# HOLOCENE PREHISTORY IN THE TÉLIDJÈNE BASIN, EASTERN ALGERIA

CAPSIAN OCCUPATIONS AT KEF Zoura D and Aïn Misteheyia

Assembled and edited by

**David Lubell** 

ARCHAEOPRESS ARCHAEOLOGY

# ARCHAEOPRESS PUBLISHING LTD Gordon House 276 Banbury Road Oxford OX2 7ED

www.archaeopress.com

ISBN 978 1 78491 373 1 ISBN 978 1 78491 374 8 (e-Pdf)

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Cover image: Kef Zoura D from the south looking towards Relilaï. The low stone wall visible in the shadowed area under the rockshelter marks the main excavation trench.

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Printed in England by Oxuniprint, Oxford This book is available direct from Archaeopress or from our website www.archaeopress.com

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## **Preface and Acknowledgements**

## David Lubell

This monograph is the final report for the project called The Prehistoric Cultural Ecology of Capsian Escargotières that began in 1972 with funding from the Wenner-Gren Foundation for Anthropological Research, and continued with several grants between 1973 and 1979, first from the Canada Council and subsequently from the Social Sciences and Humanities Research Council of Canada. Funding was also provided by the University of Alberta both during and after the field work in the form of research leaves and small grants. Field seasons took place in 1972, 1973, 1976 and 1978, with a short trip in December 1979 to extract a pollen core from the Oum el-Khaled marsh (Ritchie 1984).

Unfortunately, plans to continue field work had to be abandoned when changes in Algerian policies made it impossible to obtain research permits. The data and interpretations presented here are therefore based on an incomplete project, and it is partly for this reason that final publication has taken so long. The 1973 and 1976 excavations at Aïn Misteheyia were published in Science (Lubell et al. 1976) and Libyca (Lubell et al. 1975, 1982-83). The human skeleton excavated at Aïn Misteheyia in 1976 was published by Meiklejohn et al. (1979) with a further study on its chronology and burial practices in the Journal of African Archaeology (Lubell et al. 2009; see Jackes et al. 2015). We tested Kef Zoura D in 1976 and then excavated it in 1978, intending to return in following years but that proved impossible. The full analysis of the site has thus been delayed, although we published some data in the African Archaeological Review (Jackes and Lubell 2008) and a chapter in a recent volume on pressure flaking (Rhamani and Lubell 2012). Two PhD dissertations have also used data from the project (Sheppard 1987; Rhamani 2003). An analysis of the phytoliths recovered from Aïn Misteheyia bulk samples has also been published (Shipp et al. 2013).

We did not realize it at the time, but Aïn Misteheyia (hereafter AM) and Kef Zoura D (hereafter KZD) have proven to be key sites in a discussion that has been ongoing since at least the 1930s when Vaufrey (1936) published his interpretation of Capsian stratigraphy attempting to understand if there was a temporal succession between the *Capsien typique* (hereafter *Ct*) and the *Capsien supérieur* (hereafter *Cs*). Grébénart (1976) tried to resolve this when he re-excavated Relilaï in the 1970s, but as we discuss in Chapter1 uncertainties remain. AM and KZD are the only Capsian escargotières excavated with modern methods and extensive

radiocarbon dating that have a clear stratigraphic sequence in which both Ct and Cs are represented. We have been able to show that Ct precedes Cs, that the latter saw the introduction of a new technique for the production of blanks (pressure flaking), that the change is more-or-less contemporary with the 8200 cal BP cold event, and that it was accompanied by a subtle change in the subsistence regime of continued foraging despite the introduction of some herding of apparently introduced domestic stock nearby (Roubet 1979; Kherbouche et al. 2014; Kherbouche 2015). Recent work in Morocco (e.g. Lindstädter et al. 2015) and Tunisia (Mulazzani 2013) suggests the changes observed at AM and KZD may have eventually led in some areas to the introduction of Neolithic subsistence patterns, but there is as yet no clear evidence for this in the central Capsian area of eastern Algeria and southern Tunisia.

Those familiar with Capsian sites may remark on the absence of a chapter devoted exclusively to the land snail fauna. We deal extensively with land snails in our discussion of stratigraphy and chronology in Chapter 1 and have published several other papers in which land snails are discussed, so it seemed redundant to repeat those observations here. With one exception, all the work in this volume is original and previously unpublished, although elements of Chapter 1 were included in a preliminary fashion in Jackes and Lubell (2008). The exception is the paper from *Sahara* (Rahmani and Lubell 2005) which complements the analyses of bone tools and worked shells (Chapters 3, 4 and 5).

Chapters 3 and 4 result from my admiration for the analyses done on the worked bone assemblage from the Tunisian Capsian site of Hergla (Mulazzani 2013). I was also very pleased when David Reese agreed to study and report on the marine shells from both Kef Zoura D and Aïn Misteheyia.

Peter Sheppard laboured long and hard on the analysis of the lithic assemblage (Chapter 2) and I am pleased (indeed relieved) that it can finally be published. The same must also be said for the analysis of the charcoals (Chapter 8) by Catherine D'Andrea and Tom Shay.

Finally, the preliminary results of the just-begun usewear analysis of the Kef Zoura lithic assemblage by Bernard Gassin and Juan Gibaja, which is reported in Chapter 9, is part of a new project directed by Thomas Perrin (Toulouse) entitled "From the Mesolithic to the Neolithic in Western Mediterranean: the African impact" which will incorporate further analyses of the Kef Zoura lithics and chronology.

Kent Flannery (1986: xvii) mused about the "Paul Masson" approach to archaeology whereby "I will publish no site...before its time". I cannot pretend to have been either so prescient or so conscientious and, in any event, we are not done yet!

