staffordshire	1	1					1	3
Sussex	7		1	3	2	4	1	18
Warwickshire		1				1	1	3
Wiltshire	16	16	8	33	43	120	1	237
Bath & NE Somerset					1			1
Bedfordshire					1	9	1	11
Berwickshire					1	2		3
Brighton & Hove					1	2		3
Bristol					1		1	2
East Anglia					1	1		2
East Sussex					1	5		6
Essex	1				2	1	1	5
Northumberland					3	3	1	7
Nottinghamshire					1	1		2
Suffolk	1				3	3	1	8
Yorkshire					1	4		5
Luton						1		1
Sunderland						1		1
Surrey	2					2	1	5
West Sussex						3		3
West Yorkshire						2		2
Greater London	1							1
Greater Manchester	1							1
Cornwall & Scilly							1	1
Cumbria (Cumberland & Westmorland)							1	1
Isle of Wight							1	1
Worcestershire							1	1
Yorkshire East							1	1
Yorkshire North							1	1
Yorkshire West							1	1
Grand Total	85	119	55	116	199	377	38	989



PLOUGHING EVIDENCE – YORKSHIRE WOLDS’ BARROWS, ACCORDING TO GREENWELL & MORTIMER

Yorkshire Wolds	Lost pre 1850	Lost 1850-1900	Lost 1900-1959	Lost 1960-70s	Lost 1980-90s	Lost 2000-today
Total lost barrows	1	20	56	349	513	727

Current state of monument	Total
Destroyed	727
Extant	15
Status unknown since 2000	406



Ploughing Evidence	Totals
?	186
ancient trench dug through barrow	1
Built over a vault	1
could not dig, due to trees	3
cut through by a dyke	1
damaged with beacon construction	1
destroyed previously	1
Disturbed for stones	1
Dug into for rabbits	4
flattened by rabbit diggers	1
N	23
part excavated	1
partly destroyed by wall	1
partly removed by owner	1
partly removed by tenant	1
partly removed in past	1
prev. covered in trees	3
prev. covered in trees/guttered by rabbit diggers	1
prev. dug into to bury diseased cattle in 1866	3
prev. excavated	24
Prev. opened	20
Prev. removed for gravel	1
rabbits burrowing	1
Removed 1850	1
removed by farmer	2
Removed by tenant	3
removed in past	5
Removed to great extent	1
Road-cutting	1
trees had been planted on it	5
until 12 yrs ago, had ash trees & thorns on it	1
Y	162
Yes & prev. opened	1
Yes, & crossed by a fence	1
Yes, & tenant removed part of cist	1

METHODOLOGY – CHAPTER 7 – PRIMARY ANALYSIS OF LEGACY DATA AND PASTSCAPE

The data from each barrow referenced was manually entered onto an Excel spreadsheet, under the following headings:

Excavator	Number	Publication Year / Page reference	Monument Height (ft)	Monument Diameter/Length (ft)	Ploughing evidence?	Contents - Organic?	Burial	Cremation	Partial bodies	Disturbed	How many people in total?
-----------	--------	-----------------------------------	----------------------	-------------------------------	---------------------	---------------------	--------	-----------	----------------	-----------	---------------------------

Burial information	Tools- Flint, Chert, Antler	Pot type	Special (specific details)	Later additions	Other
--------------------	-----------------------------	----------	----------------------------	-----------------	-------

When assessing monument height, in all cases, if two heights were assigned to the same structure, such as 1 foot 3 – 1 foot 6, the higher number was added to the Excel spreadsheet. The following heights were used to place a numerical value on discursive text:

Very slight	0.1m
Slight	0.3m
Much ploughed down	0.3m
Discernible	0.5m
Yes	1.0m
Well-defined	1.0m
Prominent mound	1.5m

If Greenwell or Mortimer wrote ‘ploughed down’ with no specific details on the actual height of the structure at the time of their excavations, a height measurement from Pastscape’s database was used.

Excavation	Totals
?	2
? Partial excavation	2
AP	337
Excavated	2
Greenwell	172
Greenwell Mortimer	4
Knox' map	4
Mortimer	273
Mortimer (not excavated)	1
Mortimer?	1
Not Excavated	17
Other Excavator	55
Other Excavator/ Greenwell	11
Other Excavator/ Mortimer	33
revealed by the sea	2
Young (History of Whitby)	2
Unknown	226
Greenwell (not excavated)	2
Grand Total	1147

Excavator(s)	Total barrows
? Unknown	2
Bateman Ruddock 1851	
Greenwell	3
Bethel Boys Mortimer	1
Dr Thurman Mortimer	1
Greenwell	150
Greenwell Brewster	4
Greenwell Hull	1
Greenwell Manby	3
Greenwell Mortimer	4
Greenwell Rescue Excavation	1
Greenwell Vatcher	1
Greenwell?	2
J Browne	1
James Silburn Mortimer	19
Lord Londesborough Greenwell	1
Lord Londesborough Mortimer	3
Mortimer	272
Mortimer	1
Mortimer (not excavated)	1
Mortimer Brewster	3
Mortimer Coombs	1
Mortimer Gibson	1
Mortimer Manby	1
Mr D Leadly	1
Mr Simpson Mortimer	1
Mr Thomas of Boston Mortimer	3
Not Excavated	2
Professor Rolleston	1
Rev. Porter Mr Monkman	3
Greenwell (not excavated)	2
Grand Total	490

