

BEYOND THE ICE

Creswell Crags and its place in a wider European context

MATTHEW BERESFORD

Archaeopress

Archaeopress

Gordon House
276 Banbury Road
Oxford OX2 7ED

www.archaeopress.com

ISBN 978 1 905739 50 9
ISBN 978 1 78491 080 8 (e-Pdf)

© Archaeopress and Matthew Beresford
2012

All rights reserved. No part of this book may be reproduced, stored in retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying or otherwise, without the prior written permission of the copyright owners.

Cover image

Ice Age Bison Wall Art by Alisdair McNeal

In memory of Roger Jacobi 1947-2009

Beyond the Ice

Creswell Crags and its place in a wider European context

<i>List of Illustrations</i>	ii
<i>Acknowledgements</i>	v
<i>Introduction</i>	1
<i>Chapter One: Antiquarian interest & early fieldwork</i>	9
<i>Chapter Two: Armstrong's research and interpretations</i>	22
<i>Chapter Three: Discovery of the rock art at Church Hole Cave, Creswell Crags and its wider implications</i>	36
<i>Chapter Four: Challenging the Creswellian: The way forward</i>	50
<i>Chapter Five: The development of Creswell as a heritage site: a 21st century perspective</i>	63
<i>Chapter Six: Neanderthals and Moderns: the search for Creswell Man</i>	78
<i>Chapter Seven: Final Remarks</i>	93
<i>Chapter Eight: Conclusion</i>	101
<i>Appendix</i>	104
<i>Bibliography</i>	105

LIST OF ILLUSTRATIONS

- I.1 – *Location of Creswell Crags* (M. Beresford)
- I.2 – *George Stubbs' 'Two Gentlemen Going a shooting, with a view of Creswell Crags, Taken on the Spot', c. 1767, oil on canvas* (Public Domain)
- I.3 – *Timber support beam from the medieval wooden mill at Creswell Crags* (M. Beresford)
- I.4 – *William Buckland (1784-1856)* (Public Domain)
- I.5 – *Leg bones gnawed by hyaenas, with similarities labelled, (left) Buckland's experimental bone, (right) bone of bison from Kirkdale* (Public Domain)
- I.6 – *Aerial view of Creswell Crags* (© Creswell Heritage Trust)
- 1.1 – *The Reverend J Magens Mello (1836-1914)* (Public Domain)
- 1.2 – *Sir William Boyd Dawkins (1837-1929)* (Public Domain)
- 1.3 – *Robin Hood's Cave during the 19th century excavations* (© Creswell Heritage Trust)
- 1.4 – *Artefacts from the 19th century excavations at Creswell* (© Creswell Heritage Trust)
- 1.5 – *The horse engraving from Robin Hood's Cave* (© Creswell Heritage Trust)
- 1.6 – *Pleistocene fauna of Robin Hood's Cave* (M. Beresford. Source: Boyd Dawkins, 1876)
- 1.7 – *Upper canine of Machairodus from Robin Hood's Cave* (Boyd Dawkins, 1877)
- 1.8 – *Bone needle from Church Hole* (Boyd Dawkins, 1877)
- 1.9 – *Bone awl from Church Hole* (Boyd Dawkins, 1877)
- 1.10 – *Notched bone from Church Hole cave* (Boyd Dawkins, 1877)
- 1.11 – *Pleistocene fauna of Church Hole Cave* (M. Beresford, Source: Boyd Dawkins, 1876)
- 2.1 – *Alan Leslie Armstrong* (© Creswell Heritage Trust)
- 2.2 – *Excavations at the Pin Hole cave during the 1920s* (© Creswell Heritage Trust)
- 2.3 – *Bone 'marrow scoop' from Mother Grundy's Parlour* (M. Beresford, redrawn from Armstrong, 1924)
- 2.4 – *Bone 'engravings' from Mother Grundy's Parlour. Bison (left), Reindeer (middle), Rhinoceros (right)* (M. Beresford, redrawn from Armstrong, 1924)
- 2.5 – *Possible skinning tool from Mother Grundy's Parlour* (M. Beresford, redrawn from Armstrong, 1924)

