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Projects supported by £8.8 million of funding from the British Government under the Aggregates Levy Sustainability Fund (ALSF) administered by English Heritage (now Historic England) have completely transformed our understanding of the Palaeolithic and contributed to our understanding of Pleistocene environments in Britain. This is a period of multiple Ice Ages interspersed with warmer periods, which forms the backdrop for human evolution. The benefits to archaeology and for the interpretation of these fragile remains from this ancient epoch have been incalculable. This volume draws together the results of this research in a series of thematic chapters and illustrated text boxes focusing on key techniques, methodologies and case studies, providing a commentary for the non-specialist. Insights obtained from projects have helped to define future priorities and milestones for Palaeolithic research.

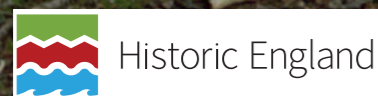
# LOST LANDSCAPES of Palaeolithic Britain

edited by  
**Mark White**  
with  
**Martin Bates, Matthew Pope, Danielle Schreve,  
Beccy Scott, Andrew Shaw and Elizabeth Stafford**

Lost Landscapes of Palaeolithic Britain

Edited by Mark White

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Janus House, Osney Mead, Oxford OX2 0ES





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*of Palaeolithic Britain*

**The contribution of projects funded by the  
Aggregates Levy Sustainability Fund 2002–2011**

Edited by Mark White, with Martin Bates, Matthew Pope,  
Danielle Schreve, Beccy Scott, Andrew Shaw and Elizabeth Stafford

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*Julia Collins and Magdalena Wachnik*

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Cover illustration: Late Pleistocene hunters encamped on the high ground of the Isle of Wight observe a migrating reindeer herd following the now submerged Solent River. In the distance the chalk ridge of Portsdown behind modern day Portsmouth can be seen. Original artwork by Peter Lorimer

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**This book is dedicated to the memory of**  
**Jon Humble (1958-2015)**  
**Inspector of Ancient Monuments, Senior National Minerals**  
**and Environmental Adviser for Historic England,**  
**and Palaeolithic enthusiast**





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## Summary

This volume is concerned with disseminating the results and implications of various Palaeolithic and Pleistocene projects funded through the British Government's *Aggregates Levy Sustainability Fund* (ALSF), which ran from 2002 to 2011. This fund underwrote Palaeolithic and Pleistocene research in England and showcased it on an international stage. A wide variety of archaeologists and scientists participated and benefited from this scheme and this is demonstrated by the range of reports that resulted from the fund. Some of these works have found their way into formal publication in monographs and papers while others remain in the archive as grey literature. For these reasons this volume has been written and the research described is targeted not only at the informed audience but also at the archaeologists less familiar with Palaeolithic archaeology. The book has a major role to play in terms of practical outcomes for conservation and management, by facilitating the expansion of data on the Palaeolithic resource and nurturing greater collaboration between various stakeholders, particularly in updating Historic Environment Records (HERs) and developing mineral plans.

The five chapters in this volume present an overview of the results from the different projects. In Chapter 1 Mark White examines the background to the ALSF and how projects undertaken are contextualised within previous Palaeolithic research in the UK. There follows a series of chapters examining certain key themes in the work. Martin Bates and Matthew Pope (Chapter 2) consider the methodological approaches to field investigations in Palaeolithic archaeology including techniques appropriate to field investigation at a variety of scales. This is followed by an examination of the nature of the marine and marine-terrestrial transition zone by Matthew Pope and Martin Bates (Chapter 3), an area of increasing importance today with extensive gravel

extraction in the offshore region as well as the development of the renewables sector. Danielle Schreve (Chapter 4) then considers the nature of the terrestrial landscape-based projects at the site and valley scale. She also discusses a major flagship project of the ALSF, the National Ice Age Network (NIAN). Next, Andrew Shaw and Beccy Scott (Chapter 5) discuss the technology, behaviour and settlement history of Palaeolithic humans.

This book is written for the non-specialist and focuses on providing a commentary on the Palaeolithic material record. The book uses case studies to open up to a wide audience the nature, potential and pitfalls of the Pleistocene record. A commonly recurring theme throughout the volume is scale. We have attempted to highlight how the scale of landscape investigations range from the pan-European down to the individual site, and timescales include deposits of varying ages. The concept of scale is important in the Palaeolithic, as often the results of site investigation provide information about the archaeological record at a variety of scales that are hard for the non-specialist to grasp.

