

# Medieval Rural Settlement and Infrastructure Archaeology Across Europe

Edited by  
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**Access Archaeology**





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Front Cover: Early medieval settlement enclosure and fields excavated at Roestown 2, Co. Meath, Ireland, in 2005–06 in advance of work on the M3 motorway scheme. (*Photograph by Archaeological Consultancy Services (ACS) Ltd and Studio Lab; reproduced by permission of ACS and Transport Infrastructure Ireland*)

Back Cover: Reconstruction drawing of the late 8th- to early 9th-century farm of Sint-Denijs-Westrem – The Loop in Flanders, showing a child playing as adults are storing this year’s harvest in pits to secure a seed stock for next year. (© Yannick De Smet, DL&H and Ghent University)

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# Key organisations and contributor biographies

## Key organisations

### *Medieval Settlement Research Group (MSRG)*

The Medieval Settlement Research Group (MSRG) (<https://medieval-settlement.com>) is a long-established, internationally recognised, multi-disciplinary organisation dedicated to advancing understanding of medieval rural settlements and landscapes between the 5th and 16th centuries AD. Founded in 1986 from the amalgamation of two groups focussed on deserted and moated medieval rural settlements, the MSRG brings together archaeologists, historians, geographers and related specialists to facilitate collaboration and knowledge exchange. Its core aims include promoting research on villages, hamlets and farmsteads, encouraging pan-European perspectives, and supporting studies that range from individual sites to broad landscape-scale analyses. The group disseminates findings through its annual journal, *Medieval Settlement Research*, which publishes peer-reviewed articles, fieldwork reports, reviews and bibliographies. MSRG also organises spring and winter seminars, provides small grants for research and conference participation, and contributes to national policy discussions on the recording, preservation and excavation of medieval rural sites.

In 2020–22, the MSRG ran four online seminars on the impact of infrastructure archaeology on medieval rural settlement studies in 16 countries across Europe: this volume publishes 15 of these papers, extended, updated and fully referenced, with an added introduction and concluding overview by the volume editors who are all members and current or former officers of the MSRG.

### *Ruralia*

Ruralia (<https://ruralia2.ff.cuni.cz>) is an international European association dedicated to the archaeology of medieval and post-medieval rural settlement and rural life. Founded in 1995, Ruralia promotes comparative, interdisciplinary research on rural environments from Late Antiquity and the early medieval period through to the early modern era, addressing topics such as settlement forms, economy, landscape use, buildings, social organisation and daily life. Its central activity is a biennial international conference, each focused on a specific thematic topic, bringing together researchers from participating European countries to share current work and advance cross-border archaeological understanding. Conference papers undergo peer review and have been published in dedicated volumes every two years since the first Ruralia conference in Prague in 1995. Ruralia is formally registered in the Netherlands and provides a key European platform for scientific exchange in rural archaeology, strengthening collaboration across disciplines and regions.

### *European Archaeological Council (Europae Archaeologiae Consilium, EAC)*

The European Archaeological Council (<https://www.europae-archaeologiae-consilium.org>) is a Europe-wide network of representatives of national bodies responsible for managing archaeological heritage. Established in 1999 as an international non-profit organisation under Belgian law, it brings together heads of national archaeological services to strengthen cooperation, develop shared standards, and exchange information. The EAC focuses on supporting the effective management and protection of archaeological heritage across Europe, particularly through monitoring the implementation of the Valletta Treaty and facilitating structured collaboration among heritage agencies. Membership is open to national authorities from Council of Europe countries, and today the EAC represents heritage managers from 30 European states. Its work includes publishing guidance

documents, hosting annual thematic symposia, and convening specialist working groups that address transnational challenges in archaeological management. The EAC also collaborates closely with organisations such as the European Association of Archaeologists and maintains observer status within Council of Europe heritage committees.

### ***European Association of Archaeologists (EAA)***

The European Association of Archaeologists (<https://www.e-a-a.org>) is a major pan-European, membership-based, non-profit organisation founded in 1994 in Ljubljana, Slovenia. It brings together professional archaeologists, students and other interested individuals from across Europe and beyond, with over 12,000 registered members from around 120 countries having participated across its history. Its mission is to promote archaeological research, encourage the exchange of information, support the management and interpretation of Europe's archaeological heritage, and uphold ethical and scientific standards in archaeological practice. A central activity is its large and influential Annual Meeting, which attracts thousands of delegates each year for sessions on archaeological research, theory, fieldwork and heritage management. The EAA also publishes the *European Journal of Archaeology*, the newsletter *The European Archaeologist* and a monograph series that disseminates current scholarship.