Greenwell and Mortimer excavations & other excavators (before them and after them)

Greenwell's excavations

	North Riding	East Riding
1864	April -Egton, Cold Kirby; June -Hutton Buscel; September -Slingsby; October - Gilling	
1865	July -Slingsby	June -Langton
1866	April/May/June -Hutton Buscel	March -Cherry Burton October -Weaverthorpe
1867	Helperthorpe (at some point this year)	April/October -Ganton October-Weaverthorpe November -Cowlam
1868		April -Kirby Underdale
1869	Ganton (at some point this year)	November -Rudston
1870		November -Rudston

Taken from Kinnes & Longworth (1985, 15-16); and Greenwell (1877, 458-478)

Mortimer's excavations

Mortimer's barrow excavation order, by region within the Wolds

- 1 -Towthorpe Group
- 1a -Driffield Group
- 2 -Blanch Group
- 2b -a 'detached barrow', close to the Calais (Callis) Wold Group
- 3 -Towthorpe Group
- 4 -Painsthorpe Wold Group
- 5 -Fimber Group
- 6 -Towthorpe Group
- 7 -Towthorpe Group
- 7a -Towthorpe Group
- 8 -Hanging Grimston Group
- 9 -Hanging Grimston Group
- 10 -Hanging Grimston Group
- 11 -Hanging Grimston Group
- 12 -Hanging Grimston Group
- 13 -Calais (Callis) Wold Group
- 14 -Calais (Callis) Wold Group
- 15 -Calais (Callis) Wold Group
- 16 -Riggs Group
- 17 -Riggs Group
- 18 -Towthorpe Group
- 19 -Riggs Group
- 20 -Riggs Group

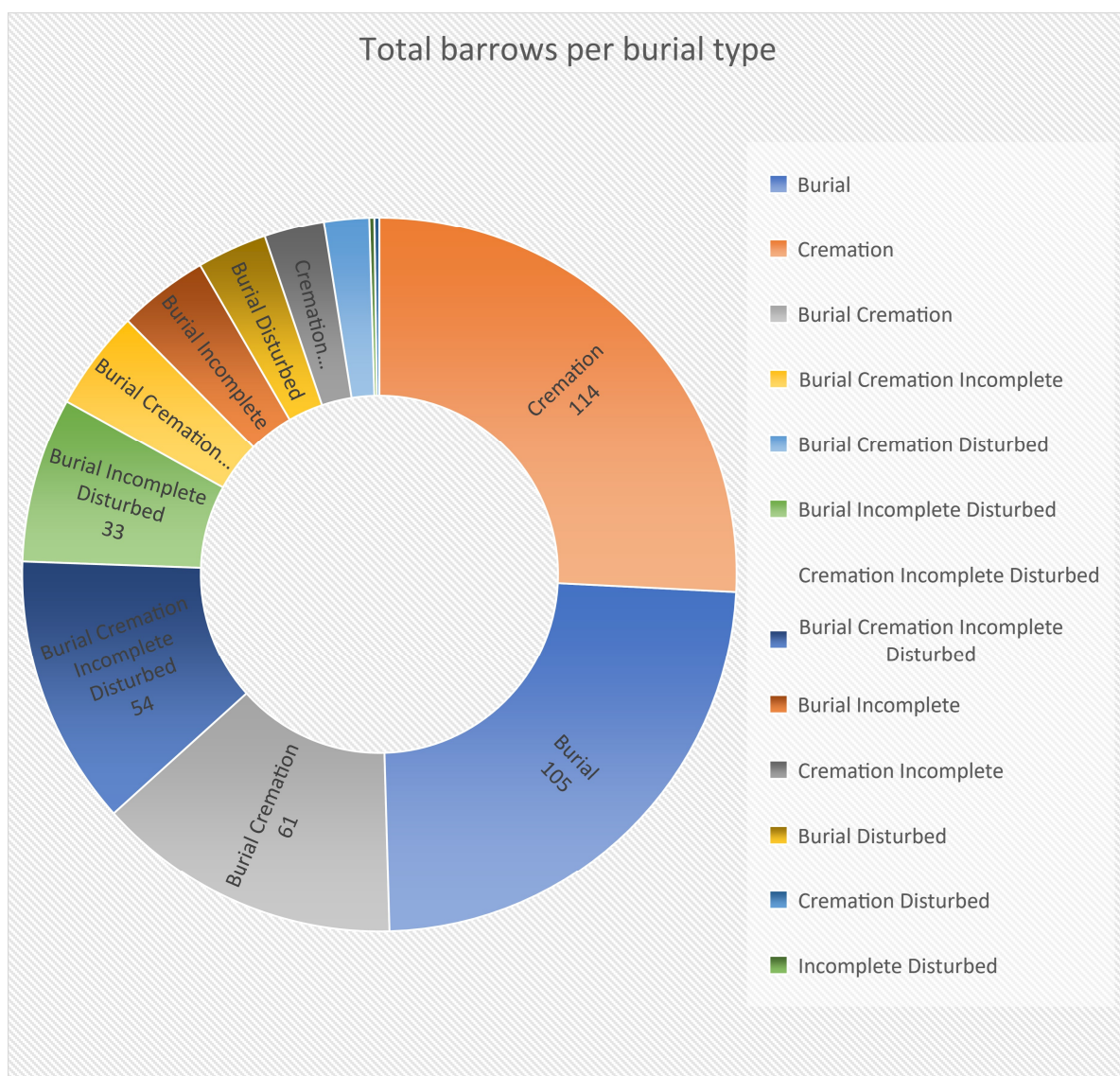
Number of barrows per group excavated by Mortimer