The final chapter has been written by Mark White as an attempt to use the insights gathered through the ALSF projects to define future priorities and milestones and to offer pointers for all stakeholders regarding reasonable responses and mitigation to development at different locations. He identifies three basic strategic aims, each of which subsumes outreach and education:

- Extending the Pleistocene record (the discovery of new sites). This will require better predictive modelling.
- Enhancing the Pleistocene record (creation of an up-to-date online national database of collections and archives).
- Engaging with the Pleistocene record (engaging with stakeholders across a variety of forums).

## Sommaire

Cette publication est axée sur la dissémination des résultats et implications des différents projets de recherche du Paléolithique et du Pléistocène, exécutés entre 2002 et 2011 et financés par le Fonds ALSF (*Aggregates Levy Sustainability Fund*) du gouvernement britannique. Ce financement a sécurisé la recherche sur le Paléolithique et le Pléistocène britannique et l'a exposée sur la scène internationale. Divers archéologues et scientifiques ont participé à et bénéficié de ce programme, illustré par un ensemble de rapports permis par ce financement. Certains de ces travaux ont donné lieu à des publications officielles sous forme de monographies et d'articles, tandis que d'autres demeurent encore au stade d'archive comme rapport de diagnostic. C'est pour ces raisons que ce volume a été créé : la recherche décrite cible non seulement un public averti, mais aussi les archéologues moins familiers avec l'archéologie du Paléolithique. Cet ouvrage a un rôle majeur à jouer en matière de résultats pratiques pour la conservation et la gestion, tout d'abord en facilitant l'expansion des données sur le Paléolithique, mais aussi en encourageant une plus grande collaboration entre les diverses parties prenantes, plus particulièrement en actualisant les registres HER (*Historical Environment Records*) et en développant des plans miniers.

Les cinq chapitres de ce volume présentent une vue d'ensemble des résultats de ces projets distincts. Dans le chapitre 1, Mark White examine les antécédents du ALSF et la manière dont les projets mis en œuvre s'insèrent dans de précédentes recherches du Paléolithique en Grande-Bretagne. Puis s'ensuit une série de chapitres sur certains thèmes clés du projet. Martin Bates et Matthew Pope (chapitre 2) étudient l'approche méthodologique de la recherche Paléolithique de terrain, dont des techniques appropriées à cette recherche à différentes échelles. Ceci est suivi par l'examen par Matthew Pope et Martin Bates (chapitre 3) de la nature de la zone de transition marine et marine-terrestre, zone aujourd'hui d'une importance grandissante avec l'extraction intensive de gravier dans les régions offshore et le développe-

ment du secteur des énergies renouvelables. Danielle Schreve (chapitre 4) considère ensuite la nature des projets basés sur l'aménagement du paysage terrestre à l'échelle du site et de la vallée. Elle évoque aussi le projet emblématique du ALSF: *National Ice Age Network* (NIAN). Andrew Shaw et Beccy Scott, quant à eux (chapitre 5), analysent la technologie, le comportement et l'histoire de l'établissement de l'humanité au Paléolithique.

Rédigée pour le non spécialiste, cette publication s'attache à commenter les témoignages matériels du Paléolithique. Il y est fait usage d'études de cas permettant d'exposer à un public large la nature, le potentiel et les écueils des archives du Pléistocène. La notion d'échelle constitue un thème récurrent dans cet ouvrage. Nous avons tenté d'attirer l'attention sur la façon dont l'envergure des investigations varie du paneuropéen à l'échelle du site-même, ainsi qu'à travers une série de périodes. Le concept d'échelle est important pour le paléolithique; les résultats de recherche sur le terrain renseignent fréquemment le relevé à des échelles variables, difficiles à appréhender par le novice.

Le chapitre final, rédigé par Mark White, tente d'utiliser les connaissances amassées au fil des projets du Fonds ALSF à la fois pour définir les priorités et étapes futures, mais aussi pour conseiller toutes les parties intervenantes sur des réponses satisfaisantes et une atténuation du développement en divers emplacements. Ce dernier chapitre identifie trois objectifs stratégiques de base, chacun englobant une dimension de sensibilisation et d'éducation :

- Augmenter les archives du Pléistocène (découverte de nouveaux sites), ce qui nécessitera une meilleure modélisation prédictive.
- Mettre en valeur les archives du Pléistocène (création d'une base de donnée nationale des collections et des archives mise à jour et accessible via internet).
- S'efforcer de comprendre les archives du Pléistocène (en collaborant avec les différents acteurs sur une variété de forums).

