

## TABLE OF CONTENTS

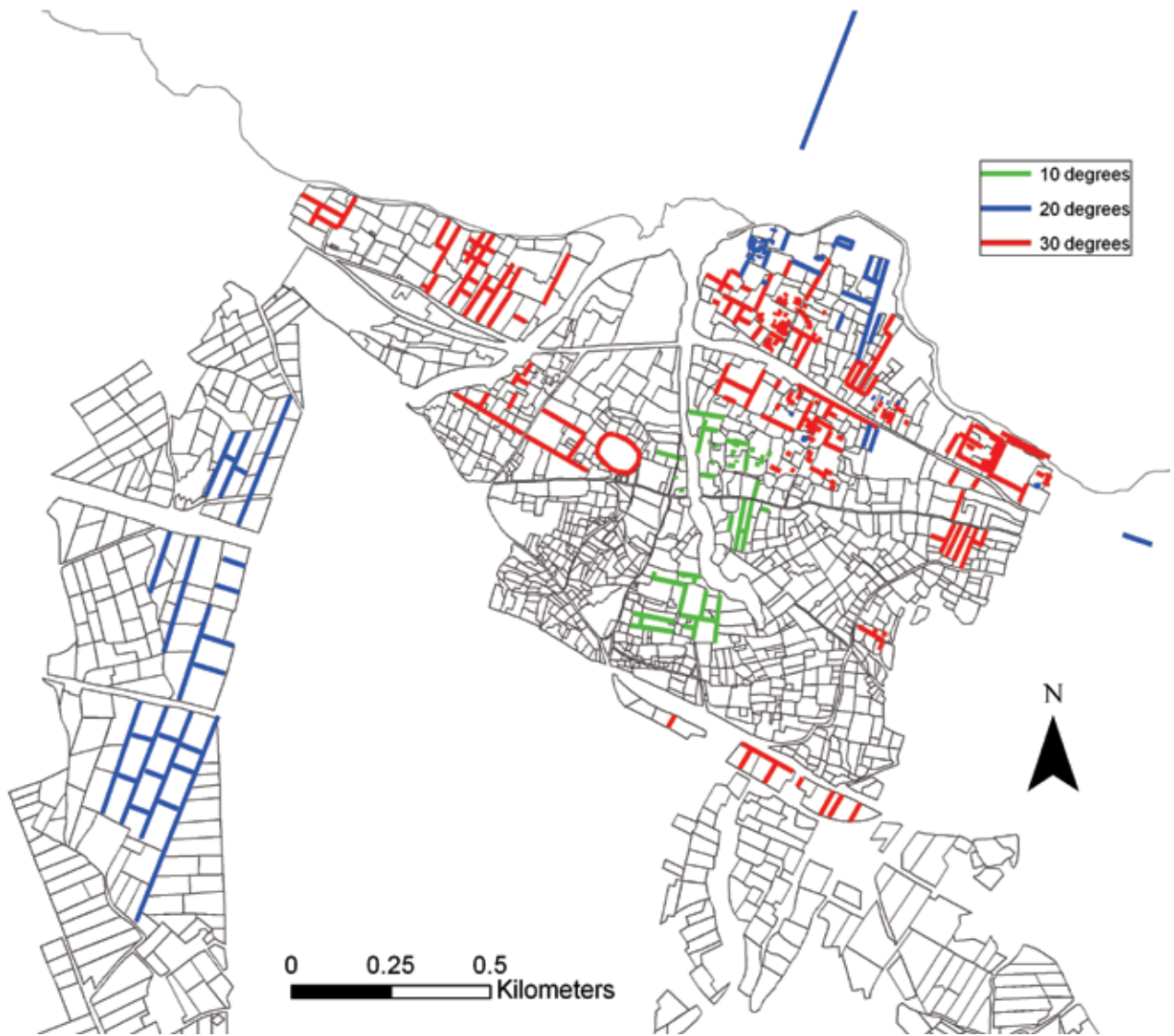
Preface and Acknowledgements	7
<i>D. L. Stone, D. J. Mattingly and N. Ben Lazreg</i>	
PART I: SYNTHESIS	
1. Introduction: background and context for the investigations at Leptiminus	10
<i>D. L. Stone, D. J. Mattingly and N. Ben Lazreg</i>	
2. Environment	29
<i>A. G. Brown, B. Sherriff and S. Butler</i>	
3. Methodology and fieldwalking data	49
<i>D. L. Stone, D. J. Mattingly and J. N. Dore</i>	
4. Geophysical survey	91
<i>S. Clarke and D. Robinson</i>	
5. Urban morphology, infrastructure and amenities	121
<i>D. L. Stone, D. J. Mattingly, A. I. Wilson, L. M. Stirling, H. Dodge and N. Ben Lazreg</i>	
6. Economy	205
<i>D. J. Mattingly, D. L. Stone, L. M. Stirling, J. P. Moore, A. I. Wilson, J. N. Dore and N. Ben Lazreg</i>	
7. Leptiminus: profile of a town	273
<i>D. J. Mattingly and D. L. Stone</i>	
PART II: SPECIALIST REPORTS	
8. Lithics	289
<i>E. Z. Faro</i>	
9. Finewares, cookwares and coarsewares from the urban survey, S1, S10 and S200	295
<i>J. N. Dore</i>	
10. Amphoras from the urban survey, S1 and S10	337
<i>J. N. Dore (with contributions by R. Schinke Piggott, D. L. Stone and D. J. Mattingly)</i>	
11. Stamped amphoras	352
<i>D. L. Stone, D. J. Mattingly and A. Opaît</i>	
12. Lamps	387
<i>T. J. Allen</i>	
13. The pottery from the rural survey	403
<i>K. E. Carr</i>	
14. Iron production débris	434
<i>I. Schrüfer-Kolb</i>	
15. Mortars and plasters	454
<i>J. Bagust, J. Fletcher and G. Morgan</i>	