### Acknowledgements

Interdisciplinary research such as we describe here can only be successful as a collaborative effort (Table 1), and I am deeply grateful to William Farrand,<sup>1</sup> Achilles Gautier, Fekri Hassan, Mary Jackes, James Ritchie and Peter Sheppard for their contributions and their patience over many years. Peter Sheppard and Catherine D'Andrea completed their chapters a number of years ago but have updated them slightly to take account of developments since. The student participants, both in the field and the laboratory, were vitally important contributors and a number have gone on to productive professional careers. Our collective debt to our local Algerian assistants is incalculable–we could never have done this without them.

The lithic artefact illustrations are the work of Margot Mortensen, at the time a student in the History Department at the University of Alberta. Much to my disappointment, she was never able to pursue her remarkable talent further. Because they have never been published before, we include, as an addendum, her illustrations of lithics from AM.

The use-wear analyses (Chapter 9) conducted at the University of Waterloo in the summer of 2015 were only possible through the generous loan of two microscopes by Anne Grant and Bev Raimbault, Ecology Teaching Lab, Faculty of Environment and unlimited use of the Nikon Eclipse LV100POL microscope by Dr Chris Yakymchuk and his graduate assistant Cameron Drever, Earth and Environmental Sciences.

This project began in 1966, when Ralph Solecki assigned a very junior undergraduate a term paper to find out if the large assemblage of land snails found associated with the Proto-Neolithic cemetery in Shanidar Cave (Solecki *et al.* 2004) could provide useful information on palaeoenvironments: a previous study of some of the materials (Harris 1961) had been inconclusive. I have noted elsewhere (Lubell 2004a, 2004b; Lubell and Barton 2011), that this led to my discovery of the work of Alonzo Pond, whom I was fortunate to be able to meet in 1975 (Lubell 1992 and see also Jackes and Lubell 2014a, 2014b). His work on the Capsian escargotières, sparked my continuing interest in Maghreb prehistory and the occurrence of enormous numbers of land snails in late Pleistocene and early Holocene sites throughout the circum-Mediterranean.

My mentor A.E. (Tony) Marks introduced me to the late Fred Wendorf and both of them aided and abetted my interest in North African prehistory. Through them I met Karl W. Butzer and Jacques Tixier, and especially Achilles Gautier and Fekri Hassan, who all influenced the project design. Claude Brahimi (then at C.R.A.P.E. in Algiers) first encouraged me to come to Algeria rather than go elsewhere, and Colette Roubet (also then at C.R.A.P.E.) ensured that I would survive to continue the research after Gautier and I contracted infectious hepatitis in 1973. I also thank the staff of the Canadian Embassy in Algiers from 1972-79, the director and staff of the Centre National de Recherches Préhistoriques, Anthropologiques et Ethnographiques, the Ministère de l'Education Supérieur et de la Recherche Scientifique, the Agence Nationale d'Archéologie et des Monuments Historiques and the Ministère de l'Information et de la Culture, all of whom helped to ensure that the field research could be carried out successfully.

Since 1976, Mary Jackes has invested countless time, energy, expertise and patience to ensure this project reached its present state.

Waterloo

March 2016

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<sup>&</sup>lt;sup>1</sup> Bill Farrand's unexpected death in March 2011 (see e.g. L.G. Straus, *Journal of Anthropological Research*, vol. 67, 2011), has prevented inclusion of the final version of his contribution on the regional geomorphology of the Télidjène Basin and the geological setting of Kef Zoura D. Bill had planned to complete this following recovery from the surgery which, tragically, took his life.

#### TABLE 1: PROJECT PERSONNEL (F, FIELD; L, LABORATORY)

	1972	1973	1976	1978 and following		
Professional colleagues						
ADOUANI, Tahar				F		
BALLAIS, Jean-Louis		F				
CAMPBELL, lan			F			
FARRAND, William R.				F		
GAUTIER, Achilles	F	F	F			
HASSAN, Fekri		F				
JACKES, Mary				F		
LEVENTHAL, Elizabeth			L			
MEIKLEJOHN, Christopher			L			
RITCHIE, James C.				F		
SCHWARCZ, Henry P.			L	L		
SHAY, C. Thomas				L		
SKINNER, Mark L.				L		
Colleagues who were students at the time of participation						
ARCHER, John			F			
BARD, Kathryn				F		
BOBROWSKY, Peter			F			
BOURAHLI, Brahim				F		
BOUZENOUNE, Rashid Amar				F		
CHIPPINDALE, Christopher		F				
CHISWELL, Coreen				L		
CLOSE, Angela		F				
D'ANDREA, Catherine				L		
ELMENDORF, Jill		F				
FILAH, Mustafa				F		
GAY, David			F			
HENRICKSON, Elizabeth			F			
HENRICKSON, Robert			F			
HODGSON, Barbara			F			
KOCH, Christopher			L			
KOONS, Karin			L			
KORRI, Michelle			L			

	1972	1973	1976	1978 and following
LELLO, Richard				L
LOWE, Sherry			L	
MORTENSEN, Margot				L
PARDOE, Colin			L	
RAHMANI, Noura				L
ROSEN, Arlene				F
ROSS, Deborah				F/L
SCHULTZ, Karen				L
SHEPPARD, Peter J.				F/L
STORY, Joan			F	
WHITE, Randall				F
WILLOUGHBY, Pamela			F	L
WOOLLETT, James				L
Algerian assistants				
BOUGHERARA, Lazhar Ben Mohammed		F	F	F
MEZHOUD, Abdelghani	F			
RAHAL, Layesh		F	F	F

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