- 2.6 – *Bone reindeer point from Church Hole cave* (Garrod, 1926)
- 2.7 – *Replica of an engraved bone object of Magdalenian design from Creswell Crags M. Beresford*
- 2.8 – *The anthropomorphic engraving from the Pin Hole cave* (Armstrong, 1929)
- 2.9 – *Typical section of the Pin Hole Cave* (Armstrong, 1937)
- 3.1 – *Plan of Church Hole cave depicting the twelve ‘panels’ of Ice Age art* (M. Beresford)
- 3.2 – *Deer Stag engraving (panel III), showing modern grafitti and ‘goatee beard’* (M. Beresford)
- 3.3 – *Panel VII at Church Hole: are they birds or stylised females?* M. (Beresford)
- 3.4 – *U-series results from Church Hole and Robin Hood’s Cave* (M. Beresford. Source: Pike et al, 2007)
- 3.5 – *Radiocarbon determinations from human-modified bone and antler from Creswell* (M. Beresford. Source: Pike et al, 2007)
- 3.6 – *Church Hole Panel VII depicting, in the author’s opinion, stylised female forms* (M. Beresford, redrawn from Pettitt 2007)
- 3.7 – *The Venus Impudique from the Dordogne* (Public Domain)
- 3.8 – *Gönnersdorf Plaquette 2, with detail of engraving 2b – Note the ‘truncating’ line at the bottom of the legs* (M. Beresford, redrawn from Pettitt, 2007)
- 3.9 – *Engraving of a stylised female form on a lamp from the site of Grotte de Courbay* (M. Beresford, redrawn from Pettitt, 2007)
- 3.10 – *The sorcerer from Les Trois Freres* (Public Domain)
- 4.1 – *Distribution map reflecting Late Upper Palaeolithic sites contemporary with the Creswellian occupation at Creswell Crags* (after Jacobi & Pettitt, 2009)
- 4.2 – *Flint tools from Newton Linford: piercer (a), obliquely truncated blade with burin scar (b), retouched blade with en éperon preparation (c), Cheddar point (d)* (M. Beresford, redrawn from Cooper, 2002)
- 4.3 – *Tanged point from Röke, Sweden* (M. Beresford, redrawn from Larsson, 1991)
- 4.4 – *Flint tool types from the open site at Mill Farm, Whaley* (M. Beresford. Source: Hart, 1984)
- 4.5 – *The arctic hare was integral to the lifestyle of Creswell Man* (© Robert Nicholls, www.paleocreations.com)
- 4.6 – *Engraving the bone point with incised lines helped to hold the projectile in place when hafted* (© Creswell Heritage Trust)
- 4.7 – *The hafted weapon* (© Creswell Heritage Trust)
- 5.1 – *The merels boards from Church Hole cave* (M. Beresford)
- 5.2 – *The cave at Langwith Bassett, where Armstrong discovered Palaeolithic remains in the 1930s* (M. Beresford)
- 5.3 – *1980s publicity leaflet showing early interpretations of how ‘Creswell Man’ may have looked* (© Creswell Heritage Trust)
- 5.4 – *Exhibition space inside the new visitor centre* (© Creswell Heritage Trust)
- 5.5 – *Visitor figures for Creswell Crags, based on adult visitors undertaking guided cave tours* (M. Beresford. Source: Creswell Heritage Trust)
- 5.6 – *Skull of the Cheddar Man. Cut marks on the skull are clearly visible to the left of the suture* (© Natural History Museum)
- 5.7 – *Fossilised lynx phalanges from Pin Hole* (M. Beresford, redrawn from Brothwell, 1981)
- 5.8 – *Skull fragments found at Robin Hood’s Cave in 1969, layer OB and E* (M. Beresford, redrawn from Campbell, 1977)

