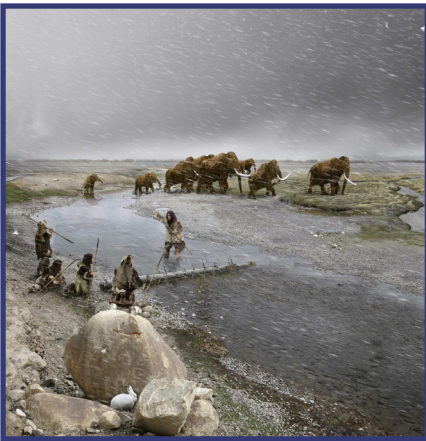


ALSF Dissemination Project: Lost Landscapes of Palaeolithic Britain



**The British Palaeolithic post-ALSF:
Core Principles for Future
Enhancement, Expansion and
Engagement**



April 2014



Historic England

Issue No: 3

OA Job No: 5193

**NHPP 3A3 Deeply Buried/Subterranean Pleistocene and Early Holocene
Archaeology
Project number – 5458**

LOST LANDSCAPES
of Palaeolithic Britain

**The British Palaeolithic post-ALSF: Core Principles for Future
Enhancement, Expansion and Engagement**

*Mark White¹, Martin Bates², Matthew Pope³, Danielle Schreve⁴, Beccy Scott⁵ and
Andy Shaw⁶*

¹ Durham University; ² University of Wales, Trinity St Davids; ³ University College
London; ⁴ Royal Holloway University of London; ⁵ The British Museum; ⁶ University
of Southampton

Oxford Archaeology

2014

LOST LANDSCAPES

of Palaeolithic Britain

The British Palaeolithic post-ALSF: Core Principles for Future Enhancement, Expansion and Engagement

CONTENTS

SUMMARY.....	1
1 INTRODUCTION.....	3
1.1 SCOPE OF DOCUMENT	3
1.2 AIMS	3
1.3 ACKNOWLEDGEMENTS	4
2 REVIEW OF CURRENT STATUS.....	5
2.1 WHERE ARE WE NOW?	5
2.2 RESEARCH FRAMEWORKS VERSUS RESOURCE ENHANCEMENT FRAMEWORKS	5
2.3 CHANGING PRIORITIES	8
3 EXPANDING THE PLEISTOCENE RECORD.....	9
3.1 FRAMEWORK FOR EXPANDING THE PLEISTOCENE RECORD	9
3.2 METHODS FOR EXPANDING THE PLEISTOCENE RECORD.....	12
4 ENHANCING THE PLEISTOCENE RECORD	15
4.1 FRAMEWORKS FOR ENHANCING THE PLEISTOCENE RECORD	15
4.2 METHODS FOR ENHANCING THE PALAEOLITHIC RECORD	15
5 ENGAGING STAKEHOLDERS.....	17
5.1 FRAMEWORKS FOR ENGAGING STAKEHOLDERS	17
5.2 METHODS FOR ENGAGING STAKEHOLDERS	18
6 BIBLIOGRAPHY.....	20

SUMMARY

Palaeolithic archaeology in Britain must meet the needs of a number of different stakeholders, the most important in the context of English Heritage being: a) developers and development control officers and; b) national research agendas. Both currently have different requirements which, as suggested here, might be harmonised under a single banner of “Expanding, Enhancing and Engaging” (the E³ Framework). The following objectives are identified:

Expanding

- E1.1 Future research frameworks should be remodelled to provide a greater emphasis on discovery of new sites and the enhancement of the existing record, and less on academic research agendas.*
- E1.2 These changing priorities should be reflected in the planning process, through greater contingency measures in development and mineral plans, along with better understanding between Palaeolithic archaeologists and development control officers.*
- E1.3 A landscape approach needs to be adopted, and all areas of the landscape need equal consideration, including deposits whose age might normally preclude investigation (i.e. Ipswichian deposits). This approach requires that the Palaeolithic is considered and recognised to include sites of palaeontological and palaeoenvironmental interest as well as human occupation.*
- E1.4 A routine set of standards for evaluating the Palaeolithic record in terms of development control and quarry monitoring need to be developed that are implemented on a national scale. The techniques exist but they are not uniformly employed. The scale of what constitutes adequate investigation remains to be identified.*
- E1.5 To examine how these issues are dealt with in northern France, which has analogous Pleistocene deposits but a much higher discovery rate.*
- E1.6 The current emphasis on marine resources which cannot be easily investigated needs to be translated into potential onshore continuations, which can be investigated.*

Enhancing

- E2.1 Building on the English Rivers Palaeolithic Survey (TERPS) and Council for British Archaeology (CBA) gazetteers, enhancement through reviews of existing Palaeolithic collections in local and regional museums, to include artefacts; associated*

documentation; history of collections; current curatorial conditions and accessibility. This should be completed through an online national register.