*continued overleaf*

16. Building materials and decorative stones <i>H. Dodge</i>	463
17. Pumice from the East Baths (S1) <i>L. Lancaster, G. Ventura, F. Marra and G. Sottili</i>	479
18. A brick stamp of Agathobulus <i>S. Graham</i>	481
19. Querns, millstones and grain-processing <i>D. L. Stone</i>	485
PART III: STRUCTURES RECORDED AND STAMPED AMPHORAS (on DVD in pocket inside front cover)	
20. Gazetteer of sites in the urban survey <i>A. I. Wilson, D. J. Mattingly, D. L. Stone, L. M. Stirling, H. Dodge and N. Ben Lazreg</i>	495
21. Gazetteer of sites and catalogue of pottery from the rural survey <i>D. L. Stone and K. E. Carr (with a contribution by A. I. Wilson)</i>	629
22. Supplementary images for catalogue of stamped amphoras in chapt. 11, Table 11.1	661
23. Pocket inside back cover for foldouts 1a, 1b, 2a, and 2b	

Throughout this report reference to the previous reports is made as follows:

- Leptiminus 1* N. Ben Lazreg and D. J. Mattingly, *Leptiminus (Lamta): a Roman port city in Tunisia. Report no. 1* (JRA Supplementary Series no. 4, 1992).
- Leptiminus 2* L. M. Stirling, D. J. Mattingly and N. Ben Lazreg, *Leptiminus (Lamta). Report no. 2. The East Baths, cemeteries, kilns, Venus mosaic, site museum, and other studies* (JRA Supplementary Series no. 41, 2001).



Colour fig. 5.A. Composite plan showing all evidence for common alignments (field boundaries and geophysical features).

## Preface and Acknowledgements

The Leptiminus Archaeological Project set out in 1990 to examine an ancient port town and its immediate hinterland through multidisciplinary fieldwork. A first volume of reports on the work was published in 1992 (hereinafter referred to as *Leptiminus 1*), dealing with previous work at the site, excavations in 1990 at the Site 10 cemetery, pottery and building materials, and the initial survey work (including field-walking and study of harbour facilities). A second volume containing reports primarily on excavations at cemeteries, a public bath, a suburban house, and a kiln site appeared in 2001 (hereinafter referred to as *Leptiminus 2*).

The current volume presents the results of the project's field survey approaches from 1990 to 1999, consisting of pedestrian fieldwalking, geological and geomorphological investigations, a survey of standing structures and other sites detectable from surface remains, and subsurface geophysical prospection. The methodology and initial results of these investigations are presented in chapters 2, 3, and 4, while a detailed study of sites discovered and artefacts recovered comprises much of the volume (especially chapters 8-21). Most notable in this volume, however, are the syntheses in chapters 5, 6, and 7 of the archaeological evidence the project has collected to date from both surveys and excavations.

Near the end of the preparation of these reports the death of John Dore from an illness which progressed rapidly saddened the editors and the other members of the project. Dore's contributions as chief ceramicist since 1990 greatly enhanced our understanding of the town. He devised a methodology for sorting pottery and other artefacts which made it possible to process the large volumes of material present at an urban centre inhabited for more than a thousand years. He developed typologies for the coarseware and amphoras from Leptiminus from huge quantities of sherds and also found time to study the slipped wares using the typology of John Hayes. The editors regretfully completed the chapters he had begun to write at the time of his death. We dedicate this volume to him in gratitude for his many contributions to our joint work.