### **Author biographies**

#### ***John A. Atkinson***

John Atkinson is currently Chairman of GUARD Archaeology Limited, an archaeological services company he co-founded in 2011. He has worked in commercial archaeology for over 30 years and was formerly Deputy Director of Glasgow University Archaeological Research Division (GUARD). John has undertaken significant research projects such as the Ben Lawers Historic Landscape Project and the Scottish Bloomeries Project and published widely on his research interests including Scottish rural settlement and early industries during the medieval and post-medieval periods.

#### ***Paul Arthur***

Paul Arthur was until retirement in 2025 Professor of Medieval Archaeology at the University of Salento and President of the Italian Society for Medieval Archaeology (SAMI). His research focuses on settlement systems, ceramics, economic history, and societal and environmental change and its impact. He has conducted numerous excavations, field surveys and studies in Britain, Italy, Turkey, the Sinai Peninsula and Ukraine and published widely on medieval rural settlement. After recently concluding major excavations at the castle and town walls of Lecce, his current projects, with a particular focus on the Byzantine period, include mapping medieval settlement in Salento and excavations at Lombard and Byzantine Oria.

#### ***Floris Beke***

Floris Beke is an archaeologist at RAAP Belgium, an archaeological contractor. He obtained his master's degree in Archaeology from Ghent University in 2009, specializing in the archaeology of North-west Europe. Over the past 15 years, he has led numerous archaeological investigations in Flanders, primarily focusing on large-scale, rural, multi-period sites. In addition to his focus on medieval archaeology, his interests extend to the landscape potential of sites. In 2024, he published a synthesis of 25 years of archaeological research on linear infrastructure projects in Flanders, evaluating both methodology and knowledge potential and comparing the results with surrounding regions.

### ***Neil Christie***

Neil Christie is Professor of Medieval Archaeology at the University of Leicester, UK, where he has been based since 1992. His specialisms relate chiefly to late Roman and early medieval archaeology, notably in Italy, but he has also worked on and led excavation and survey projects in Spain, Turkey and England, including a major project centred on the early to late medieval historic townscape of Wallingford in Oxfordshire. Key research themes cover urbanism, defence and transitions in the landscape. He has a long association (as Secretary and Reviews Editor) with the UK's Medieval Settlement Research Group and the Society for Medieval Archaeology.

### ***Wim De Clercq***

Wim De Clercq is Professor of Historical Archaeology at Ghent University and leads the Historical Archaeology Research Group within the Department of Archaeology. For more than a decade, his work and that of his team have focused on Roman-period and medieval rural settlement and building traditions in Flanders, alongside landscape-archaeological research on maritime access and the outer harbours of Bruges in the medieval period. Since 2024, he has served as Principal Investigator of the project *Lost villages of the river Scheldt*, which investigates drowned late-medieval villages in the river's intertidal zone near the estuary in The Netherlands.

### ***Gareth Davies***

Gareth Davies is Technical Director at SLR Consulting and an Honorary Research Fellow in Medieval Archaeology at the University of Nottingham. A member of the Chartered Institute for Archaeologists and a fellow of the Society of Antiquaries of London, Gareth's former roles have included Director of Archaeology at the York Archaeological Trust, Chairman of the Sedgeford Historical and Archaeological Research Project in Norfolk and member of the MSRG Committee. An experienced field archaeologist, Gareth's research interests focus on the development of social complexity in the settlement landscapes of early medieval Britain and north-west Europe, and how excavation and survey methods can help inform these debates. He has published widely on settlement investigations in the Midlands and East of England and was co-chair of the MSRG infrastructure archaeology seminar series.

### ***Ewoud Deschepper***

Ewoud Deschepper obtained his PhD on early medieval rural settlement at Ghent University in 2022, since when he has been studying medieval village formation in south-western Flanders (Belgium). He currently works at SOLVA, the inter-municipal service for southern East Flanders, where he continues his work on medieval villages, rural settlement and landscape through the combination of archaeological, historical and place-name evidence. He is secretary of Forum Vlaamse Archeologie, an interest group aiming to improve the public outreach of archaeology in Flanders.