- E2.2 An expansion of TERPS is required, which more fully incorporates Middle and Upper Palaeolithic sites, field-walked sites and personal collections.*
- E2.3 Surveys of under-explored landscape types and deposits – e.g. Chalk uplands, Ipswichian deposits.*
- E2.4 Better protection of Palaeolithic resources (mineral plans, development control, monument status) and a national assessment of potential Pleistocene deposits.*
- E2.5 Investment in reviewing potential of artefact-based studies, such as raw material and use-wear analysis, which can add value to existing collections.*

Engaging

- E3.1 Assist development controllers in understanding the nature, value and potential of the resource – the first step in this is the ‘Lost Landscapes of Palaeolithic Britain’ volume.*
- E3.2 Revisit the initiatives begun by the National Ice Age network (NIAN), and attempt to re-open negotiations with the Mineral Products Association (MPA) to attain a new level of co-operation, including watching briefs, rapid mitigation plans, and the establishment of local relationships with managers.*
- E3.3 Building local level relationships with major developers and development control officers.*
- E3.4 Develop an agreement on protection and responsibility for endangered sites.*

1 Introduction

1.1 Scope of document

1.1.1 This report has been written in response to a Brief provided by English Heritage entitled *A Project Brief for an ALSF Dissemination Project 'Lost Landscapes of the Palaeolithic'* (July 2011). The overall aim of the project is to raise awareness and widen understanding of the highly important contribution Aggregates Levy Sustainability Fund (ALSF) projects have made to Palaeolithic archaeology.

1.1.2 The project forms a key component of Activity 3A3 of the National Heritage Protection Plan (NHPP: *Deeply Buried/Subterranean Pleistocene and Early Holocene Archaeology*) and is seen as an essential precursor to the initiation of a new programme of research aimed at enhancing the protection of the Palaeolithic and Pleistocene resource.

1.1.3 The proposed outcome of the project comprised three components:

- 1) A peer reviewed monograph providing an overview and comparative study of Palaeolithic/Pleistocene sites and landscapes of the Lower and Middle Palaeolithic, with a particular focus on the methods of investigation and results from ALSF projects – the *Lost Landscapes of Palaeolithic Britain* volume.
- 2) An update of The English Rivers Palaeolithic Survey (TERPS) gazetteer of sites and artefact collections with data from ALSF projects
- 3) A separate review or archive report for English Heritage to inform relevant research activities undertaken as part of the NHPP through assessments of best practice and the development of research priorities.

1.1.4 This report concerns the third component of the project and is intended as a supplement to the detailed review of ALSF projects and methods presented in the peer reviewed monograph, authored by the same team of Palaeolithic specialists.

1.2 Aims

1.2.1 The main aims of the report are to:

- 1) Provide an assessment of best practise in methodologies for prospection and assessment.
- 2) Set out detailed research/conservation priorities linked to the current research frameworks.
- 3) Produce a strategy to complete the National Ice Age Network (NIAN) assessment of quarries.

1.3 Acknowledgements

1.3.1 The 'Lost Landscapes of the Palaeolithic' project was commissioned by English Heritage. The project was overseen for English Heritage by Jonathan Last and monitored by Helen Keeley. This report was prepared by Mark White (Durham University), Martin Bates (University of Wales, Trinity St Davids); Matthew Pope (University College London); Danielle Schreve (Royal Holloway University of London), Beccy Scott (British Museum) and Andy Shaw (University of Southampton). Mark White also undertook an overall editorial role. The project was managed by Elizabeth Stafford for Oxford Archaeology South.

2 Review of Current Status

2.1 Where are we now?

2.1.1 Palaeolithic archaeology, from the perspective of English Heritage and within the developer funded framework, needs to consider point of delivery information that can be used in two different ways:

- 1) Providing information pertinent to development control officers within local government
- 2) Addressing key thematic issues such as those outlined in various documents produced by English Heritage (1998, 1999, 2008)

2.1.2 In terms of 1), the profession is hampered by lack of recognised standards for fieldwork undertaken as part of development control investigations, even to the level of what should, or should not, be included in desk-top evaluations and field assessments. When undertaken, these typically follow standardised procedures used for later prehistoric and historic archaeological investigations where the frameworks and methodologies do not always apply to the Palaeolithic archaeological resource. Consequently the notion of a successful Palaeolithic assessment of a site can mean very different things to different practitioners, let alone to development control officers and curators. This is a factor currently exacerbated by recent cuts to, and restructuring of, local, district and county Planning Departments. Learning from the ALSF findings, now is the time to address the key issues of assessment and investigation, and also to rethink the nature of the research agendas mentioned in 2). The latter point is taken up first below.

2.2 Research Frameworks versus Resource Enhancement Frameworks

2.2.1 To date, English Heritage has commissioned two framework documents for the British Palaeolithic: *Research Frameworks for the Palaeolithic and Mesolithic of Britain and Ireland* (1999) and the *Research and Conservation Framework for the British Palaeolithic* (2008); as well as a guidance document for planning authorities and developers (1998).