5.9 – *Table showing human remains from the Creswell caves* (M. Beresford)

5.10 – *Radiocarbon dates from Human remains in the Creswell Heritage Area* (M. Beresford. Source: Chamberlain, 2007)

6.1 – *Skull comparison of a Neanderthal (La Chapelle) and Homo sapiens (Combe Capelle)* (Arthur Keith, 1915)

6.2 – *Châtelperronian blades from the type-site of Grotte des Fées* (M. Beresford, redrawn from Gravina et al. 2005)

6.3 – *Child burial from Laghar Vello, Portugal* (© Guida Casella)

6.4 – *The Lowenmensch carving from Schleswig-Holstein* (Public Domain)

6.5 – *A bâton-de-commandement found at Gough's Cave, Cheddar Gorge* (M. Beresford, redrawn from Wymer, 1984)

6.6 – *Inuit arrow straightener* (Boyd Dawkins, 1874)

6.7 – *End scraper / burin from Langwith Bassett Cave* (© Creswell Heritage Trust)

6.8 – *Cheddar point from Langwith Bassett Cave* (© Creswell Heritage Trust)

7.1 – *Map of Doggerland showing land mass before sea levels rose* (© David Astbury. Rivers after Coles and Rouillard)

7.2 – *Penknife points from the Final Palaeolithic site at Rookery Farm* (M. Beresford, redrawn from Conneller, 2009)

7.3 – *The Abbots Bromley Horn Dancers, circa. 1915, wearing antler headdresses similar to those found at Star Carr. Were they for ritual, hunting or a ceremonial dance?* (Public Domain)

7.4 – *Prehistoric toolmaker John Lord making replica Ice Age tools during an event at Creswell Crags* (© Creswell Heritage Trust)

Acknowledgements

I have wanted to write about the site of Creswell Crags for quite some time, but I was not sure of which angle to take. It was after a brilliant lecture on the history of Creswell Crags back in the summer of 2008 that I mentioned my wish to the late Roger Jacobi of the Natural History Museum of London, who was quite encouraging in his response. He suggested that I may wish to attempt to collate all the information that was out there and offer up a new interpretative history of the Crags. And so the seed was planted in my head and the foundations laid for what I wanted to look at. So, here, I wish to offer my thanks to Roger who, sadly, passed away before this work was finished.

I have been aided by many other people along the way, particularly my old mentors at the University of Nottingham, Dr. David Marcombe (who sadly had to retire through ill health before this work was completed) and Dr. Sarah Speight, who was once again instrumental in shaping my work from an early stage, as she did for my previous book. I also wish to offer my sincere thanks to the publishing team at Archaeopress, particularly David Davison for his belief and support, and to the many people who gave me permission to use their images.

This work, in its finished form, would have been almost impossible to complete without the richness of the Creswell Research Library archive, and I am indebted to Ian Wall and his team at Creswell for allowing me access to this and pointing me in the right direction from time to time. I particularly wish to thank John Scott, Anna Griffiths, Maria Smith and Rebecca Clay who all, at one time or another, offered advice and judgement on various aspects of the history of Creswell Crags. Also, the staff at the various archives who have helped me along the way, including The National Archives, the Nottinghamshire Archive Office, the Derbyshire Record Office, the Derby Museum, Sheffield Museum, the Natural History Museum and the British Museum, particularly Jill Cook for her expert advice on the mobile art from Creswell.

I must now go back in time and thank the many people who have worked at Creswell Crags over the last one hundred and thirty-four years, without whose work I would have had nothing to debate! These are the Rev. John Magens Mello, Sir William Boyd Dawkins, Thomas Heath, Dr. Robert Laing, Alan Leslie Armstrong, Dr. Charles McBurney, Jeffrey Radley, John Campbell, Simon Collcutt, Rogan Jenkinson, Dr. Roger Jacobi, Dr. Paul Pettitt and Dr. Andrew Chamberlain.