### ***Zdravko Dimitrov***

Zdravko Dimitrov is Associate Professor in Department of Antiquities in National Institute of Archaeology and Museum by the Bulgarian Academy of Sciences (NAIM-BAS) Sofia, Bulgaria since 2001. He has directed more than ten rescue excavations along infrastructure projects in modern Bulgaria as well as research excavations of Roman towns Ratiaria, Bononia and sanctuaries in Rhodopes. He has been Mellon Fellow from Jordan (ACOR 2009) and Greece (ASCSA 2011) and held a Paul Getty Foundation Stipend for Algeria for 2012.

### ***Paweł Duma***

Paweł Duma is an Assistant Professor at the Institute of Archaeology, University of Wrocław (Poland) and is the Polish national representative for the Ruralia Association. His research focuses on historical archaeology, particularly medieval and post-medieval rural communities, material culture and social practices connected with death, including execution sites and burial customs. He has directed and participated in numerous excavations in Silesia and has published widely on gallows sites, funerary archaeology and the archaeology of everyday material culture.

### ***Jesús Fernández Fernández***

Jesús Fernández Fernández is currently a Ramón y Cajal research fellow at Oviedo University, an Honorary Research Associate at UCL's Institute of Archaeology, and a professor-tutor at the National University of Distance Education (UNED), where he teaches and explores topics ranging from the history and archaeology of medieval societies to heritage studies and the dissemination of historical knowledge. He has directed numerous academic initiatives and fieldwork at medieval sites, with a particular interest in the material culture of rural settlements and peasant communities. Since 2012, he has been leading the award-winning La Ponte Research Centre and Ecomuseum in Asturias (Spain) and serves on the executive board of MINOM-ICOM (International Movement for a New Museology).

### ***Johan Hoorne***

Johan Hoorne has more than 20 years' experience in contract archaeology. In 2012, he co-founded the archaeological contractor De Logi & Hoorne, which focuses on rural archaeology in the western part of Flanders, and covers all chronological periods. Since 2007, he has managed the large-scale archaeological project of The Loop, near Ghent, which features a diverse and extensive multi-period site, including an early medieval settlement and two settlements and a windmill dating to the high medieval period. In his spare time, he is chairperson of Forum Vlaamse Archeologie.

### ***Andrej Janes***

Andrej Janes is consultant conservator archaeologist at the Croatian Conservation Institute, Division for Archaeological Heritage, in Zagreb. He has written extensively on Croatian archaeology and has been involved with infrastructure archaeology projects for many years, with a key paper published in 2019. He is a member of Ruralia, the international association for the archaeology of medieval and post-medieval settlement and rural life in Europe and is its national representative for Croatia.

### ***Aline Kottmann***

Aline is employed at the State Office for Cultural Heritage Management in Baden-Württemberg, where she has worked since 2018 in 'Operational Archaeology', with responsibility for excavations with a primary focus in medieval archaeology. She is member of the board of the German Society for Medieval and Post-medieval Archaeology (DGAMN). Her research interests are in cultural landscapes and the reconstruction of production facilities using archaeological approaches.

### ***Mette Svart Kristiansen***

Mette Svart Kristiansen is associate professor at Aarhus University. Her main research area is medieval and early modern rural settlements. She has published research internationally and nationally, lately as head of the research network Medieval Rural Denmark. She was formerly head of excavations at

the Øresund coast-to-coast link with Copenhagen County Council and on the subway in Copenhagen with Copenhagen Museum. She is the national representative for Denmark for Rurialia.

### ***Carenza Lewis***

Carenza Lewis is a medieval archaeologist and Professor of Public Engagement with Research at the University of Lincoln, having formerly been archaeological investigator with the Royal Commission on the Historical Monuments of England, research fellow at Birmingham University, and director of Access Cambridge Archaeology at Cambridge University. A member of the MSRG since 1986 and of TV's *Time Team*, she has researched and published widely on medieval rural settlement, since 2005 directing community excavations in >100 currently occupied medieval rural settlements in England and from 2019–23 leading a major project introducing this approach in more than a dozen rural settlements in the Netherlands, Czech Republic and Poland. A former president of the Society for Medieval Archaeology and of the MSRG, she currently chairs the European Archaeological Association Advisory Committee for the Public Benefits of Archaeology and is the UK national representative for Rurialia.