- 2.2.2 The research priorities outlined in these documents – however they may be framed – revolve around an evergreen set of questions that have pertained since Prestwich and Evans stepped off the boat back from Amiens (Gamble and Kruszynski 2009). They include: culture and society; environments and ecology; settlement systems and colonisation; dating; continental connections; subsistence and technology; and behaviour in different landscape settings (caves versus open air). The absence of statements regarding the need to discover new sites at this time emphasises that discovery of sites was a *de facto* given in the context of widespread quarrying (and development) activity across much of the country. Today only the specifics and the theoretical paradigms within which they have been investigated have changed. Moreover, since the 1940s the rate of discovery has all but collapsed, leaving archaeologists with no option but to re-examine the same aging sites and datasets. The question that must be asked, then, is do we actually need to continuously re-write these research frameworks, re-iterating questions that we have known for generations, or do we need something new that aims to enhance the record and give us more to work with in achieving these research objectives?
- 2.2.3 A brief examination of the ‘achievements and failures’ resulting from the different aspirations of the 1999 Framework demonstrates that it is the area of strategy and conservation that needs most work. Of the 17 research themes listed in the 1999 Framework (Table 1), 15 were considered to have been achieved or partly achieved in 2008. Only two were left totally unattended. A number of successes were achieved under the auspices of ALSF, but a larger number came through the Ancient Human Occupation of Britain project (AHOB), British Research Councils or other externally funded projects. It may be no coincidence that the authors of the AHOB project featured strongly on English Heritage working parties; indeed, those already involved in fulfilling the agendas formulated the agendas – all of the present authors included.
- 2.2.4 Survey and assessment initiatives – those that could potentially enhance the value of our existing materials and add new data – did not fare so well. Only three of the 13 stated action points were even partly achieved, and the last is arguably a research initiative:
- The assessment of the marine archive and subsequent framework document (funded by English Heritage partly through ALSF: English Heritage 2009; Gaffney *et al.* 2009)

- Guidelines on the relationship between caves and open sites (this was a conservation audit of caves in the Peak District commissioned by ALSF; Holderness *et al.* 2007)

- Publication of key sites

2.2.5 No progress was made in those areas that could have most enhanced the existing dataset:

- A TERPS-style survey for the Middle Palaeolithic
- Updating the Upper Palaeolithic element of the CBA gazetteer
- Databases of material gathered by fieldwalking over the last 20 years
- A geographical survey of Chalk landscapes and their Palaeolithic potential
- Incorporation of Palaeolithic sites and landscapes in the Monuments Protection Programme
- Legislation for protection of open-air sites
- A national register of curated Palaeolithic finds
- A regional international assessment of potential Pleistocene deposits for a balanced national coverage
- Feasibility studies to assess the potential of deeply buried sites
- Predictive computer modelling

2.2.6 Nor was the rate of new discovery particularly high. Direct prospecting for new sites continues to prove relatively fruitless. Most new sites are discovered either in advance of development, for example Southfleet Road (Wenban-Smith 2013) and Glaston (Cooper *et al.* 2012), or during the course of quarrying (e.g. Lynford, Boismier *et al.* 2012). Most are found by pure chance: such as Pakefield and Happisburgh (chance discoveries on the beach) and Harnham (discovered accidentally in course of field evaluation preceding a road scheme).

2.2.7 So, the very things that reflect most closely the philosophies of the ALSF were the things that the community failed to achieve.

2.3 Changing Priorities

2.3.1 It should be clear from the foregoing discussion that research frameworks have hitherto taken precedence over survey, prospection, discovery and conservation: this was obviously not the intention when the framework documents were formulated, but it has been the practical reality. The former initiatives are able to command funding from British and international sources. The same is not true for the priorities favoured here. We therefore urge English Heritage to help, through the planning process and mineral planning documents, to shift the focus away from academic research questions to the tools needed to answer those questions, in other words, more sites and better understanding of old materials. This is also critical in terms of outreach, education and impact. The discovery of the oldest footprints outside Africa, at Happisburgh in Norfolk (Ashton *et al.* 2014) coinciding with a major new exhibition at the Natural History Museum, certainly has a larger impact on the public's understanding and interest in the Palaeolithic than a new assessment of the relationship between the Ahrensburgian and Mesolithic. But, in order to achieve these successes and engender new and exciting research, the type of project in the list of unfulfilled dreams above need to be brought back to the table. These as three key aspirations may be summarised as:

- Expanding the Pleistocene Record
- Enhancing the Pleistocene Record
- Engaging stakeholders

3 Expanding the Pleistocene Record

3.1 Framework for Expanding the Pleistocene Record

- 3.1.1 This describes the need for more sites. Research excavations are unlikely to achieve this on their own, and development is critical.
- 3.1.2 The basic premise on which these priorities are formulated is that Palaeolithic sites/artefacts lie within, and are associated with, palaeolandscapes both terrestrial and marine (Bates and Wenban-Smith 2011). Understanding the palaeolandscape context of Palaeolithic archaeological remains is fundamental in order to expand our interpretive horizons for excavated material, to understand better the likely locations in the present landscape in which we may expect to find evidence for our earliest ancestors, and to develop and apply suitable approaches to investigation and interpretation of the past, in accordance with the varying spatial and temporal scales of their sedimentary context.
- 3.1.3 To reiterate, in order to enhance our knowledge of the Palaeolithic past, new sites need to be discovered and excavated, alongside the reinvestigation of known sites. However, this is problematic since, unlike later archaeological periods in which new sites are discovered frequently through both active prospecting and academic research projects, relatively few previously unknown Palaeolithic sites have been discovered in the last 20 years. Furthermore there has been a tendency to examine those areas known to contain archaeology, thereby reinforcing current dogma. Areas for targeting investigations should extend beyond the demonstrable (i.e. fluvial, lacustrine, coastal) to the unknown both spatially (brickearths, solution hollows) and temporally (last interglacial). Indeed, it was not long ago that we were not looking for archaeology in the Cromer Forest Bed Formation – it now boasts the oldest sites in Northern Europe. Consideration of spatial and temporal scale of variability in the nature and condition of the Palaeolithic archaeological record is particularly important in both interpreting different aspects of the past and also in developing approaches to its field investigation. Indeed, it is vital these issues are resolved in order to adequately address the issues of colonisation, presence/absence of humans etc that are key questions identified in the research framework.