\* \* \*

The initial idea for the project was developed by John Humphrey and David Mattingly in 1990 (both then in the Department of Classical Studies at the University of Michigan) in collaboration with Hedi Slim and Nejib Ben Lazreg of the Tunisian Institut National du Patrimoine (INP), formerly Institut National d'Archéologie et d'Art. We are grateful to successive Directors of the INAA/INP, Abdelaziz Daoulatli and Bou Baker Ben Frej, Mohammed Beji Ben Mami and Fethi Bejaoui, and to Hedi Slim, Fethi Bejaoui and Nabil Kallala, Directeurs successifs de la Division de la Recherche et de l'Inventaire Général, for granting and extending the permit and for their strong support of the project. We thank Habib Ben Younes, Directeur de la Division des Musées, for use of the Lamta Museum facilities, and the Directeur du laboratoire central de l'INP, Slim Khosrof, and his aide Salah Ouertani. We thank Abderrazak Gragueb, Directeur de l'Agence Nationale de Mise en Valeur du Patrimoine (ANEP), and then Agence de Mise en Valeur du Patrimoine et de Promotion Culturelle (AMVPPC) since 1997, for his support during the preparation of the Musée de Lamta, the late Bechir Hamrouni and M. N. Bousrih (foremen). The initial seasons of work were directed by Humphrey, Mattingly and Ben Lazreg, but by the mid-1990s the direction had passed to two ex-Michigan Ph.D. students, David Stone and Lea Stirling, who continued the work of the project, always in collaboration with Ben Lazreg. Of this directorial group, Stone and Mattingly have been the most closely involved with the survey aspects of the project and have taken the lead in the writing and editing of this volume. We are most grateful to John Humphrey for undertaking to publish this volume in the JRA Supplementary Series, and for editing the manuscript with great care. Additional excavations at Leptiminus directed by Nejib Ben Lazreg, Lea Stirling, and Susan Stevens have taken place since 1999 and publication of this fieldwork is in preparation.

At Lamta the team has received the warmest possible welcome and moral and material support from Mohammed Bou Srih, the late Mohammed Abdessalam and Salem Herchay, successive Presidents of the Municipality of Lamta, Vice-Présidents the late Haj Amor Rjeb, Fraj Salah, Mhammed Makhoulouf, and Abderrazak Chakroun, and on an almost daily basis from the Secretary General of the Municipality, Hamed Bou Zid. We are also grateful to the Délégués of Lamta, Sayyada and Bou Hjar, Mokhtar Ghezayel, Fraj Qacem, Mohammed Mtaoua, Farhat Tayari, Mohammed Chouk, Mondher Zine El Abidine and Sadok Ouennis, to the Omda of Lamta Ahmed Salah, and to the successive Gouverneurs de la région de Monastir, Abdel Aziz Châabane, Mohammed Ben Nasr, Mohammed Habib Brahem, Mondher Friji and Khelifa Jbeniani, and the Délégué de la Culture, Mohammed Salah Laatil. We must also mention the efforts of the Association de la Sauvegarde de la Ville de Lamta and its Président d'Honneur Habib Salha and chief officers Samir Rejeb, Kamel Salha, Riyah Ben Ayed and Mohammed Sassi.

At the University of Michigan the project is indebted to former director of the Kelsey Museum, Elaine Gazda, for her willingness to co-sponsor the project and for providing supplemental funding as well as work-space and services; to Robin Meador-Woodruff, former curator; and to Sharon Herbert, present director. We thank Peg Lourie for assistance in editing the volume.

In 1995 the University of Manitoba took over the permit from the University of Michigan and we are most grateful to its successive Vice-Presidents for Research, Terence Hogan and Joanne Keselman, for facilitating the international agreement. We thank the successive Deans of Arts Raymond Currie, Robert O'Kell and Richard Sigurdson, as well as the successive chairs of the Department of Classics, Rory Egan and Mark Joyal, for their support of the research team and the field school. The Canada Research Council, through the Chair in Roman Archaeology, has supported aspects of post-fieldwork analysis and contributed support for publication costs.

The project gratefully received a major grant from the National Endowment for the Humanities, a U.S. federal agency, for work that began in 1991 and continued until 1994. A grant from the National Geographic Society further supported work in 1992-93. For work starting in 1997 the project received a major grant from the Social Sciences and Research Council of Canada (SSHRCC). Supplemental funding in the seasons being reported on here also came from the participants in a field school and from the Universities of Michigan, Manitoba, Leicester, and Newcastle, and from the Society for Libyan Studies. The Society of Antiquaries of London provided a grant towards the costs of a study season to help finalize this publication. The British Academy supported a grant to produce many of the maps. Additionally, the editors thank the School of Archaeology and Ancient History at the University of Leicester, the Department of Classics of the University of Manitoba, the Department of Classics at Florida State University, for bringing them together at various points in the course of preparing the volume.

We thank in particular the INP's Mohammed Naceur Bou Srih who has worked tirelessly, first as a guardian in the museum, then to preserve the site of Leptiminus first as a worker and then a foreman in our excavations, and additionally as a specialist on the field survey. His knowledge of the site of Leptiminus and the town of Lamta has contributed tremendously to this volume and to our work for many seasons. We are grateful to the following Tunisian staff members as well: Tahar Ben Lazreg, Fethi Gaabiche, Lotfi Jedda and Ridha Kooli (draughtsmen and topographers), Bechir Bel Haj Hassine, and the late Bechir Hamrouni (foremen), Choukri Fantar, Mounir Fantar, Mohammed Ben Cheikh, Mohammed Naceur Ben Cheikh, Mohammed Naceur Henia and Riadh Salha (museum staff).

Our work could not have been achieved without the enthusiastic participation of our field teams. In previous reports we have acknowledged participants in the 1990-1994 field seasons. Here we again thank those individuals, but add specific mention of participants from 1995 to 1999.