I	Towthorpe Group	21 barrows
II	Wharram Percy Group	10 barrows
III	Aldro Group	36 barrows, in 5 clusters
IV	Acklam Wold Group	17 barrows
V	Hanging Grimston Group	19 barrows
VI	Painsthorpe Wold Group	21 barrows
VII	Garrowby Wold Group	18 barrows
VIII	Calais (Callis) Wold Group	18 barrows
IX	Riggs Group	14 barrows
X	Fimber Group	3 barrows
Xa	Life Hill Group	6 barrows
XI	Garton Slack Group	36 barrows
XII	Drifffield Group	9 barrows
XIII	Huggate Wold Group	20 barrows
XIV	Huggate and Warter Wold Group	16 barrows
XV	Blanch Group	28 barrows

Total barrows excavated

	Number of barrows with burial data
Total barrows	1127
	490

	Burial	Cremation	Incomplete interments	Disturbed interments
Total barrows	318	275	139	116



Cremation and Inhumation together	Total
Y	66
Y - beyond the burned bones, some unburnt bones found with some previously burnt ones, added to the later pyre	1
Grand Total	67

		Neolithic long barrow	Neolithic round barrow	Bronze Age barrow
Burnt in situ				
Total	14	0	3	11
Burnt in situ - in hollow				
Total	12	0	0	6
Burnt unevenly / flues - crematoria				
Total	20	8	2	0

Number of cenotaph holes or graves within barrows	Total
1	47
2	20
3	7
4	2
6	4
?	5
? 2 food vases but no bodies?	1
?1	21
?3	1
1 (cinerary urn with no bones) - only found in 3 instances in 40 years' digging in E Yorks	1
2 empty cists (decayed bodies?)	1
Total Number of Barrows	110

BURIAL DATA – YORKSHIRE WOLDS' EXCAVATED BARROWS

Total number of buried or cremated humans per barrow	Total
0	43
1	154
2	81
3	44
4	33
5	15
6	15
7	11
8	10
9	7
10	5
11	6
12	1
13	7
14	2
15	1
16	2
17	2
18	3
20	2
22	1
26	1
62	1
1+	2
11+	2
12+	1
13+	1
14+	2
15+	2
18+	2
2+	5
20+	1
3+	8
4+	6
5+	1
6+	3
7+	6
8+	1
9+	2

Total number of bodies per barrow type	Total barrows
0 interments	43
BA barrow	41
Barrow	1
Long barrow	1
1 interment	154
BA barrow	143
Long barrow	7
Neolithic round barrow	4
2 interments	85
BA barrow	81
Long barrow	3
Neolithic round barrow	1
3 interments	52
BA barrow	45
Long barrow	2
Neolithic round barrow	5
4 interments	37
BA barrow	31
Long barrow	2
Neolithic round barrow	4
5 interments	19
BA barrow	16
Long barrow	2
Neolithic round barrow	1
6 interments	18
BA barrow	16
Neolithic round barrow	2
7 interments	14
BA barrow	12
Neolithic round barrow	2
8 interments	9
BA barrow	7
Long barrow	1
Neolithic round barrow	1
9 interments	13
BA barrow	11
Neolithic round barrow	2
10 interments	5
BA barrow	4
Neolithic round barrow	1
11 interments	7

Total number of bodies per barrow type	Total barrows
BA barrow	4
Neolithic round barrow	3
12 interments	4
BA barrow	2
Long barrow	1
Neolithic round barrow	1
13 interments	7
BA barrow	3
Long barrow	2
Neolithic round barrow	2
14 interments	5
BA barrow	4
Neolithic round barrow	1
15 interments	3
BA barrow	1
Long barrow	1
Neolithic round barrow	1
16 interments	3
BA barrow	3
17 interments	2
BA barrow	1
Neolithic round barrow	1
18 interments	4
BA barrow	2
Neolithic round barrow	2
19 interments	1
BA barrow	1
20 interments	3
BA barrow	1
Neolithic round barrow	2
22 interments	1
Neolithic round barrow	1
23 interments	1
Long barrow	1
62 interments	1
Neolithic round barrow	1
Grand Total	490

