An Archaeological Resource Assessment of the Palaeolithic in Lincolnshire

Steven Membery

Note: For copyright reasons the figures are currently omitted from the web version of this paper. It is hoped to include them in future versions.

Introduction

The last decade has seen an increase in the study of the evidence from this period as the discipline has integrated knowledge from geology, environmental science as well as anthropology and archaeology. The methodologies concerning collection, analysis and interpretation of material representing early human activity has expanded to incorporate a wider range of scientific approaches. Recent studies have lead to a far greater understanding of Quaternary sites in other parts of the country but Lincolnshire has received little attention when compared to such areas as East Anglia or Southern Britain. The English Rivers Palaeolithic Survey (Wessex Archaeology 1996) has recently discussed evidence for the Palaeolithic period in Lincolnshire but despite a series of studies such as Wymer and Straw (1977) the only other summary publication concerning this period is May's *Prehistoric Lincolnshire* (1976). Other investigations have been carried out such as that by the British Geological Survey, and fieldwork by Professor Allan Straw but little published material is available. The data from this period has frequently been viewed, and discussed in terms of geological epoch rather than the more detailed oxygen isotope sequence. This dating system is one from which the Lincolnshire data could benefit although it is only recent studies that have utilised this method such as the Palaeolithic rivers study which is not exhaustive.

Find spots from which palaeoliths have been recovered are scarce within the county although a growing record now exists within the SMR and palaeoenvironmental investigations are discussed in the Wessex survey. Further studies of evidence, such as the Peterborough elephant, and Palaeoenvironmental evidence from the gravel terraces of southern Lincolnshire are forthcoming (Bennet & Trimble pers. comm.). However often faunal remains are not included within archaeological investigations (or recorded on the SMR) because of a lack of associated artefacts. This furthers an already existing gap between geological and archaeological studies which means recorded data is difficult to access.

Lower and Middle Palaeolithic (c.500, 000-40, 000)

The presence of widespread glacial tills indicates that the Anglian glaciation had covered most, if not all, of Lincolnshire. It is also possible that further ice sheets associated with the Wolstonian were also widespread throughout the region (West 1968) with most of the eastern areas (the Lincolnshire Marsh) being glaciated during the Devensian. The Devensian ice margin is believed to have formed a curving boundary running roughly north-south paralleling the chalk Wolds. This margin has resulted in the presence of surviving pre-Ipswichian tills which are thought by some (Bristow & Cox 1973) to equate with the Lowestoft Till of East Anglia. These glaciations have resulted in a complex history of topography within the county. River drainage patterns have been shown to have drastically altered throughout the period under discussion. Therefore surface geology may exhibit little relationship with existent rivers.

Palaeoliths have been recovered from a series of different geological context within the county. These deposits include river gravels, glaciofluvial deposits, blown sands and surface sites on both Cretaceous and Jurassic outcrops and on the Oxford Clays at Sleaford and Barlings. Palaeolithic recording in Lincolnshire is relatively recent as artefacts have only been recovered from the county since 1897. These early collections were doubted as genuine due to their northerly provenance. The SMR contains only 46 site entries for the Palaeolithic with all finds occurring on the uplands of the county with none known from the Fens. Examples of fine early implements are known, such as the Risby Warren Middle Palaeolithic bout coupe hand axe but there are no indications of artefacts being recovered from *true in situ* contexts. The majority of artefacts are handaxes composed of both andesite and quartzite but a quantity of retouched flint flakes have also been recovered. Most finds are singular and when associated

with faunal remains useful for biostratigraphic comparison derive from secondary depositional layers (Wessex Archaeology 1996). However, it is possible to assess the time depth of human activity within the county by summarizing the evidence in terms of geological age.
Palaeoliths recovered from gravels at Welton-le-Wolds have been interpreted as deriving from a pre-Devensian layer (Catt 1977, Bristow and Cox 1973) or possibly Wolstonian (Shotton 1981). Human presence within the Hoxnian interglacial is evidenced by Palaeoliths recovered from Kirmington (WESSWX). Over 70 artefacts have been recovered from this site which have been described by Burchell and Boylan (1966). A Wolstonian date has been designated to a handaxe recovered from the Fulbeck Sand and Gravels at Tattershall associated with Hippopotamus amphibius (Brandon and Sumbler 1988).
Debate does surround the dating of these sites especially the Tattershall handaxe as the Fulbeck sand and gravel are thought to be Ipswichian and the freshness of the artefact argues against for a relatively local derivation. The present evidence (despite dating problems) shows that, once geological deposits are better understood, it will be possible to predict zones or areas within the county which have the potential to produce evidence of human utilisation for c. 250,000 years.

