Falerii Novi



Falerii Novi The Ground-Penetrating Radar survey of the Roman town

Martin Millett, Alessandro Launaro, Lieven Verdonck and Frank Vermeulen, with a contribution by Konogan Beaufay Published by: McDonald Institute for Archaeological Research University of Cambridge Downing Street Cambridge, UK CB2 3ER (0)(1223) 339327 eaj31@cam.ac.uk www.mcdonald.cam.ac.uk



McDonald Institute for Archaeological Research, 2025

© 2025 McDonald Institute for Archaeological Research. *Falerii Novi* is made available under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 (International) Licence: https://creativecommons.org/licenses/by-nc-nd/4.0/

ISBN: 978-1-913344-25-2

On the front cover: Satellite photo of Falerii Novi (Google Earth).

Cover design by Dora Kemp and Ben Plumridge. Typesetting and layout by Ben Plumridge.

Edited for the Institute by Matthew Davies (Series Editor).

Contents

Contributor	'S	vii
Figures		ix
Tables		х
Foreword		xi
Acknowled	gements	xiii
Chapter 1	Introduction Martin Millett	1
Chapter 2	Survey methodology Lieven Verdonck,	15
	with contributions from Alessandro Launaro & Martin Millett	
Chapter 3	The GPR survey results	33
	Martin Millett, Alessandro Launaro & Lieven Verdonck	
Chapter 4	The anatomy of a town	69
	Martin Millett,	
	with contributions from Alessandro Launaro & Konogan Beaufay	
Chapter 5	The biography of a town	125
	Martin Millett	
Chapter 6	Conclusions	131
	Martin Millett	
Appendix: l	Building Units	141
References		149
Index		159

Contributors

Konogan Beaufay Ax:son Johnson Centre for the Study of Classical Architecture / Faculty of Classics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DA Email: kbb31@cam.ac.uk

Alessandro Launaro Faculty of Classics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DA, UK Email: al506@cam.ac.uk

MARTIN MILLETT Faculty of Classics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DA, UK Email: mjm62@cam.ac.uk LIEVEN VERDONCK Faculty of Classics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DA, UK Email: Lieven.Verdonck@UGent.be

FRANK VERMEULEN

Department of Archaeology, Ghent University, Sint-Pietersnieuwstraat 35, 9000 Ghent, Belgium Email: Frank.Vermeulen@UGent.be

Figures

1.1	Map showing the location of Falerii Novi.	2
1.2	Photo of the exterior of the Porta di Giove.	3
1.3	LiDAR image of Falerii Novi and its immediate environs.	6
1.4	Satellite image of Falerii Novi.	7
1.5	Photo of the medieval church of Santa Maria from the east.	8
1.6	Photo of the 1969–75 excavations (Insula XXXI) as displayed in 1997.	9
1.7	Plan of the walled area of Falerii Novi showing the numbering used.	10
1.8	Plan showing the phasing of the grid at the outset of the current project.	12
2.1	Digital elevation model (DEM) of Falerii Novi.	19
2.2	Horizontal slice from the baths [164] in Insula LI at an estimated depth between 1.10–1.15m.	20
2.3	Horizontal slice at an estimated depth between 0.80–0.85m, showing the macellum [106].	21
2.4	(a) Horizontal GPR slice at an estimated depth between 0.80–0.85m, showing a residential area [29].	
	(b) Magnetometer data from the same area.	23
2.5	Horizontal GPR slice at an estimated depth between 0.70–0.75m, showing the theatre [178] and	
	Magnetometer data from the same area.	24
2.6	Vertical GPR profiles from a residential area [160].	25
2.7	Vertical GPR profile from the baths [164] in Insula LI after migration.	26
2.8	Reprocessed results of the fluxgate gradiometry survey of Falerii Novi completed in 1997–98.	28–9
2.9	Horizontal slice showing the entire Ground-Penetrating Radar survey at Falerii Novi, at an estimated denth of 0.75–0.80m	30-1
3.1	Plan of Falerii Novi showing the location of the Sectors used in Chapter 3.	34
3.2	Plans showing the extent of the geophysical surveys within the walls of Falerii Novi.	36-7
3.3	Sector A: plan showing the interpretation of the features revealed in the surveys.	38
3.4	Sector B: plan showing the interpretation of the features revealed in the surveys.	40
3.5	Sector C: plan showing the interpretation of the features revealed in the surveys.	43
3.6	Sector D: plan showing the interpretation of the features revealed in the surveys.	47
3.7	Sector E: plan showing the interpretation of the features revealed in the surveys.	48
3.8	Sector F: plan showing the interpretation of the features revealed in the surveys.	50
3.9	Sector G: plan showing the interpretation of the features revealed in the surveys.	53
3.10	Sector H: plan showing the interpretation of the features revealed in the surveys.	57
3.11	Sector I: plan showing the interpretation of the features revealed in the surveys.	60
3.12	Sector J1: plan showing the interpretation of the features revealed in the surveys.	62
3.13	Sector J2: plan showing the interpretation of the features revealed in the surveys.	63
3.14	Sector K1: plan showing the interpretation of the features revealed in the surveys.	66
3.15	Sector K2: plan showing the interpretation of the features revealed in the surveys.	67
4.1	Plan of showing the development of the street grid as revised following analysis of the survey results.	72
4.2	Photo of the exterior of the North Gate [P3/P4] taken between 1890 and 1913.	75
4.3	Photo of the interior of the North Gate [P3/P4] taken in 1998.	76
4.4	Photo of the exterior of the Northeast Gate in the north wall [P5] , showing the partial blocking.	76
4.5	Photo of the exterior of the Northeast Gate in the east wall [P6].	77
4.6	Photo of the exterior of the Porta Puteana [P8] taken by Thomas Ashby on 28 March 1894.	77
4.7	Photo of the interior of the Porta Puteuna [P8] showing the springing for the inner arch.	70
4.8	Photo showing the top of an archea opening in the 10wn vvai [P9].	70
4.9	Levelled transects across the area to the north of the walled area showing the extent of quarrying.	00 Q1
4.11	Photo of the town wall at the possible Northwest Gate [P2] showing the difference in level between	01
	the interior and exterior.	81
4.12	Photo of the Town Wall at the east end of the site showing quarrying.	82
4.13	Plan of Falerii Novi showing the location of temples.	84
4.14	Plan of Falerii Novi showing the location of encroachments onto and closures of streets.	86
4.15	Photo showing the free standing pier of the Main Aqueduct adjacent to the Town Wall.	89
4.16	Plan of Falerii Novi showing the location of street fountains and evidence for water pipes.	90