## Zusammenfassung

Dieser Band befasst sich mit den Ergebnissen mehrerer paläolithischer und pleistozäner Projekte, die vom *Aggregates Levy Sustainability Fund* (ALSF) in der Zeit von 2002 bis 2011 durchgeführt und von der Britischen Regierung finanziert wurden. Die Finanzierung hatte das Ziel paläolithische und pleistozäne Forschung in England zu unterstützen und der internationalen Öffentlichkeit zu präsentieren. Eine Vielzahl Archäologen und Wissenschaftler nahmen an dem Vorhaben teil und profitierten davon, dies wird durch die zahlreichen Dokumentationen und Ergebnisse untermauert. Einige Arbeiten wurden in Monographien und Artikeln publiziert, während andere in der grauen Literatur archiviert wurden. Aus diesem Grunde wurde der vorliegende Band geschrieben und die darin vorgestellten Forschungsergebnisse sollen nicht nur den Fachleuten, sondern auch Archäologen, die mit der paläolithischen Forschung weniger vertraut sind, erreichen. Das Buch wird bei der Verbreitung paläolithischer Informationsquellen eine Hauptrolle im Bereich des Denkmalschutzes und der Verwaltung einnehmen und die Zusammenarbeit verschiedener daran interessierter Personen fördern, besonders beim Aktualisieren der "Historic Environment Records" (HERs) und beim Erarbeiten von Mineralplänen.

Die fünf Kapitel in diesem Band geben einen Überblick der Resultate der geförderten Projekte. Im ersten Kapitel untersucht Mark White den Hintergrund der ALSF und wie die durchgeführten Projekte im Kontext der paläolithischen Forschung in Großbritannien eingeordnet werden können. Dem folgen einige Kapitel, welche die Hauptthematiken der Arbeiten untersuchen. Martin Bates und Matthew Popes (Kapitel 2) prüfen die methodologische Vorgehensweise der Feldarbeit in der paläolithischen Archäologie, inklusive Grabungstechniken, die bei einer Vielzahl von Projekten angewandt werden kann. Darauf folgt eine Betrachtung der Eigenschaften der marinen und marine-terrestrischen Transitzonen von Matthew Pope und Martin Bates (Kapitel 3), ein Bereich der zunehmend wichtiger wird im Angesicht von umfangreichem Kiesabbau auf offener See und der Entwicklung erneuerbarer Energien. Danielle

Schreve (Kapitel 4) untersucht im Weiteren den Charakter terrestrischer landschaftsraum basierter Projekte sowohl im Kleinen, auf Grabungsgröße, als auch bezogen auf ganze Täler. Sie erörtert außerdem ein bedeutendes Projekt des ALSF, das "National Ice Age Network" (NIAN). Danach befassen sich Andrew Shaw und Beccy Scott mit der Technologie, der Lebensweise und der Siedlungsgeschichte paläolithischer Menschen.

Dieses auch für den Laien verfasstes Buch zielt darauf ab die paläolithischen Hinterlassenschaften vorzustellen und zu bewerten. Das Buch nutzt Fallstudien um einem breiten Publikum Wesen, Potential und Schwierigkeiten der Forschung über das Pleistozän nahezubringen. Ein wiederkehrendes Thema in diesem Band ist der Umfang der behandelt wird. Wir haben versucht deutlich zu machen, dass einige Untersuchungen gesamteuropäisch einzuordnen sind, sich andere auf individuelle Grabungen beziehen und auch die Zeitspannen der Ablagerungen variieren. Maßstäbe richtig zu erfassen ist bei der Betrachtung des Paläolithikums von großer Bedeutung, da Resultate von Grabungen oft Informationen auf einer Vielzahl von Skalen wiedergeben, die für den Laien schwer zu erfassen sind.

Das letzte Kapitel wurde von Mark White geschrieben als ein Versuch die Einblicke die durch ALSF gesammelt wurden zu nutzen und zukünftige Prioritäten und Meilensteine zu definieren, es soll interessierten Personen helfen passende Strategien zu entwerfen um die Auswirkungen von Entwicklungsprojekten an diversen Standorten zu vermindern. Er identifiziert drei wesentliche strategische Ziele, welche alle Öffentlichkeitsarbeit und Bildung umfassen.

- Das pleistozäne Schriftgut erweitern (neue Fundstätten entdecken). Dies erfordert eine besser vorausschauende Modellierung.
- Das pleistozäne Schriftgut verbessern (Herstellung einer aktuellen online- Datenbank aller Kollektionen und Archive)
- Sich mit dem pleistozänen Schriftgut beschäftigen (Austausch mit Interessierten durch eine Vielzahl von Foren).





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