Finally, I must thank the people who were the most crucial to this work, the very people who left behind the evidence that this entire work is based upon: the Ice Age inhabitants of the Creswell caves.

I remember reading Francis Pryor's excellent book *Britain BC* and marvelling how he handled the obligatory 'errors and omissions' part, so here I shall echo his words – 'it is customary to end the acknowledgements part with a formulaic statement to the effect that the errors, biases and omissions owe nothing to the various people mentioned, and are entirely the author's responsibility'. And just like Francis, I really *do* mean it also.

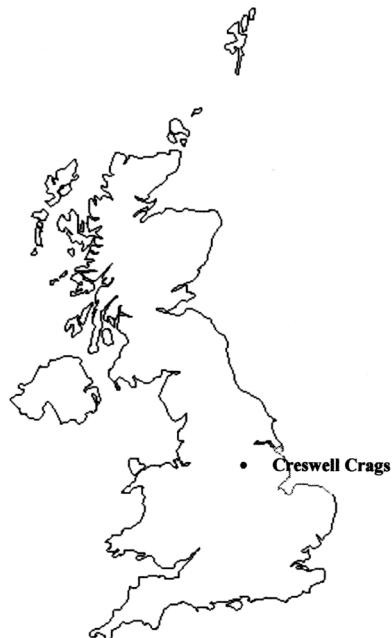
Matthew Beresford
Southwell
Nottinghamshire
September 2010

Introduction

'The Creswell Crags, on the Nottinghamshire-Derbyshire border near Worksop, come as a surprise when one is travelling through this fairly featureless landscape. Suddenly there is an idyllic little valley with a small stream between cliffs of Magnesian Limestone. And in the cliffs are a whole series of small caves, most of which were inhabited at times during the last Ice Age'.

Paul Bahn, *Current Archaeology*, May / June, 2005

In 1769, 10,000 years after the last Ice Age, the prehistoric history of Creswell Crags lay long forgotten. In the gorge that day was an artist by the name of George Stubbs, who stood painting his picture *Two Gentlemen Going a shooting, with a view of Creswell Crags, Taken on the Spot* which shows a medieval wooden water mill in the background. The thatched roof was supported by a timber beam, and when Creswell Heritage Trust moved from its old visitor centre to the new one in May 2009, this timber support beam was discovered amongst their varied collection of archaeological artefacts. It had been placed in storage and largely forgotten about, but measures are now being considered to preserve and perhaps display this artefact. This little story is one of many that can be told by the artefacts discovered here at the Crags and all paint a wonderful picture about its rich history. But it is not medieval water mills that the Crags are famous for, it is its Palaeolithic (Old Stone Age) caves.



I.1 – Location of Creswell Crags
(M. Beresford)



I.2 – George Stubbs' *'Two Gentlemen Going a shooting, with a view of Creswell Crags, Taken on the Spot'*, c. 1767, oil on canvas (Public Domain)

These caves harboured one of the richest collections of Palaeolithic occupation known in Britain, and have since proven to be one of the most northerly sites that Ice Age Man visited. Indeed, in 2003, we discovered that it is also the home of Britain's only known Ice Age cave art. But that is another story. This book attempts to pull all of those stories together and document who those Ice Age people were that used the Crags, what they were doing there and how, over time, archaeologists have pieced together the thousands of pieces of the puzzle in order to understand this.

Much has been written on the archaeology and history of Creswell Crags, but these tend to be isolated approaches or rather dated. We are lacking an up-to-date work that gathers all the information and attempts to put together a cohesive picture of the site, something which this book also aims to address.