3.1.4 The challenge of discovery needs to be addressed by the profession. Routine methodological approaches need to be adopted that are implemented in a systematic way (county by county) where evaluation leads through survey to landscape models. Currently procedures for desktop evaluation and survey are good and inferences regarding palaeolandscapes can be easily drawn from survey and assessment, although the immense timescales of the Palaeolithic may need some reinforcement. Testing for human presence in the landscape follows before identification of targets for excavation (Fig. 1), and the procedures for testing (test pits, trenches and super-trenches¹) are similarly well-developed procedures. Likewise, excavation procedures and inferences are good. The weak link presently in the chain, however, (Fig. 1) is in making cogent inferences and conclusions from the testing and producing a critical understanding of the context of Palaeolithic finds. Such a methodology is adopted notably in Kent and other parts of SE England to a certain extent, but beyond the region, there is often a less rigorous approach to the Palaeolithic. As time and resources are stripped away, we wonder how long best practice will be retained even in Kent.

3.1.5 This consideration needs to underpin future work in terms of what level of intensity of evaluation/mitigation is appropriate? And how should this be developed? Effective oversight by County Archaeologists and English Heritage Scientific Advisors needs to be enhanced. This might be achieved through systematic training across the sector following adequate consideration of coherent approaches to investigation/assessment. Mineral Plans need to be clearer about the potential for Palaeolithic archaeology, and appropriate contingencies to deal with it – accepted by developers at the outset, rather than an unwelcome surprise.

3.1.6 It is also important to note here, that in terms of previous research and conservation strategies for Palaeolithic archaeology, relatively little attention has been focused on methods for investigating the past at the scale of the artefact or site (e.g. English Heritage/Prehistoric Society 2008). This is primarily due to the difficulty and scale of

¹*Definition of testing methodologies*

test pit (single machine bucket width excavation approx. 1.5m wide, 3m long to the reach of the arm of digger (3-5m), recording from the ground surface and no access to trench)

trench (stepped excavation to allow access to depths of 3-4m, sections 6m across at top of trench)

super-trench (major stepped excavation to depths of 5-6m, major sections 10-50m length)

such works. By contrast, the *Managing Lithic Scatters* document (English Heritage, 2000) considered such topics as estimating the adequacy of past collection strategies and spatial strategies, in relation to the anticipated nature of a palaeo-landscape and the chronological/spatial scale of preservation.

- 3.1.7 In the context of the off-shore record, progress has been made in considering prehistoric archaeology as part of the extraction process. However in terms of meeting aspects of the Palaeolithic research agenda, it is arguable that little or no progress has been directly made. Not only are we a long way from being able to directly and effectively investigate high-resolution archaeology should it be discovered, it is not yet clear whether we have the methodologies to locate or make sense of such signatures in the first place. There is a need to develop a research agenda for the off-shore record that is primarily archaeological, as distinct from palaeogeographical, and which can, in the absence of detailed sub-marine records, be directly addressed through terrestrial datasets which exist or are accessible in the present, rather than those submerged record we aspire to access in the future.
- 3.1.8 Other issues to consider include the conceptual problems of worth in the Palaeolithic record that commonly go undiscussed but where value judgements about the worth of discovered remains are made by all. For example undisturbed horizons preserving micro-scale evidence (such as at Boxgrove and Harnham) have been rightly highlighted (Roe 1980; English Heritage 1991 & 1998) as of particular significance for their stratigraphic and chronological integrity, and their glimpses into short-lived episodes of activity. However, these represent rare and unique discoveries while disturbed and transported material, such as predominates in fluvial gravel contexts, has in contrast been generally downgraded in its potential significance (Bates and Wenban-Smith 2011; Wenban-Smith 2013). Commonly such artefacts are considered by many, including those in the curatorial environment, as of low value and not worthy of protection or research in advance of destruction. However, such a stance reflects a misunderstanding of the nature of the questions to be addressed by the material recovered. The study of such material in fact complements the evidence from undisturbed sites by bringing a different chronological and spatial perspective to bear. Valuing such material also avoids writing-off large quantities of the finite Palaeolithic resource just because we don't yet know what to do with it. The value of such material (transported artefacts) does, in fact, represent a time and space-averaged sample, giving a more representative view of lithic production and diversity across Palaeolithic timescales than the evidence from a few square metres representing one

afternoon in the distant past. Such evidence, especially when formed of substantial collections tied in with specific terrace formations, may in fact be of more value in documenting and explaining general patterns of material cultural change, since it is less vulnerable to local heterogeneity caused by, for instance, specific tasks or raw material availability. Ultimately these issues relate back to our understanding of the nature of the landscape context and setting of the archaeological resource, and its position within this framework. Some of these prejudices might be overcome through education and training of appropriate staff within the sector.