### ***Petr Lissek***

Petr Lissek is the director of the Institute for Preservation of Archaeological Heritage of North-West Bohemia. He studied archaeology at the University of West Bohemia and led many rescue archaeological research projects in the region. He specialises in medieval and mining archaeology.

### ***Gabe Moshenska***

Gabriel Moshenska is Professor of Public Archaeology at UCL Institute of Archaeology. His research interests include the history of archaeology, the archaeology and heritage of 20th-century conflict, and the public understanding of the past. His publications include *Material Cultures of Childhood in Second World War Britain* (Routledge, 2019) and, as editor, *Teaching and Learning the Archaeology of the Contemporary Era* (Bloomsbury, 2024). He is currently researching the archaeology of buried books, archaeological themes in horror fiction, and the history of Egyptian mummy unrolling parties.

### ***Richard Newman***

Richard was until retirement in 2025 the local authority heritage curator for East Yorkshire responsible for historic environment services, following similar roles in Lancashire and Cumbria. He began his archaeological career in south Wales in the early 1980s and has been a member of the MSRG since the late 1980s with research interests focused on medieval and post-medieval settlement and landscapes. He has worked as both a contract archaeologist and a local authority curator, holding senior posts at Wessex Archaeology, Lancaster University Archaeological Unit and Wardell Armstrong. In the 1990s, he project-managed the archaeological responses to major schemes including Wessex Water pipelines, the Newbury Bypass, the Second Severn Crossing English Approach Roads, and in 2017–19 managed archaeological investigations conducted for the East Anglia One cable trench project.

### ***Petr Netolický***

Petr Netolický is the Head of the Applied Research Unit at the Department of Archaeology, University of West Bohemia, which focuses primarily on endangered archaeological sites and interconnects field activities with an educational heritage and archaeology program. He specialises in medieval, post-medieval and building archaeology.

### **David Novák**

David Novák is the Deputy Director of the Institute of Archaeology of the Czech Academy of Sciences in Prague, serving also as the Head of the Department of Information Resources and Landscape Archaeology. He graduated at the University of West Bohemia in Pilsen, where he also defended his doctoral thesis focused on medieval and early modern manorial residences and their role in the landscape. He is responsible for the Czech national research infrastructure for archaeological data. His research interests include FAIR data management, GIS applications and landscape archaeology. He is involved in a number of projects in open science and digital humanities.

### **Aidan O'Sullivan**

Aidan O'Sullivan is Professor of Archaeology and Head of UCD School of Archaeology, University College Dublin. His research interests focus on early medieval Ireland in North-west Europe, wetlands archaeology and environments globally, and experimental archaeology, and he is co-director of the UCD Centre for Experimental Archaeology and Material Culture (CEAMC). He was co-PI of the INSTAR-funded *Early Medieval Archaeology Project* (EMAP), 2007–2015, and is currently co-PI of the Taighde Eireann/Research Ireland COALESCE-funded *Early Medieval People and Things* (EMAP) project, exploring the materiality of life in early medieval Ireland, AD 400–1100.

### **Edith Peytremann**

Edith Peytremann is currently a Professor of Medieval Archaeology at the University of Tours, France, having previously worked for many years at the National Institute for Preventive Archaeological Research (INRAP). She is a leading researcher on settlements in France in the Middle Ages, on which she has written extensively. Edith is a member of Ruralia and has been the national representative for France. She is the co-president of the French Association of Merovingian Archaeology.

### **Tibor Ákos Rácz**

Tibor Ákos Rácz is assistant professor of the Institute of Archaeology at the Pázmány Péter Catholic University, Budapest, archaeologist of the Ferenczy Museum Centre and head of the Community Archaeology Association in Hungary. He has conducted extensive research into the birth of the Hungarian village system in the High Middle Ages and dedicated several studies to analysing the effects of crucial political events (conquest of the Carpathian Basin, Hungarian state foundation, Mongol invasion) on contemporary life and material culture. He is the national representative for Hungary for Ruralia.

### **Edit Sarosi**

Edit Sarosi is head of the Department of Ancient History in the Aquincum Museum of the Budapest History Museum and was until 2022 head of the Excavation Project Office in Budapest History Museum. She was inspector of archaeology at the Cultural Heritage Protection Office between 2004 and 2017 and earned her PhD in Medieval Studies at Central European University in 2013. She is interested in medieval rural landscapes of Hungary, and especially studies of medieval and early modern settlement and land management practices. She has published widely including a monograph on deserted villages and emerging market towns in the Great Hungarian Plain 1300–1700 and a chapter on Kecskemét in the *Hungarian Atlas of Historic Towns*.