The purpose of this book, then, is to investigate how past work and interpretations of the site have changed over time, and how these have invariably led to how the site has been managed and promoted. The first chapter aims to explore the early antiquarians and their work at Creswell in the 1870s and how they laid the foundations for future work. Chapter 2 then focuses on the more methodological approach of Alan Leslie Armstrong in the 1920s and 1930s when scientific methods were advancing and the archaeological techniques became more proficient. From these two chapters a specific picture of how Creswell was used in the past shall emerge, and ultimately led to the idea of a centralised system for Britain (known as the 'Creswellian') in the final stages of the Pleistocene, ultimately isolating it from its potential place in a wider European context. The discovery

of what is essentially Magdalenian (or perhaps Magdalenian-inspired) art in Church Hole cave in 2003 revolutionised our thinking on this matter, and this is discussed in Chapter 3. Chapter 4 then examines how recent research has radically altered our view on the site and the Creswellian in general, before we then consider how all this information, and the newly discovered cave art, can be used to argue against Garrod's proposal of a localised British industry and reasserts Britain's place upon a much wider continental Palaeolithic map. This is discussed in Chapter 5, which also addresses the question of how the site should now be managed, promoted and used to educate, both the public and the academic world, in the present and in the future – essentially how Creswell Crags developed (and should continue to be developed) as a heritage site. The final chapter then looks at whether, from all this information, we can confidently ask 'who was Creswell Man?' and attempts to address the differences (or similarities) between the Neanderthal inhabitants and the Modern Humans. The work culminates by looking at what happened after the Last Ice Age and how the land, and settlement patterns, altered in this period.

In 1926, after fifty years of work at Creswell Crags, the archaeologist Dorothy Garrod coined the term the Creswellian for what she suggested as a localised British industry in the Late Upper Palaeolithic. In doing this she severed the links between Britain and its European neighbours. Some eighty years later I would challenge that view. Garrod chose the site of Creswell Crags as her type-site for her 'Creswellian' model on the basis that the flint assemblage discovered there, predominantly shouldered points and backed blades, showed such an abundance in variety that it was a superlative in representing the uniqueness of a British culture.¹ Jacobi, however, recently stressed the point that it was exactly due to this wide variety that Creswell should *not* be used as a definitive model.²

There is human occupation evidence at Creswell from around 60,000 years ago up to the present day and much of this early period, along with later occupation evidence, is discussed over the course of this book. As far as actual historical interest in the gorge goes, we had to wait until the latter half of the 19th century, when cave exploration became quite popular. Prior to this the intrepid antiquarians focused their attention on the burial mounds, which we now know date to later Prehistory, namely the Neolithic and Bronze Ages. The thought process behind this was based on the idea put forward in the Bible that the world was created in precisely 4004BC, and the antiquarian explorers took this as gospel (no pun intended!). They therefore set out to find the 'Ancient Britons' of the period, and soon discovered their remains in the barrows and tumuli littering the landscape.³ But with the publication, and consequent acceptance by the scientific world, of Charles Darwin's theories on evolution (*On the Origin of Species*, 1859) society soon realised that our earliest ancestors went much, much further back in time. These ideas were applied to early discoveries by the Rev. William Buckland such as the Palaeolithic burial of the 'Red Lady' at Paviland Cave on the Gower Peninsula and of extinct animal bones at the cave site of Kirkdale, Yorkshire, both in the early 1820s.

Initially, Buckland believed that the deposits of sand and gravels within the caves he explored were evidence of the great flood (Darwin's theories would later challenge and disprove Buckland's 'great flood' hypothesis). Much like the Rev. J Magens Mello would discover in his later exploration at Creswell, Kirkdale Cave showed evidence of animal

¹ Dorothy Garrod *The Upper Palaeolithic Age in Britain*, (Oxford), 1926

² Roger Jacobi *The Creswellian, Creswell and Cheddar, in The Late Glacial in north-west Europe: human adaptation and environmental change at the end of the Pleistocene*, Barton, N, Roberts, A J and Roe, D A (eds), CBA Research Report No. 77, 1991, pp. 128-40