3.2 Methods for Expanding the Pleistocene Record

3.2.1 As the ALSF projects have demonstrated, large-scale investigation of landscapes is now common and the range of tools to undertake these is at our disposal. This is true for both terrestrial and marine based archaeology and spectacular results have been obtained in both areas. However, these are, in the main, technology driven projects where goals are the imaging of submerged landscapes (e.g. Doggerland), reconstructing past geographies (e.g. of the Trent, Solent or Thames) and making regional-scale statements about the likely distribution of Palaeolithic archaeologies. By contrast, the humans in this landscape are still undetected because of issues of scale, visibility and methodologies. However, to the development control officer and developer, the issue remains at the scale of the site and the individual(s) leaving the archaeological signature and consequently, there is presently a fundamental imbalance between method, practice and requirements. In order to address these issues and place the human back into our landscape, we now need to address the thorny issue of detecting the archaeology in the landscape.

3.2.2 We already have the methodologies needed for reconstructing Palaeolithic landscapes at a variety of scales, including a range of remote (geophysical) tools coupled with boreholes and geomorphological mapping to provide a landscape context for the investigation. These have essentially built on the English Rivers Project and have been deployed in a number of areas through the ALSF at varying scales (e.g. S W Britain project, Trent, Medway, Solent etc), but large areas of England remain to be considered. Adequate information for curatorial staff will only be available if a more systematic approach to such survey is adopted (e.g. as was the approach in the English Heritage funded Rapid Coastal Zone Assessment project). Beyond that, as described above, consideration now needs to be given to the methodology of testing the landscape (searching for archaeological sites) through the use of test pits, trenches

and super-trenches. No new methodologies are required to progress our knowledge but the systematic and enforced application of demonstrably effective procedures to address the key problem is required. Among the considerations that need to be resolved are:

- 1) What is the sampling density and depth needed to adequately address the question of whether or not archaeological remains are present in a site?
- 2) What significance should be attached to the discovery of a single find in a test pit?
- 3) How well do we understand the distribution of archaeological remains in Pleistocene sediments? And how can we use this knowledge to develop strategies for site investigations?

3.2.3 Practical issues need to be addressed and considered – it is probably fair to say that a statistically realistic methodology to find Palaeolithic archaeology would involve a considerable number of test pits (i.e. a 100 x 100m site is 10000m², a 2% sample of this area using test pits (3 x 1.5m each) would need 45 test pits excavated to the full depth of the Pleistocene deposits and zone of impact). Whether such a density of test pits is adequate remains to be determined; additionally we wonder what the view of the construction industry would be to such a scale of investigation. By contrast, what was the general consensus of what constituted an adequate sampling strategy for near surface archaeology prior to developing the commonly used 2-5% sampling density for large road schemes? It is probable that such figures would have been considered onerous but today is widely accepted by developer, curator and consultant. The consultant is often overlooked but actually exercises a critical role in this process. They often work to minimum guidelines in order to win the job; therefore, those minimum guidelines need to set the bar at an appropriate level to gain maximum value from the resource while still being economically viable. That is why the nested approach is advocated.

3.2.4 If extensive sampling is considered beyond acceptable (both in terms of cost and more importantly to ground conditions resulting from the excavation of large numbers of deep holes impacting on ground engineering stability) should we look to focus sampling strategy using perceived notions of the location of artefacts in different parts of the sediment body? Do we currently understand enough about Palaeolithic resource distribution that such an approach is a robust and defensible strategy? The use of predictive modelling based on these principles and on known

artefact densities in an area will help contractors, curators and planners make decisions. This will demand the mapping of palaeolandscapes, establishing where humans were most likely to have been active and why, thus enhancing the importance of archaeological landscapes without archaeology (this is of particular importance within the curatorial sector where the concept of a 'result' in Palaeolithic archaeology is seen as 'no artefacts recovered equals failure' even where important information on environmental conditions or dating of Pleistocene sediments is achieved). It will also require us to understand the geology, distribution of plants and animals, and changes in human behaviour through time. However, basing predictive models solely on the current distribution of known sites will continue to be a self-reinforcing process, and predictive models need to be developed and revised taking landscape-scale geomorphological processes into consideration. Predictive modelling as part of the desk-top survey might one day occur at the point of conception, alerting the curator and developer to potential contingency measures for excavation or watching brief and comfortably falls within the scope of National Planning Policy Framework.

3.2.5 It is worth at this point taking a look at our nearest European neighbours. In Northern France new Palaeolithic archaeological sites are being found on a regular basis, unlike in southern England, despite having broadly analogous capture points. How and where are these being found? Most are found as part of housing, road or other major infrastructure projects (e.g. Canal du Nord) rather than aggregate extraction and most are from upland capture points on the chalk. There are also well established national and regional procedures for investigating the presence of Pleistocene deposits and Palaeolithic material in advance of these projects; and there is established regionally based expertise in the form of INRAP and the regional centres. Consequently, one way into considering this issue is to look to the contrasts between the geographic focus of investigations and investigative procedures in the UK and northern France. Public and academic perceptions certainly play a role: French academics see their record as the pinnacle of the European Palaeolithic, and this translates through to the public. Their projects have huge outreach and similarly large impact, and cross regional rivalries enhance this.

3.2.6 There is also clearly a need to adequately reflect on efficiency of the investigation methodology in Palaeolithic archaeology following investigation – a process rarely articulated in the discussion and conclusions to a field investigation (an exception being Wenban-Smith, 2013).

4 Enhancing the Pleistocene Record

4.1 Frameworks for Enhancing the Pleistocene Record

4.1.1 The last comprehensive study of museum collections of early Palaeolithic material was by Derek Roe (1968), which was then used in the 1990s by John Wymer as the basis for TERPS' artefact counts and distribution maps. A lot has happened over the past 45 years, and we urgently need an up-to-date online national database of collections and archives.