### ***Rainer Schreg***

Rainer Schreg holds the chair of Medieval and Post-medieval Archaeology at Bamberg University. His research – besides his interest in the archaeology of ceramics – has a strong interdisciplinary focus on environmental and social history, critically examining the archaeology of village formation, crises, sustainability and resilience in medieval societies. His work includes studies on medieval deserted settlements in Southern Germany, and extends to international projects such as environmental archaeology in Crimea and investigations of pre-Columbian and colonial sites in Panama. He holds a strong interest in the meaning of archaeology in modern societies, communicating his insights through his academic blog ‘Archaeologik’.

### ***Barney Sloane***

Barney Sloane is currently National Specialist Services Director at Historic England, with responsibility for their archaeologists, scientists and building conservation specialists. His professional career began in commercial archaeology before a period as a Research Fellow at the University of Reading, after which he joined English Heritage, later to become Historic England. His interests focus on medieval archaeology and history, particularly funerary archaeology and the impact of plague in England in the 14th century. He is a former President and currently Honorary Board Member of the European Archaeological Council, and chaired the working group on Public Benefit in Development-led Archaeology.

### ***Eva Steigberger***

Mag. Dr. Eva Steigberger is currently Head of Department of Archaeology, Federal Monuments Authority Austria, responsible for all legal matters of archaeological interventions in Austria. She started her career in commercial archaeology, began her work for the Federal Monuments Authority in 2007 in archiving and after a period as a research assistant at the Austrian Academy of Sciences, Institute for the Study of Ancient Culture, joined the Authority full-time first responsible for Styria, since 2017 as Dept. Head of Department and since end of 2025 as Head of Department of Archaeology. She is a member of the European Archaeological Council (EAC).

### ***Rónán Swan***

Rónán Swan is Head of Archaeology and Heritage at Transport Infrastructure Ireland (TII), a major commissioner of archaeological work in Ireland over the past 25 years. A graduate of University College Dublin, he holds a master’s degree from Southampton University and postgraduate diplomas from Trinity College Dublin and University College Cork. He previously served as Head of Archaeology at the National Roads Authority and has over 30 years of postgraduate archaeological experience in the private and public sector. Rónán is a former board member of the Discovery Programme and former chair of the Royal Irish Academy’s Standing Committee for Archaeology.

### ***Claudia Theune***

Claudia Theune was from 2007 until retirement in 2024 Full Professor of Historical Archaeology at the University of Vienna. She studied prehistory and early medieval archaeology at the Universities of Marburg and Bonn, completing her doctorate in 1988. In 2001, she completed her habilitation at Humboldt University in Berlin. Her research interests include archaeology of the Middle Ages and modern times, especially early medieval forms of representation, medieval ways of life in remote areas such as the Alps and conflict archaeology of the 20th century. Claudia was formerly President of Ruralia.

### ***Pavel Vařeka***

Pavel Vařeka is the Head of the Department of Archaeology and associate professor at the University of West Bohemia in Pilsen. He has conducted extensive research in medieval and post-medieval archaeology and has published numerous studies on settlement, deserted and inhabited villages, rural housing, and material culture. He carried out extensive rescue research on a whole village in North-West Bohemia, which was demolished due to coal mining (Libkovice). In recent years, he has also focused on contemporary archaeology, which he has been developing in the Czech Republic and beyond. He is currently leading a research project in Kyrgyzstan on settlement transformation in the long-term perspective and the archaeology of the forced Soviet collectivisation of nomads.

### ***Elena Vasileva***

Elena Vasileva is Assistant Professor of History and Archaeology in the Department of Medieval Archaeology of the National Archaeological Institute with Museum, Bulgarian Academy of Sciences in Sofia, Bulgaria, and since 2019 has been NAIM-BAS Assistant Scientific Secretary. Her research interests are in the late medieval Balkans, including cultural characteristics, contacts and exchange within the Ottoman empire, and jewellery, settlements, funerary customs and cemeteries. Since 2003, she has led more than 30 field archaeological surveys, and, since 2018, has been a participant in the Joint Research Programme 'Research and interpretation of the archaeological cultures on the territories of Bulgaria and Serbia'.