Possible taphonomic loss within barrows	Totals
? Unclear	5
? Unclear/ Yes	3
Decayed body, decayed pot	1
Yes	72
Yes - clay covering/placement of heavy flint blocks over 2 bodies, crushing them	1
Yes (adult)	1
Yes (bottom of grave)	1
Yes - as body had been covered in turves	1
Total	85

Total number of bodies in Bronze Age barrows	Number of barrows
0	40
1	144
2	74
3	46
4	33
5	15
6	11
7	17
8	10
9	7
10	3
11	4
12	1
13	3
14	5
15	2
16	0
17	3
18	1
19	0
20	1
Total barrows	420

Complete and incomplete bodies	Total
Only complete bodies within barrows	220
Total number of complete bodies	1293
Only incomplete bodies within barrows	33
Total number of incomplete bodies	535

Too few cremated bones	Total
In grave/ hollow/ hole	31
Within urns	10
On surface	11
Above enigmatic holes	3
Within barrow infill material	2

Too few unburnt bone fragments	Total
Within grave/ hollow/ hole	8
Above enigmatic holes	1
Within barrow infill material	1

Number of human remains within each barrow	Number of barrows with only burials	Total number of buried bodies within these barrows	Number of barrows with only cremations	Total number of cremated bodies within
1	71	71	83	83
2	30	60	28	56
3	23	69	8	24
4	15	60	4	16
5	8	40	2	10
6	7	42		0
7	2	14	1	7
8	3	24		0
9	4	36	9	9
10	3	30		0
11		0		0
12	1	12		0
13		0		0
14		0		0
15	1	15		0
16		0		0
17	1	17		0
18	3	54		0
19		0		0
20	1	20		0
Totals	173	564	135	205

Barrows with a single human burial or cremation	Total Barrows
B no further data	4
B adult	38
B child	3
B young person	7
BD no further data	4
BD adult	4
BDe no further data	2
BDe adult	3
BDe young person	2
BDF? adult	2
BF no further data	1
BF young person	1
C no further data	26
C adult	32
C child	4
C young person	6
CD no further data	3
CD	1
CD adult	1
CF no further data	8
CF adult	2
Grand Total	154

Number of adult burials per barrow	Total
1	108
2	40
3	37
4	14
5	14
6	11
7	7
8	5
9	3
10	2
13	1
14	1
Grand Total	243

Number of young person burials per barrow	Total
1	58
2	21
3	2
Grand Total	81

Number of infant or child burials per barrow	Total
1	58
2	30
3	6
4	6
5	6
6	2
7	2
8	1
11	1
12	1
Grand Total	113

Number of adult cremations per barrow	Total
1	91
2	17
3	3
4	7
5	3
6	1
Grand Total	122

Number of young person cremations per barrow	Total
1	31
2	1
3	1
Grand Total	33

Number of child cremations per barrow	Total
1	21
2	3
Grand Total	24

Total number of barrows with number of human remains	Only Burial	Only Cremation
1	61	80
2	20	23
3	12	7
4	5	2
5	1	1
6	2	
7	1	
8	1	
9	1	1
10		
11		
12		
13		
14		
15		
16		
17		
18	1	
Total barrows	105	114

Number of cenotaph holes or graves within barrows	Total
1	47
2	20
3	7
4	2
6	4
?	5
? 2 food vases but no bodies?	1
?1	21
?3	1
1 (cinerary urn with no bones) - only found in 3 instances in 40 years' digging in E Yorks	1
2 empty cists (decayed bodies?)	1
Total Number of Barrows	110

Total number of bodies per barrow type	Total barrows
0 interments	43
BA barrow	41
Barrow	1
Long barrow	1
1 interment	154
BA barrow	143
Long barrow	7
Neolithic round barrow	4
2 interments	85
BA barrow	81
Long barrow	3
Neolithic round barrow	1
3 interments	52
BA barrow	45
Long barrow	2
Neolithic round barrow	5
4 interments	37
BA barrow	31
Long barrow	2
Neolithic round barrow	4
5 interments	19
BA barrow	16
Long barrow	2
Neolithic round barrow	1
6 interments	18
BA barrow	16
Neolithic round barrow	2
7 interments	14
BA barrow	12
Neolithic round barrow	2
8 interments	9
BA barrow	7
Long barrow	1
Neolithic round barrow	1
9 interments	13
BA barrow	11
Neolithic round barrow	2
10 interments	5
BA barrow	4
Neolithic round barrow	1
11 interments	7
BA barrow	4
Neolithic round barrow	3

Barrows with a single human burial or cremation	Total Barrows
B no further data	4
B adult	38
B child	3
B young person	7
BD no further data	4
BD adult	4
BDe no further data	2
BDe adult	3
BDe young person	2
BDF? adult	2
BF no further data	1
BF young person	1
C no further data	26
C adult	32
C child	4
C young person	6
CD no further data	3
CD	1
CD adult	1
CF no further data	8
CF adult	2
Grand Total	154

B – burial; C – cremation; D – disturbed/disarticulated; De – decayed; F – fragmented.