4.1.2 TERPS made huge strides in this area for the Lower Palaeolithic but the survey findings need expanding. The recommendation for a new online national database is in keeping with the findings and suggestions of the Archaeological Archives and Museums document (Edwards 2013), a document supported by English Heritage, the Society of Museum Archaeologists, and the Federation of Archaeological Managers and Employers. This highlighted by the fact that a general lack of information on 'what is out there' is endemic in archaeology, not just the Palaeolithic.

4.1.3 It is also important that we critically evaluate what the TERPS database is directly telling us. It is far from being a distribution record of past human behaviour, and should not be treated as such in the planning process. It is a starting point, a record of modern discovery which may or may not reflect both the geography of past human behaviour and the survival of archaeology in primary or secondary context. Understanding the dynamic and complex relationship between these factors should be considered as important as updating the record itself. For example, isolated finds in areas where there is little historical human landscape impact could be as significant as dense distributions of material in areas of high 19th and 20th century industry or urbanisation. Further work is needed to understand this relationship and adjust perspective in the planning process accordingly.

4.2 Methods for Enhancing the Palaeolithic Record

4.2.1 We can do no better here than repeat some of the under-achievements from 1999, which remain unprioritised priorities:

- A more comprehensive TERPS-style survey for the Middle Palaeolithic
- Updating the Upper Palaeolithic element of the CBA gazetteer

- Databases of material gathered by fieldwalking over the last 20 years
- A geographical survey of Chalk landscapes and their Palaeolithic potential
- Incorporation of Palaeolithic sites and landscapes in the Monuments Protection Programme
- A national register of curated Palaeolithic finds
- A regional international assessment of potential Pleistocene deposits for a balanced national coverage

4.2.2 To this we can add a register of archival material relating to Palaeolithic sites, which needs data-basing (coverage on the National Register of Archives is patchy and the metadata for searches insensitive – Google often produces results for the NRA that do not appear using their native search engine), scanning and publishing on-line. The information it contains can totally transform the value of old collections and, in effect, render them new sites – as has been done for Baker’s Hole and Foxhall Road (Wenban-Smith 1996, White and Plunkett 2004). Regional and national scale assessments, predictive modelling and curatorial decisions utterly depend on such databases.

4.2.3 Much of this work requires museum visits and is expensive in terms of man-hours. The whereabouts of some historical collections can also be difficult to trace, as museums have merged/closed (Passmore Edwards, Ipswich, etc) and material has been relocated or even sold. Some material is in private hands but a simple web-based campaign or initiative similar to the Public Catalogue Foundation’s picture gallery should help bring these to light. Given the current erosion of publicly funded museum collections, urgent consideration should be given to this. Regional hub-collections should be considered, in order to be prepared to take curatorial control of local museum collections under threat. A sample audit of accessibility of known collections/objects held within smaller museums would be useful.

5 Engaging Stakeholders

5.1 Frameworks for Engaging Stakeholders

- 5.1.1 The initiatives started by the *National Ice Age Network* need to be revisited. The original philosophy and aspirations of NIAN was to get a better long-term ‘deal’ for significant Pleistocene remains brought to light during commercial quarrying, and an agreement in principle about recording/recovering remains in quarries. It had the backing of English Heritage, English Nature, the Quaternary Research Association, the Geologists' Association, the Council for British Archaeology, the UKRIGS Group (Regionally Important Geological and Geomorphological Sites) and the Prehistoric Society.
- 5.1.2 That said, its implementation could have been better received by some key players within the quarrying industry, and even though as a whole NIAN was seen as being ‘pro-industry’, an amount of negative feeling resulted; much it must be said the result of political tensions between industry and government unrelated to archaeology. The knock on effect of this was to put strain on long-standing relationships between Quarry owners and archaeologists (e.g. Boxgrove). Lessons need to be learnt about how to best address the needs of all stakeholders if and when these negotiations are re-opened.
- 5.1.3 A new approach should be developed by the Palaeolithic community in partnership with the Mineral Products Association (MPA). Emphasis should be given on the development of local, bottom-up approaches to relationships with the industry and regional focus. Awareness of how the research community relates to aspects of development control will be important to iterate here, showing that pre-existing relationships based on research translate into effective mitigation during phases of quarry development or expansion. Furthermore, the research community can include the same personnel who may subsequently act on behalf of commercial clients during development.
- 5.1.4 A related point that has just become problematic with the recent storms is the relationship between English Heritage funded projects and impacts and the geological world through local geoconservation groups. For example, work in Cornwall for English Heritage on submerged forests was met with some hostility by local geoconservation groups.