³ For an account of local antiquarian barrow-digging, see Thomas Bateman's *Vestiges of the Antiquities of Derbyshire* (1848) which details his work in the Peak District



I.3 – Timber support beam from the medieval wooden mill at Creswell Crags
(M. Beresford)

bones being gnawed by hyaenas leading Buckland to suggest it to be an early hyaena den. He became so obsessed by this that he decided to experiment with a live hyaena to attempt to understand how they ate the bones and how they subsequently regurgitated them. Initially, he borrowed one from a travelling circus but eventually purchased his own – his intention was to kill it and dissect its stomach, but in the end he had grown so attached to ‘Billy’, as he fondly named it, that he could not bring himself to do this and ended up keeping him as a pet for nigh on twenty-five years!⁴

His experiments showed that hyaenas bit off large fragments from the upper part of a bone using their molar teeth and swallowed them whole. On retrieving the fragments

⁴ Chris Stringer *Homo Britanicus*, (London), 2006

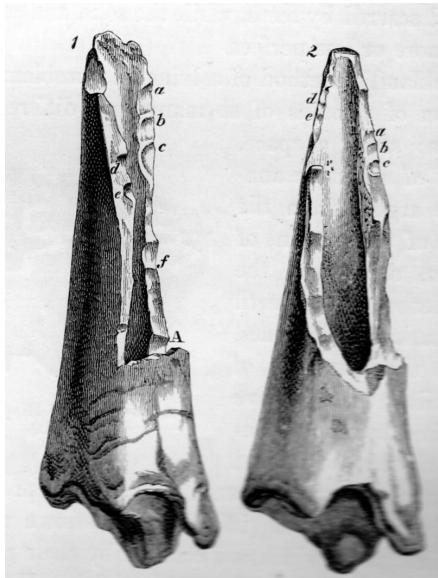


I.4 – William Buckland (1784-1856) (Public Domain)

Buckland compared them to Palaeolithic remains of bison bones from Kirkdale Cave, noting the same tell-tale marks on these remains as those from his own experiments. William Boyd Dawkins, who dug with Mello at Creswell (see Chapter 1), was a noted admirer of Buckland's work, and commented on the hyaena experiments in his own work, *Cave-Hunting* (1874), which detailed his varying beliefs on the study of caves and undoubtedly shaped his methods at Creswell.

These new theories and the recent discoveries led the antiquarians to begin the systematic study of cave sites and consequently led Mello to obtain permission to explore the Creswell caves in the mid-1870s (see Chapter 1), principally, on the Derbyshire side, Mother Grundy's Parlour (named, legend informs us, as Old Mother Grundy – a local 'witch' or herbalist – lived there for a time in the 19th century), Robin Hood Cave (the outlaw is said to have escaped the Sheriff's men by hiding in the cave) and Pin Hole (Victorian ladies dropped hat pins into a recess in the cave in order to bring good luck) and on the Nottinghamshire side Church Hole (no one is quite sure how this name came about, but it could simply be due to the roof of the cave mirroring that of a church ceiling).

These early restraints within the scientific world are reflected by Mello himself when he commented how '*some forty years (from 1879) or so ago the possibility of man having been a contemporary of the mammalian fauna of the Pleistocene was, if not openly*



1.5 – Leg bones gnawed by hyaenas, with similarities labelled, (left) Buckland's experimental bone, (right) bone of bison from Kirkdale
(Public Domain)

derided, yet received with great scepticism, even in the scientific world'.⁵ Nevertheless, the results were astounding.