Possible taphonomic loss within barrows	Totals
? Unclear	5
? Unclear/ Yes	3
Decayed body, decayed pot	1
Yes	72
Yes - clay covering/placement of heavy flint blocks over 2 bodies, crushing them	1
Yes (adult)	1
Yes (bottom of grave)	1
Yes - as body had been covered in turves	1
Total	85

Total number of bodies in Bronze Age barrows	Number of barrows
0	40
1	144
2	74
3	46
4	33
5	15
6	11
7	17
8	10
9	7
10	3
11	4
12	1
13	3
14	5
15	2
16	0
17	3
18	1
19	0
20	1
Total barrows	420

Number of human remains within each barrow	Number of barrows with only burials	Total number of buried bodies within these barrows	Number of barrows with only cremations	Total number of cremated bodies within
1	71	71	83	83
2	30	60	28	56
3	23	69	8	24
4	15	60	4	16
5	8	40	2	10
6	7	42		0
7	2	14	1	7
8	3	24		0
9	4	36	9	9
10	3	30		0
11		0		0
12	1	12		0
13		0		0
14		0		0
15	1	15		0
16		0		0
17	1	17		0
18	3	54		0
19		0		0
20	1	20		0
Totals	173	564	135	205

Complete and incomplete bodies	Total
Only complete bodies within barrows	220
Total number of complete bodies	1293
Only incomplete bodies within barrows	33
Total number of incomplete bodies	535

Burial Practices

	Burial Cremation	Burial Cremation Incomplete	Burial Cremation Disturbed	Burial Incomplete Disturbed	Cremation Incomplete Disturbed	Burial Cremation Incomplete Disturbed	Overall Totals
Total barrows	67	20	9	33	0	54	183
Overall bodies involved in such practices	234	184	67	237	0	503	1225
Ratio of bodies per barrow for each burial type	3.83	9.2	7.44	7.18	0	9.31	

	Burial Incomplete	Cremation Incomplete	Burial Disturbed	Cremation Disturbed	Incomplete Disturbed	Overall Totals
Total barrows	18	12	14	1	1	46
Overall bodies involved in such practices	60	33	66	1	7	167
Ratio of bodies per barrow for each burial type	3.33	2.75	4.71	1	7	

Too few cremated bones

Too few cremated bones	Total
In grave/ hollow/ hole	31
Within urns	10
On surface	11
Above enigmatic holes	3
Within barrow infill material	2

Too few unburnt bone fragments	Total
Within grave/ hollow/ hole	8
Above enigmatic holes	1
Within barrow infill material	1

Additional or replacement body parts

Addition or Replacement Human Bones by Parish	Total
Langton	1
West Heslerton Wold	1
Sherburn Parish	1
Ganton Parish	4
Wold Newton Parish	1
Helperthorpe Parish	1
Weaverthorpe Parish	3
Langtoft Parish	1
Cowlam Parish	2
Rudston Parish	5
Hunmanby Parish	2
Goodmanham Parish	3
Kilham Parish	1
Kirby Grindalythe Parish	1
Thixendale Parish	3
Birdsall Parish	3
Leavening Parish	1
Kirby Underdale Parish	1
Bishop Wilton Parish	2
Garton Parish	6
Hutton Cranswick Parish	1
Warter Parish	1
Burythorpe Parish	1
Bishop Burton Parish	1
Grand Total	47

Additional or Replacement body parts within barrows	Total
2 Additions	7
2 Additons	1
3 Additions	5
3 Additions	1
4 Additions	3
6 Additions	1
8 Additions	1
Addition	25
Replacement	1
Replacement 2 Additions	1
Replacement Addition	1
Total barrows involved in such practices	47

Possible evidence of violence

Possible Evidence of Violence	Total
1 leaf-shaped flint arrowhead pointing towards skull	1
1 arrowhead in front of face touching teeth	1
1 barbed flint arrowhead in front of adult face	1
1 bronze dagger by face but point directed AWAY from face	1
1 bronze dagger point touched chin	1
1 arrowhead inside skull	1
1 bronze dagger point touching chin	1
1 diamond-shaped arrowhead with remains of decayed wooden shaft found under thigh bone	1
1 flint scraper in contact with teeth	1
1 leaf arrow-point facing AWAY from body	1
1 stone chisel with cutting edge towards child's face	1
2 round flint scrapers touching teeth of a buried person	1
4 black flint flakes occurred in line along vertebrae of interment	1
circular hole in left parietal bone	1
hips and legs of body missing & hole punched through parietal bone	1
mutilated remains' - 'amputation' above the pelvis prior to burial	1
Grand Total	16