### ***Gerben Verbrugge***

Gerben Verbrugge works as a spatial planning consultant for a local authority in Western Flanders. In this role, he bridges the gap between historical and modern development, applying his expertise in village structures into modern local governance and land-use strategies. He obtained his PhD on rural settlement landscapes in the County of Flanders and the impact of Flemish incomers in South Wales from Ghent University in 2020.

## Foreword

This volume provides a fascinating and extremely valuable insight into the way in which our understanding of medieval settlement has been transformed across Europe by archaeology occasioned by large-scale infrastructure projects – such as motorways, pipelines, high-speed rail, airports, energy corridors, and urban development. The authors and editors are all to be congratulated for what has clearly been a major undertaking.

One impact of the implementation of the 1992 Valletta Convention, requiring archaeological investigation to be carried out in advance of development, has been a revolution in knowledge and understanding of medieval rural settlement archaeology. Infrastructure-led archaeology has, at scale, opened windows onto previously unstudied landscapes, offering otherwise impossible opportunities. Yet the resulting surge in excavations has also created systemic challenges to coherent synthesis, such as insufficient post-excavation funding, consequent publication backlog and uneven regional coverage. It has also, in some places, revealed continuing fragmentation between commercial and academic sectors. Nonetheless, as the 15 regional assessments in this volume amply demonstrate, infrastructure archaeology remains one of the most powerful engines for generating new knowledge about medieval Europe.

Key revelations emerging from this important review are numerous; a few can be highlighted here.

In terms of understanding, it seems clear from the assessments that what we might term early medieval (i.e. of 5th- to 10th-century date) rural settlements – previously elusive because of ephemeral construction and lack of documentary visibility – have been uncovered in unprecedented numbers. The early medieval period, long relatively poorly represented archaeologically, now emerges as far more complex, varied and densely occupied than once assumed.

The understanding of later medieval settlement studies is, by contrast, hampered. Later medieval settlements (11th–16th-century date) are often still inhabited today and infrastructure projects typically avoid current settlements, creating something of an information bias. This is problematic given their value for understanding increasing nucleation and the development of planned layouts, the intensification of agriculture and craft production, and especially shrinkage, desertion, and crisis patterns of the 14th and 15th centuries.

Beyond this, methodologically, infrastructure projects have been proved to be extremely valuable because they tend towards ‘randomised’ samples of sites across landscapes. As a result, they can provide exposure of marginal or specialist sites (charcoal kilns, woodland industries, quarries, peat extraction, pottery fields) and reveal regional variation invisible in research-driven projects. This characteristic of infrastructural archaeology should be embraced and built into research designs and should be connected into a parallel and linked increase in strategic use of digital technologies at landscape scale (Lidar, geophysics, aerial survey).

The surveys in this volume also illustrate lack of, or long delays to, final publication and archiving of the findings, without which the step-change in transformation will be held back. Among reported pressures/weaknesses are lack of mandated funding for synthesis and analysis; commercial pressures to complete fieldwork quickly; patchiness or lack of archives and data standards; and weak integration between universities and commercial archaeologists.

Also of considerable interest within this volume are the comparative insights across different states and regions. Central and eastern Europe stands out as having obtained the most dramatic knowledge gains in the last quarter-century, when compared with western and northern European states. Many of the latter on the other hand, are creating genuinely useful models for data aggregation and synthesis which can be adopted or adapted by others. Working together across borders should therefore benefit everyone.

As a whole, and taking pan-European analytical themes, it is – for the first time – becoming possible to explore patterns and characters of medieval settlement; specialisations within them; seasonality and transhumance; and the sheer diversity of landscape and settlement forms, longevity and crisis.

Perhaps the greatest contribution of this volume is the emerging suite of recommendations, drawn as they are from the experiences of archaeologists working in a wide variety of circumstances. These relate to scientific outcomes from mandatory analysis, synthesis, archiving, and publication; open, standardised data systems and standards (GIS, databases, digital archives); strengthened controls where competitive archaeological markets exist; cross-disciplinary collaboration; and, arguably the most important of all if we are to continue to benefit from Valletta, engagement with the public whose shared past this all is.

Demonstrating as it does the value of development-driven archaeological investigation, this volume is full of useful and important insights which I firmly believe will stand the test of time.