5.2 Methods for Engaging Stakeholders

- 5.2.1 Hopefully, most of the stakeholders in the heritage sector already understand each other to a greater or lesser degree, depending on proximity of interests, and the Palaeolithic is regularly included in development archaeology. Still, further mechanisms need to be developed to ensure that all stakeholders from the curatorial, development and commercial sector are aware of the value of the resource.
- 5.2.2 In particular, we need to establish a mechanism for ensuring continued protection and establishing who is responsible for endangered sites. The site at Harnham is a prime example. This site was excavated in 2002 and 2004 and revealed a sequence of sediments associated with the edge of a river floodplain where fine grained sands have been covered by solifluction deposits. Archaeological material, including refitting flints and cut-marked bone, were both sealed by the solifluction deposits and present within the solifluction deposits. However, after excavation and initial assessment, nobody has taken responsibility for the site, for progressing analysis, or indeed looking after a site which is degrading without ever being properly excavated. Regular condition reports on flagship sites are needed; again these could be managed as part of a regional network or through pre-existing regional networks such as RIGS.
- 5.2.3 Today large housing developments or deep cuttings across Palaeolithic sites are as great a threat as quarrying, and the Pleistocene community need to provide the tools for the planners to make sensitive decisions in the form of strategy and conservation documents of the type we advocate here, alongside predictive mechanisms and acceptable monitoring. That said, we urgently need to capitalise on the results of the ALSF to create a new and meaningful collaboration between archaeologists and aggregates extractors. The importance of the work we do, its intrinsic interest and potential minimal impact on commercial operations, needs to be emphasised. The following emphasis on quarries should not in any way be taken as signalling its priority over other forms of development.
- 5.2.4 Regarding the fruition of NIAN, each stakeholder sees things through different lenses, but we need to resurrect cross-party talks, with constituent members drawn from the full range of constituencies. The MPA recognises the value of archaeology, but balks at the idea of interference with the means of production of their main livelihood. As suggested above, more emphasis on the Palaeolithic record, including contingency funds and mitigation procedures need to be incorporated at the level of

mineral planning, so that everybody knows what to expect from the outset, and there are no nasty fiscal surprises for industry or research disasters for archaeology.

- 5.2.5 *The Mineral Extraction and Archaeology: A Practice Guide* (Waddington 2008) recognised that the best way to deal with Palaeolithic archaeology that occurs within an aggregate body is through monitoring sensitive landform units, and that *in situ* preservation will rarely be practical or justified. Assurances therefore need to be given that a discovery would not result in a cessation of operations or massive unseen costs, but personal talks about whether an area could be left fallow for excavation, for how long, how much contingency money was available, and whether further emergency funds should be sought. The archaeological profession should also seek to train quarry workers to monitor faces as they extract sand and gravel (and perhaps redistribute the NIAN ID guides), rapid response teams (local units or universities) could be co-ordinated to rescue and bulk sample materials in a fashion that can be meaningfully analysed in the laboratory without stopping productions (as was successfully done at the Maastricht-Belvedere quarry in the Netherlands) and suitably trained and safety inducted archaeologists could be allowed periodically to monitor and record, to develop those personal relationships and negotiate sensitively if anything of real importance is uncovered.
- 5.2.6 It is unlikely that a blanket agreement could be reached. What we need in the first instance is an agreement in principle that archaeologists could monitor sensitive landforms (the identification of which relies heavily on Aspirations 1 and 2).

6 Bibliography

Ashton, N, Lewis, S G, De Groote, I, Duffy, S M, Bates, M, Bates, R, Horse, P, Lewis, M D, Parfitt, S A, Peglar, S, *et al.* 2014 Hominin footprints from Early Pleistocene deposits at Happisburgh, UK, *Plos One* **9** (2)

Bates, M R and Wenban-Smith, F F, 2011 Palaeolithic Geoarchaeology: palaeolandscape modeling and scales of investigation, *Landscapes* **12** (1), 69-96

Boismier, W A, Gamble, C and Coward, F, (eds) 2012 *Neanderthals among mammoths: excavations at Lynford Quarry, Norfolk UK*, English Heritage, Swindon

Cooper, L P, Thomas, J S, Beamish, M G, Gouldwell, A, Colcutt, S N, Williams, J, Jacobi, R M, Carrant, A and Higham, T F G, 2012 An Early Upper Palaeolithic open-air station and mid-Devensian hyaena den at Grange Farm, Glaston, Rutland, UK, *Proceedings of the Prehistoric Society* **78**, 73-93

Edwards, R, 2013 *Archaeological Archives and Museums 2012*, Society of Museum Archaeologists

English Heritage, 1991 *Exploring our Past: Strategies for the Archaeology of England*. Historic Buildings and Monuments Commission for England, London

English Heritage, 1998 *Identifying and Protecting Palaeolithic Remains: Archaeological Guidance for Planning Authorities and Developers*, English Heritage, London

English Heritage, 1999 *Research Frameworks for the Palaeolithic and Mesolithic of Britain and Ireland*, English Heritage, London

English Heritage, 2000 *Managing Lithic Scatters: Archaeological guidance for planning authorities and developers*, English Heritage, London

English Heritage, 2008 *Research and Conservation Framework for the British Palaeolithic*, English Heritage, London