Animal bones with burials / cremations

			Unworked				
			Fox/Dog			Badger	Vole
			Bones	Jaw	Skull	Skull	Bones
Human burial	Complete	Adult Young person Child Unknown	2	1	1	1 1	1
Human burial	Incomplete	Adult Young person Child Unknown			1		
Human cremation	Complete	Adult Young person Child Unknown	1	1 1			
Human cremation	Incomplete	Adult Young person Child Unknown					
Human burial/Cremation	Incomplete	Unknown					
No human burial			1	1			

Animal bones with adult burials	Total
Y	52
Y (X2)	14
Y (X3)	7
Y (X4)	2
Y (X5)	2
Y (X6)	1
Grand Total	78

Animal bones with young person burials	Total
Y	17
Y (X2)	2
Y (X4)	1
Grand Total	20

Animal bones with child burials	Total
Y	20
Y (X2)	1
Y (X4)	1
Grand Total	22

Animal bones with adult cremation	Total
Y	16
Y (X2)	3
Grand Total	19

Animal bones with young person cremation	Total
Y	3
Y (X2)	2
Grand Total	5

Animal bones with child cremation	Total
Y	2
Grand Total	2

Animal bones with human cremation (unknown age)	Total
Y	16
Y (X2)	2
Grand Total	18

Animal bones with dismembered bodies - burnt or unburnt	Total
Y	34
Y (X2)	7
Y (X3)	1
Grand Total	42

Animal bones with no human burial/ cremation	Total
Y	19
Y (X2)	3
Y (X4)	2
Grand Total	24

Artefacts within barrows

Barrows with bone implements	Total barrows
1 'article'	1
1 bead	1
1 bone article 1 dagger pommel	1
1 hairpin	2
1 human bone dagger 2 other articles	1
1 implement	1
1 needle	1
1 needle	1
1 ox-bone pointed implement	1
1 partial hairpin	1
1 pin	35
1 pin 1 hairpin	1
1 pin whalebone pommel	1
1 pin portion	1
1 pin/needle	1
1 pricker	1
1 red deer knife	1
1 spatula	1
1 spatula 1 stiletto	1
1 'unique' button	1
2 broken pins	1
2 hairpins	1
2 pins	2
3 pieces	1
3 pins	1
4 beads 1 button	1
4 pins (1 split)	1
6 hairpins 1 extra bone piece	1
Grand Total	64

Wolds' barrows with bone implements

Barrows with tusk /horn /tooth /antler implements	Total barrows
1 antler comb	1
1 antler macehead 2 boar-tusk blades	1
1 boar tusk knife	1
1 curved boar-tusk pin 1 boar-tusk knife	1
1 hollowed & shaped bone (musical instrument)	1
1 ox horn handle	1
1 ox-rib implement	1
1 part of horn ring	1
1 perforated pig tooth ornament/pendant	1
1 pierced tusk implement	1
1 red deer antler tool	1
1 rib bone spoon	1
1 rib-bone spoon many antler tines (used as rake)	1
1 rib-bone tool	1
1 worked antler hammer-head	1
1 worked beaver tusk 1 red deer macehead	1
2 ox-horn handles	1
2 shaped horn portions	1
2 worked antler tines	1
2 worn red deer antler butts	1
3 implements	1
Ox horn handle	1
ox-horn sheath	1
Grand Total	23

Wolds' barrows with tusk /horn /tooth /antler implements

			Unworked						
			Beaver	Goat/ Sheep	Horse	Horse/Ox	Ox	Ox/ Deer	Deer
			Tooth	Tooth	Tooth	Tooth	Tooth	Tooth	Tooth
Human burial	Complete	Adult	2	1	2	1	11	1	
		Young person		1			1		
		Child					1		
		Unknown					1		
Human burial	Incomplete	Adult							
		Young person							
		Child							
		Unknown					3		1
Human cremation	Complete	Adult					1		
		Young person					1		
		Child							
		Unknown					2		
Human cremation	Incomplete	Adult							
		Young person							
		Child							
		Unknown							
Human burial/ Cremation	Incomplete	Unknown							
No human burial					1				

			Unworked							
			Ox/ Pig	Pig	Fox/ Dog	Urus	Animal	Deer	Boar	Pig
			Tooth	Tooth	Tooth	Tooth	Tooth	Antler	Tusk	Tusk
Human burial	Complete	Adult	1	1			1	29	6	2
		Young person		1				4	1	1
		Child						2		
		Unknown						2		
Human burial	Incomplete	Adult								
		Young person								
		Child								
		Unknown		1				1		
Human cremation	Complete	Adult				1		4	1	
		Young person								
		Child						1		
		Unknown						4		
Human cremation	Incomplete	Adult								
		Young person								
		Child								
		Unknown						13		
Human burial/Cremation	Incomplete	Unknown								1
No human burial				1	1		1	8		