4.17	Selected GPR time slices showing the plan of the forum [83].	92
4.18	Horizontal GPR slices showing the theatre [178].	95
4.19	Photo of north side of the amphitheatre looking east, as cleared in 2001.	96
4.20	Photo of south side of the amphitheatre looking west, as cleared in 2001.	96
4.21	Horizontal GPR slices showing the macellum [106].	97
4.22	Horizontal GPR slices showing the possible macellum [146].	98
4.23	Horizontal GPR slices showing the baths [125]/[159].	100
4.24	Interpretative plan of the baths [125]/[159].	101
4.25	Interpretative plan of the baths [164].	106
4.26	Horizontal GPR slices showing the monumental porticoed nymphaeum [253].	112
4.27	Horizontal GPR slices showing the temple [201].	114
4.28	Plan of Falerii Novi showing the location of public buildings.	115
4.29	Plan of Falerii Novi showing the distribution of domestic buildings.	117
4.30	Plan of Falerii Novi showing the location of tabernae and commercial buildings.	119
4.31	Graph showing estimated population density by insula.	121
4.32	Plan of Falerii Novi showing estimated population densities by insula.	122
6.1	Summary plan of Falerii Novi showing the interpretation of the features revealed in the surveys.	132–3
6.2	GPR survey of a large suburban villa complex south of the rio del Purgatorio.	136

Tables

1.1	Index to the descriptions and plans of the Insulae.	11
2.1	Material properties of Tufo Rosso a Scorie Nere and other building materials.	22
4.1	Widths of Gates where these have been recorded.	75
4.2	Evidence for alterations to the street system.	87
4.3	Gradiometry survey evidence for probable water pipes within the town.	89
4.4	Street fountains identified in the survey.	91
4.5	Temples and other possible religious structures identified in the survey.	113
4.6	Summary of the epigraphic evidence for temples at Falerii Novi.	116
4.7	Commercial buildings identified in the survey.	118
4.8	The urban (intramural) population of Falerii Novi.	120

Foreword

This book is the product of my prolonged engagement with the site of Falerii Novi. I first visited it when travelling in the region in the mid 1990s and first worked there with Simon Keay and others in 1997–98. The results of the survey undertaken then had a major impact both on the shape of our future fieldwork careers and on the discipline of urban archaeology in Roman Italy. I have wrestled with understanding the site periodically since then, so the ideas presented here have been long in gestation. They owe an immense amount to discussions with many people over the years, not least my co-authors of this volume together with Andrew Wallace-Hadrill and the late Simon Keay.

Information included here takes account of the results of the current Falerii Novi Project and other publications to the end 2023. I was also able to visit the Falerii excavations in June 2024 and have included a few notes relating to the preliminary results of the 2024 season.

Martin Millett Cambridge June 2024

Acknowledgements

The GPR survey that forms the core of the current work was the product of a project undertaken in 2015–17, *Beneath the Surface of Roman Republican Towns*, funded by the Arts and Humanities Research Council (Grant reference: AH/M006522/1). Additional support for the work contained in this publication has been provided by the Faculty of Classics, University of Cambridge to whom we are extremely grateful. We would also like to thank the Fund for Scientific Research—Flanders (FWO) for its support of the GPR prospection, through a postdoctoral fellowship for Lieven Verdonck and a Research Infrastructure grant to Frank Vermeulen.

In the preparation of the book we have been helped by many people. An especial thanks goes to Lacey Wallace who reprocessed the data from the 1990s gradiometry survey at the beginning of our AHRC project. John Patterson and Lisa Fentress and two anonymous referees kindly provided comments on various aspects of the draft manuscript. Armin Schmidt generously offered advice to Lieven Verdonck on the interpretation of the magnetometer data. Beatrice Fochetti, Rachel Optiz and Nicola Terrenato kindly shared the results of their work in advance of publication. Over the years, we have also benefitted greatly from the support of the British School at Rome, and especially Stephen Kay. We are also grateful to Meg Andrews, Seth Bernard, Emlyn Dodd and Stephen Kay for sharing information from the current Falerii Novi Project.

Finally, we would like to thank the land owner, Sig. Gianluca Mancini, who generously allowed access to the site over many years, and the various members of staff of the Soprintendenza Archeologia, belle arti e paesaggio per la provincia di Viterbo e per l'Etruria meridionale (and its predecessors) who have supported our work over many years, especially Dott.ssa Maria Anna de Lucia Brolli without whose support our work in 1997 would never have started.