*Barney Sloane*

*National Specialist Services Director, Historic England*

*Hon. Board Member, European Archaeological Council*

# **Introduction: Exploring the impact of infrastructure archaeology on medieval rural settlement remains across Europe**

Carenza Lewis, with Neil Christie, Gareth Davies and Aidan O’Sullivan

## **Introduction**

This volume explores the impact of infrastructure archaeology on rural medieval settlements across Europe, from Bulgaria in the east to Ireland in the west, from Scotland in the north to Italy in the south. But, in many respects, it starts in Malta. This is because it was the European Convention on the Protection of the Archaeological Heritage, signed in 1992 in Valletta, Malta, that led to the transformation across Europe of the quantity and quality of infrastructure-led archaeology. Development of the continent’s infrastructure since then has been driven by many factors, but the stipulations of the so-called Valletta Convention ensured that these developments have been preceded by a vast amount of archaeological investigation over the last 35 years. However, while the impact of these excavations – either on archaeological sites themselves, or on our knowledge and understanding of the past – has been explored for some topics or periods in some countries (e.g. Bradley *et al.* 2015), these have rarely encompassed medieval rural settlement, despite the demonstrated potential for data from development-led archaeology to significantly advance understanding of aspects of this subject (e.g. Rennes *et al.* 2018). (See Darvill *et al.* (2019) for a detailed survey of the impact, scale and range of developer-led archaeologies in England.)

This volume brings together experts in medieval rural settlement and archaeologists in cultural resource management and planning across 15 different European countries to review the ways in which the threats to buried archaeology have affected medieval rural settlement remains. It aims to review what new discoveries have been able to tell us about that past, and to consider what needs to be done to ensure the best return (to knowledge and understanding) on investment (infrastructure funds spent on archaeology) now and into the future.

## **Development, archaeology and the 1992 Valletta Convention**

Construction in the present for the future has long been liable to encounter remains from the past. However, it was not until the second half of the 20th century that growing awareness of the massive scale of destruction being inflicted on the archaeology by post-war reconstruction, rising urban populations, economic expansion and infrastructure modernisation led to the recognition that existing approaches to heritage ‘protection’ were inadequate – at best relying on reactive last-minute, *ad hoc* ‘rescue’ excavations desperately attempting to record archaeological features a few metres ahead of advancing construction machinery and, at worst, forced to accept wholesale loss of irreplaceable heritage (Heighway 1972).

Ultimately, this led to the hugely impactful *European Convention on the Protection of the Archaeological Heritage (Revised)* signed on the 16 January 1992 in Valletta, Malta. This act, commonly referred to as the Valletta Convention, came into force in May 1995 and represented a pivotal shift in heritage legislation across Europe. It was adopted by nearly all member states, being ratified, for example by Bulgaria in June 1993, France in July 1995, Norway in September 1995, Ireland in March 1997, Cyprus

in April 2000, Germany in January 2003 and Denmark in November 2005.<sup>1</sup> Now, significantly, the principles of the Valletta Convention are largely followed in all EU countries.

The Valletta Convention reframed archaeological preservation as an integral component of planning (including in rural contexts) and introduced the ‘polluter pays’ principle whereby the developer (i.e. the organisation financing the development) should cover the costs of mitigating or minimising damage to any encountered archaeological remains. The Valletta Convention requires the presence or likelihood of archaeological remains – encompassing any sites, structures or materials, whether already known, suspected or entirely unexpected – to be identified or anticipated as early as possible in the planning process, before construction begins. Archaeological remains identified, at any stage, must be assessed and either avoided through redesign of the proposed development or, if this is impossible or unjustifiable, excavated and recorded so that, while the actual site may be lost, knowledge of what was there is preserved for posterity.

As importantly, ratification of the Valletta Convention by the many EU member states (and the use of similar principles elsewhere) led to the widespread development of specialised archaeological teams largely funded by developers to cooperate with planners and engineers to integrate archaeological investigation and recording into project timelines, with (in principle) adequate funding for comprehensive investigation, rigorous methodology and prompt publication of findings. The teams carrying out these archaeological investigations – variously termed ‘rescue’, ‘preventative’ or ‘development-led’ – might be employed within state departments, museums, universities or private commercial companies.