			Worked								
			Worked Bone								
			Pin	Hair pin	Spatula	Stiletto	Pricker	Instrument/ Articles	Bead	Button	Spoon- like article
Human burial	Complete	Adult	16	6					4	1	1
		Young person	4		1	1					1
		Child	6	1				2			
		Unknown	1								
Human burial	Incomplete	Adult									
		Young person									
		Child									
		Unknown									
Human cremation	Complete	Adult	3	2							
		Young person	4								
		Child	2								
		Unknown	8	1			1	1			
Human cremation	Incomplete	Adult									
		Young person									
		Child									
		Unknown									
Human burial/Cremation	Incomplete	Unknown	3						1		
No human burial											

			Worked										
			Deer				Ox		Wild Boar	Beaver	Boar	Pig	Human
			Bone Knife	Antler hammer	Antler Tool	Comb/ Tool	Horn Handle	Bone Tool	Bone Tool	Bone Tool	Tusk	Tusk	Thigh Bone Tool
Human burial	Complete	Adult		1	3		3	2	1	1	2		1
		Young person		2									
		Child						1					
		Unknown											
Human burial	Incomplete	Adult											
		Young person											
		Child											
		Unknown											
H cremation	Complete	Adult							1				
		Young person											
		Child				1							
		Unknown											
H cremation	Incomplete	Adult											
		Young person											
		Child											
		Unknown											
Human burial/Cremation	Incomplete	Unknown			2								
No human burial			1										

Barrows with jet or jet-working items	Total
1 jet bead 3 bronze awls/prickers	1
3 bronze awls 6 saws	1
1 bead 2 saws	1
1 bronze awl	6
1 bronze pricker	8
1 half-saw	1
1 jet bead	3
1 jet bead 1 jet ring some other jet pieces worked sandstone implement	1
1 jet button	5
1 jet button 1 bronze pricker	1
1 jet button 1 jet arm-ring	1
1 jet button 1 jet ring worked polishing implement	1
1 jet button 5 unshaped pieces	1
1 jet half-bead	1
1 jet pendant	1
1 jet ring	1
1 jet ring 4 jet buttons	1
1 jet slider	1
1 jet stud	2
1 jet stud 1 jet ring	1
1 jet stud worked sandstone implement	1
1 piece unworked jet	1
1 piece worked lignite	1
1 rectangular piece jet with incised markings on it	1
1 sandstone 'axe'	1
1 saw	9
1 saw piece	1
1 spindle-formed jet article	1
1 triangular jet pendant	1
11 jet/Kimeridge coal beads	1
119 jet beads 1 triangular pendant	1
12 jet beads (3 long, 9 round) for necklace	1
124 jet beads 1 semi-circular pendant	1
2 jet pendants 1 jet bead	1
2 jet studs 1 saw	1
2 saws	2
20 jet buttons	1
206 jet beads some broken jet beads 1 bronze pricker	1
3 jet buttons	1
3 saws	3
4 jet beads 1 bronze awl	1
4 jet buttons	1
5 jet buttons 1 bronze pricker	1
5 saws	1
623 jet beads 1 jet/Kimeridge coal stud	1
7 saws	1
7 saws 3 pounders	1
79 saws	1
approximately 162 jet discs 1 triangular jet lozenge 2 bronze prickers	1
bronze wires	1
twisted bronze wire	1
worked sandstone implement	7
worked sandstone implement 1 saw	1
worked sandstone implements	1
Grand Total	90

Barrows with objects made of jet	Total barrows
1 bead	4
1 bead 1 ring some other pieces	1
1 button	6
1 button 1 arm-ring	1
1 button 1 ring	1
1 button 5 unshaped pieces	1
1 half-bead	1
1 pendant	1
1 piece unworked	1
1 polished bead	1
1 rectangular piece	1
1 ring	1
1 ring 4 buttons	1
1 slider	1
1 spindle-formed jet article	1
1 stud	3
1 stud 1 ring	1
1 triangular pendant	1
119 beads 1 triangular pendant	1
12 beads (3 long, 9 round)	1
124 beads 1 semi-circular pendant	1
2 pendants 1 bead	1
2 studs	2
20 buttons	1
206 beads & some broken ones	1
3 buttons	1
4 beads	1
4 buttons	1
5 buttons	1
623 beads	1
approximately 162 discs 1 triangular lozenge	1
Grand Total	42