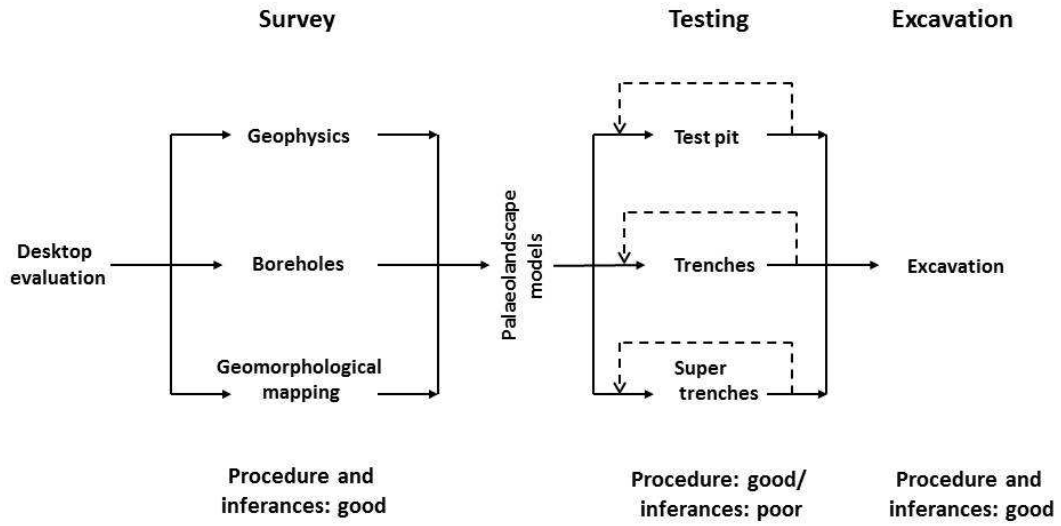
English Heritage, 2009 *North Sea Prehistory Research and Management Framework (NSPRMF) 2009*

- Gaffney, V, Fitch, S and Smith, D, 2009 *Europe's Lost World: The Rediscovery of Doggerland*, CBA Research Report **160**, York
- Gamble C S and Kruszynski R, 2009 John Evans, Joseph Prestwich and the stone that shattered the time barrier, *Antiquity* **83**, 461-475
- Holderness, H, Davies, G, Chamberlain, A and Donahue, R, 2007 A conservation audit of caves resources in the Peak District and Yorkshire Dales, *CAPRA* **7**
- Roe, D A, 1968 A gazetteer of British Lower and Middle Palaeolithic sites, CBA Research Report 8
- Roe, D A, 1980 Introduction: precise moments in remote time, *World Archaeology* **12** (2), 107-108
- Waddington, C, 2008 *Mineral Extraction and Archaeology: A Practice Guide*, English Heritage, London
- Wenban-Smith, F F, 1996 *The Palaeolithic archaeology of Baker's Hole: a case study for focus in lithic analysis*, Unpublished PhD thesis, University of Southampton
- Wenban-Smith, F F, 2013 Discussion and conclusions: Clactonian elephant hunters, north-west European colonisation and the Acheulian invasion of Britain? 447-474, in: Wenban-Smith, F F (ed) *The Ebbsfleet Elephant: Excavations at Southfleet Road, Swanscombe in advance of High Speed 1, 2003-04*, Oxford Archaeology, Oxford
- White, M J and Plunkett, S J, 2004 *Miss Layard Excavates: a Palaeolithic site at Foxhall Road, Ipswich, 1903-1905*, Western Academic and Specialist Press, Bristol

Table 1: 1999 research themes

Research Theme	Achieved/partly achieved by 2008
Human interaction with, and impact upon, faunal communities from the Middle Pleistocene to the Holocene	YES
Tracing relations between Britain and the nearest parts of the Continent	YES
Establishing with greater precision the timing of the arrival of <i>Homo sapiens</i> in Britain	YES
Examining the pattern of re-colonisation after the LGM	YES
Exploring environmental change and its impact over the Pleistocene-Holocene transition	YES
Undertaking a quality-control audit of available radiocarbon dates for the Late Middle and Upper Palaeolithic	YES
How much of the Pleistocene saw human occupation?	YES
Did the length of occupation increase as humans became better adapted to climate and environmental change?	NO
To what extent did Palaeolithic occupants of Britain intensify subsistence behaviour?	NO
Does the British Palaeolithic record reflect a full settlement system at any time	YES
What changes in landscape use and organisation of technology are indicated by raw material movement studies?	PARTLY
How did caves and open air sites fit into settlement systems	PARTLY (noting lack of caves)
Systematic compilation of ochre use, personal ornamentation and other indicators of symbolic behaviours	YES
Application of the chaîne opératoire concept to social technology	YES
Reassessment of faunal remains as a symbolic resource	YES
Transference of social organisation onto spatial patterning	NO
What was the regional scale of settlement systems and how are they reflected archaeologically?	YES

Figure 1





**Head Office/Registered Office/
OA South**

Janus House
Osney Mead
Oxford OX2 0ES

t: +44 (0) 1865 263 800
f: +44 (0) 1865 793 496
e: info@oxfordarch.co.uk
w: <http://thehumanjourney.net>

OA North

Mill 3
Moor Lane
Lancaster LA1 1GF

t: +44 (0) 1524 541 000
f: +44 (0) 1524 848 606
e: [oanorth@thehumanjourney.net](mailto: oanorth@thehumanjourney.net)
w: <http://thehumanjourney.net>

OA East

15 Trafalgar Way
Bar Hill
Cambridgeshire
CB23 8SQ

t: +44 (0) 1223 850500
f: +44 (0) 1223 850599
e: [oaeast@thehumanjourney.net](mailto: oaeast@thehumanjourney.net)
w: <http://thehumanjourney.net>



Director: David Jennings, BA MIFA FSA

*Oxford Archaeology Ltd is a
Private Limited Company, N^o: 1618597
and a Registered Charity, N^o: 285627*