Conclusion
As shown by the recovery of *in situ* animal remains such as the Peterborough elephant (dated 120,000 BP T. Lane pers. comm.) there is the possibility of buried landscapes. This alongside of the recovery of albeit ëredepositedí Palaeoliths shows the possibility of the existence of reasonably complete stratigraphic sequences from as early as pre-Devensian contexts. The problematic dating of speculative Anglian deposits in the region makes any associated interpretation of human activity difficult concerning these early phases. Conversely the evidence indicates that the possibility exists that important deposits are present which have the potential to aid a greater understanding of the Lower Palaeolithic within a frontier environment. Quarrying is a primary source of evidence for this period but at present archaeological monitoring of quarry sites is normally limited to excavation of surface deposits and features associated with later occupation. There are examples of quarry investigations in other counties such as Northampton but methodological problems occur due to the longevity of projects and economic justification. In order for future investigations to be managed predictive modelling needs to take place based on available data. An integration of different classes and sources of evidence needs to occur including bore-hole data, British Geological Survey data, SMR data and university projects.

Upper Palaeolithic (c.40,000-9,000)

Evidence
Due to the lack of protected environments, fissures or caves which occur in neighbouring counties such as Creswell Crags (Nottinghamshire) the evidence for this period is poorly represented, although a few well stratified artefacts have been recovered. Quantities of small bladed artefacts representative of the Creswellian industry have been found around the Scunthorpe area as well as a penknife point recovered from Risby Warren. However, these are considered to illustrate the only real evidence for activity within the region at this time.

Conclusion
The Upper Palaeolithic period representation within the county at first appears to be of low potential.

Main Reading
The English Rivers Palaeolithic Project Report No. 2 1995-1996 The Great Ouse Drainage and the Yorkshire and Lincolnshire Wolds

Alabaster, C. Straw, A.	1976	'The Pleistocene context of faunal remains and artefacts discovered at Welton-Le-Wold, Lincolnshire' *Proc Yorks Geol Soc* **41** (1, no.8) pp.75-93
Boylan, P.	1966	'The Pleistocene Deposits of Kirmington, Lincolnshire' *Mercian Geologist* **I** pp. 1-14
Bowen, D.	1994	'The Pleistocene of North West Europe', *Sci Progress Oxford* **76** pp. 209-23

Burchall, J. 1931 'Palaeolithic implements from Kirmington, Lincolnshire and their relation to the 100 foot raised beach of Late Pleistocene times', *Antiq J* **11** pp. 262-72

Brandon, A. 1988 'An Ipswichian fluvial deposit at Fulbeck, Lincolnshire
Sumber, M. and the chronology of the Trent terraces', *J Quat Sci* **3** (2), 127-32

Bristow, C. 1973 'The Gripping Till:a reappraisal of East Anglian
Cox, F. glacial stratigraphy', *J Geol Soc London* **129**, 1-37

Catt, J. 1977 Yorkshire and Lincolnshire. Guidebook for Excursion. C7. INQUA X Congress, Geo Abstracts, Norwich

Hayes, P. 1992 *The Fenland Project No. 5: Lincolnshire Survey, The*
Lane, T. *South-West Fens*

Lacaille, A. 1946 Some flint implements of special interest from Lincolnshire, Hampshire and Middlesex, *Antiq J* **26**, pp. 180-5

May, J., 1976 *Prehistoric Lincolnshire*, History of Lincolnshire Vol.1,Cox and Wyman.

Roe, D. 1981 *The Lower and Middle Palaeolithic Periods in Britain*, RKP, London

Shotton, F. 1981 'Major Contributions of North-east England to the Advancement of Quaternary Studies', in Neale, J. and Flenley, J. (eds), The Quaternary in Britain

West, R. 1968 *Pleistocene Geology and Biology*, London Longmans

Wymer, J., 1977 'Hand-axes from beneath glacial till at Welton-le-Wold
Straw, A. Lincolnshire', *Proc Prehistoric Soc* **43**, 355-60