Wolds' barrows with jet objects

Barrows with objects made of bronze	Total barrows
1 article	1
1 awl	1
1 awl 2 earrings	1
1 awl/pricker	2
1 awl/pricker 2 drills	1
1 bodkin	1
1 burnt article	1
1 burnt object	1
1 'Celt'	2
1 dagger	1
1 dagger 1 knife fragment	1
1 dagger-blade	1
1 dagger-blade 3 rivets	1
1 dagger-blade 4 rivets	1
1 dagger-knife 1 pricker	1
1 dagger-knife blade	1
1 drill	1
1 drill/awl	1
1 flat piece	1
1 knife	1
1 knife blade	1
1 knife-dagger	1
1 knife-dagger 3 rivets 1 drill 1 axe-blade	1
1 knife-dagger 44 rivets 1 curved piece 2 square wires	1
1 knife-dagger 5 rivets	1
1 knife-dagger & tang 3 rivets	1
1 piece awl/pricker	1
1 pricker	7
1 pricker 1 dagger-blade & rivets	1
1 pricker& bronze handle	1
1 sword	1
1 thin piece	1
1 thin piece (knife?)	1
1 thin ring	1
2 earrings	1
2 knife-daggers 6 rivets	1
2 prickers	1
2 rings	1
2-bladed knife	1
3 awls	1
4 early axes (3 ornamented)	1
numerous bronze pieces & fragments	1
rivet/part dagger	1
small pieces (from decayed knife?)	1
Grand Total	52

Wolds' barrows with bronze objects

Barrows with objects made of amber	Total barrows
1 bead	1
1 stud/button red amber	1
Grand Total	2

Wolds' barrows with amber objects

Barrows with other, unique objects	Total barrows
1 baked clay spindle-whorl	1
1 bark & skin dish small wooden spatula	1
1 basalt axe-hammer	1
1 boulder with worked edge	1
1 coracle-shaped wickerwork coffin	1
1 cylindrical basketwork receptacle	1
1 egg-shaped hammerstone	1
1 flat hammerstones (1 sandstone)	1
1 flint cube	1
1 fossil	1
1 greenstone bodkin	1
1 gritstone boulder	1
1 gritstone hammerstone 1 part sandstone axe	1
1 gritstone pounder	1
1 gritstone tool?	1
1 hammerstone	1
1 honestone axe	1
1 honestone chisel	1
1 horse-shoe flint disc	1
1 jet/Kimeridge coal stud 1 large 'hand-weapon'	1
1 lignite pendant 1 basalt axe-hammer	1
1 lignite ring/armlet 1 oval tool 3 pounders	1
1 mica-schist implement	1
1 oak piece with cross incision on it	1
1 pear-shaped pebble	1
1 piece worked lignite	1
1 pierced grey stone hammer-head	1
1 pierced ox skull	1
1 pierced sandstone cobble	1
1 polished whetstone	1
1 polished wood button	1
1 round piece of wood	1
1 sandstone button 1 wooden handle 1 wooden sheath	1
1 sandstone hammerstone	2
1 shaped hardwood article	1
1 square sandstone block	1
1 whinstone axe hammer & handle	1
1 white hammerstone (ash handle)	1
1 wooden receptacle	1
11 jet/Kimeridge coal beads	1
2 perforated chalk discs	1
2 pieces ironstone	1
3 Folkton Chalk Drums!	1
3 gritstone pounders	1
auroch tooth	1
iron pyrite lumps	1
linen shroud-like cloth	1
oak log trough & lid	1
rectangular timber construction	1
wooden object in hand	1
woven/knitted flax/wool decayed wooden trough	1
Grand Total	52

Barrows with other unique objects

Barrows with objects made of quartz	Total barrows
1 flat pebble	1
1 hammerstone	3
1 oval pebble	1
1 pebble	4
1 pebble hammerstone	1
1 pounder	2
1 struck pebble	1
2 pebbles	1
2 pounding stones	1
2 yellow pebbles	1
3 pebbles	1
4 pebbles	1
large pebble	1
Grand Total	19

Wolds' barrows with quartz objects

Barrows with shell objects	Total barrows
1 ammonite	1
1 ammonite portion	1
1 large shell	1
2 (1 pierced)	1
many small 4 spiral	1
spiral shells 1 fossil shell	1
Grand Total	6

Wolds' barrows with shell objects

Barrows with ochre	Total barrows
1 piece	1
2 lumps yellow ochre	1
ochre lumps	1
yelllowish-red ochre	1
Grand Total	4

Wolds' barrows with ochre

Barrows with objects made of polished stone axe (celt)	Total barrows
1 axe	1
1 burnt axe	1
1 celt	1
1 'celt' portion	1
1 chip groundstone axe	1
1 chipped axe	1
1 flake groundstone axe	1
1 green-coloured honestone adze	1
1 greenstone	1
1 greenstone splinter	1
1 honestone axe	1
1 honestone tool 3 stone axe fragments 1 flint axe	1
1 large & 2 smaller portions of greenstone axe	1
1 part polished axe	1
1 perforated axe hammer	1
1 perforated greenstone	1
1 perforated greenstone axe	1
1 piece axe	1
1 piece greenstone	1
1 piece polished stone axe	1
1 polished hammerhead stone	1
1 splinter greenstone	1
1 splinter greenstone axe	1
1 stone axe head	1
greenstone wristguard bronze rivets & gold heads & bronze ?buckle	1
half a celt	1
small end of axe	1
Grand Total	27

Wolds' barrows with polished stone axe (celt) objects