Cornelius Brown offered his view on Creswell and the early exploration in 1896:

'The most picturesque exposure of the magnesian limestone in Nottinghamshire is at Creswell Crags, near Worksop. Here time and a running stream have carved out and fashioned a long ravine. On each side of the stream in the tall limestone cliffs are deep caverns, which have recently been explored by a committee of the British Association. In these caverns have been found an amazing number of remains of animals long ago extinct in this country. Amongst these were the lion, tiger, leopard, hyena, wolf, bear, rhinoceros, bison, hippopotamus, Arctic fox, and the elephant. Doubtless the Creswell caves were in ages past the abode of the cave-dwelling hyenas who dragged their prey into these recesses in the rock. A large proportion of the bones found were gnawed after the manner peculiar to the hyena tribe. In one of these caves the writer discovered a 'first milk molar' of the mammoth (*Elephas primigenius*), which completed the national collection of the teeth of the mammoth. Before this specimen was handed over to the British Museum, it was described by Sir Richard Owen, F.R.S., before the Geological Society of London. A portion of Creswell Crags is in Derbyshire, but the magnesian limestone of that spot is a totally distinct rock from the 'mountain limestone,' which is such a familiar feature in the scenery of Derbyshire'.⁶

By the turn of the century the importance of the discoveries at Creswell were being wholly realised, particularly because the Midlands, and indeed Britain, were unable to offer up anything remotely close to Mello and his compatriots' discoveries. The *Victoria County History* informs us of this local scarcity: 'the Pleistocene deposits of Derbyshire

⁵ Rev. J Magens Mello *Palaeolithic Man at Creswell*, *Derbyshire Archaeological Journal*, Vol. I, 1879

⁶ Cornelius Brown *A History of Nottinghamshire* (1896)



1.6 – *Aerial view of Creswell Crags*
(© Creswell Heritage Trust)

are comparatively meagre... (as opposed to the Trent basin) (but) a few of these deposits have yielded remains; but the smallness of the number is remarkable, owing perhaps to only a few of the caverns (being) excavated.⁷ When the work was published in 1905 it deemed it 'remarkable' that nothing had been found in the Carboniferous Limestone (ie.

⁷ *Victoria County History, Vol. I, (London), 1905 p. 163*

the Peak District) and that only the recent discoveries at Kent's Hole, Torquay surpassed those made by Mello at Creswell, a telling testament to the importance of the site.

In his study of the Late Upper Palaeolithic (on which period this work focuses) Campbell⁸ suggested that the cultural material of the period was directly concentrated in these cave sites, particularly along the 'contact zones between highlands and lowlands' – as is the case at Creswell – and that this most likely represented the ancient hunting practice of exploiting 'two or more viable environmental zones at the same time for greater economic yield'.⁹ So what was this 'environmental zone' at Creswell like in the Late Upper Palaeolithic? Campbell describes it thus:

'The Late Upper Palaeolithic is associated with a Late Last Glacial environment varying between Boreal and Sub-Arctic. The flora is that of a nearly treeless steppe-tundra, with shrubby forms of Juniper, Willow and Birch, and, particularly during Zone II, occasional coppices of tree birches. The fauna suggests similar conditions and its land mammals include notably brown bear, woolly rhinoceros, wild horse, red deer, giant deer and reindeer, the main food animals again being wild horse and reindeer'.¹⁰

This description gives us a good idea of what the landscape was like at Creswell in the period and can go someway to aid us in our understanding of why Palaeolithic man was drawn to the caves. It is a marked contrast to the picture of Creswell today: 'Creswell Crags is found today amidst a decaying industrial conurbation, a landscape that could hardly be more different from the beauty of ice-age tundra'.¹¹ This view is a little harsh, and recent developments in the area have improved it considerably, but one gets the point. So this book shall focus on understanding the Palaeolithic history of Creswell Crags and attempt to address the question as to whether Garrod's view of a localised British industry is still applicable, whilst also questioning whether because of this Creswell is finally realising its potential as a forerunner in being one of Britain's, and indeed Europe's, premier Palaeolithic visitor sites.

⁸ J B Campbell *The Upper Palaeolithic of Britain*, (Oxford), 1977, p. 412

⁹ Ibid.

¹⁰ Ibid.

¹¹ Steve Mithen *After the Ice: A Global Human History, 20,000-5000BC*, (London), 2003, p. 118