Valletta was timely, since the economic booms experienced in the 1990s and early 2000s across many parts of Europe, along with political changes such as the disintegration of the USSR and the accession of a large number of new states into the European Union, were accompanied by an array of manifestations, including population growth, urban expansion in terms of suburban housing, retail parks, business parks and leisure centres, the creation of new settlements and an expansion of existing ones through new housing, plus a fuller internationalisation of trade. The experience of ‘boom’ was not, of course, consistent across all of Europe. Many territories in fact saw an economic depression in the early 1990s (as in France) or weaker growth, or else struggled in face of slow recovery or reconfiguration of state structures, such as following the end of Communism in Poland (post-Solidarity) and in Czechoslovakia in 1989 (the ‘Velvet Revolution’), or following war and conflict, notably the Bosnian War of 1992–95. More recently, the 2008 financial crash reduced expenditure on development in many states, and in the 2020s the economic effects of the Covid-19 pandemic and the war in Ukraine have put further pressure on investment for development.

### **Infrastructure archaeology**

This volume on medieval rural settlement focusses on infrastructure (whose definition is discussed further below) archaeology because, compared to other development-led archaeology, infrastructure projects (such as roads, pipelines, airports, windfarms, etc.) typically cover very large areas, are more likely to range across open countryside where smaller or lost medieval rural settlements may be present, and often offer very little scope for adjustment if archaeological remains are found, making it particularly destructive. But, the scale and character of infrastructure archaeology also provide unique opportunities to investigate previously undisturbed parts of the landscape, to discover entirely new sites in places where none had previously been known, and to carry out excavations that would never otherwise have taken place. Much development-led archaeology (such as for housing or commercial developments) tends to affect land near inhabited settlements

<sup>1</sup> <https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=143>

(today's cities, towns, villages, etc.), but 'extended' infrastructure archaeology is much more likely to affect open countryside: linear works such as building major roads or installing gas pipelines can require, in effect, random archaeological sampling across tens, or even hundreds, of kilometres.

State investment in infrastructure has been a prominent feature of the decades since the Valletta Convention, including roads (new, modified, expanded), railways, shipping and air transport; infrastructure also encompasses business, industrial and leisure parks or districts, services for water, energy and communications, management of refuse or supply chains, and much more. More recently, responses to climate change and the transition to a greener economy have instigated other new, often highly visible, infrastructure developments, such as flood defences, reservoirs, wind farms and solar parks.

### **Medieval rural settlement and infrastructure archaeology**

The creation of major new motorways, the redesigning or broadening of existing roads and railways, the laying of new energy pipelines, the setting-up of wind farms, and the works to carve out new industrial or retail parks with the concomitant needs for related services, have seen vast tracts of the landscape cut through and large areas of land stripped back. Knowing how many medieval settlements are found, when and where they existed, and what they were like, has the potential to transform our understanding of life in the medieval countryside across Europe; of the origins and development of the landscape we live in today; and of the development of the sorts of 'everyday' settlement – villages, hamlets, farms and so on – that were the homes of nearly all those who lived in those landscapes before us.

As the many contributions in this volume show, infrastructure programmes have indeed revealed evidence for a rich array of medieval activity in these landscapes, from former villages to farmsteads, from late antique villas to medieval manors, from field systems to managed woodlands, wetlands and parklands, from burial grounds to ritual monuments, even encompassing (rather appropriately) ancient infrastructure, such as road networks and water-management systems. Some of these sites are multi-period, with phases of activity spanning the prehistoric to early modern periods, while even exclusively medieval sites can span a millennium or more, and many sites generate very high numbers of finds. By way of example, in southern England, a major project in the 1990s–2000s was the construction of what came to be called the High Speed 1 rail line (HS1), formally opened in November 2007, extending 109.9 km (68.3 miles) to link London with the Channel Tunnel and costing £6.84 billion to build (equating to £51 million per mile!).<sup>2</sup> In the complex planning of the HS1 route or 'corridor' there were conscious efforts to avoid encroaching on historic and/or archaeological sites (achieved through consultation with Historic England, county archaeologists and academic staff), but 'new' sites were inevitably encountered as the line cut through good farmland and pastures, valleys and slopes, linking up existing stations and adjoining roads. Over 70 sites were subject to geophysical survey, field-walking, buildings analysis and/or open-area excavation; over 1,000 trial-trenches were undertaken. A search of the project gazetteer indicates that more than 30 medieval rural sites were encountered.<sup>3</sup> An array of major archaeological organisations, including Museum of London Archaeology, Wessex Archaeology and Oxford Archaeology, and various sub-contracted organisations, were involved in survey and/or excavation and/or in post-excavation: 'At the peak of the archaeological fieldwork, there were over a hundred archaeologists working along the route, carefully excavating and recording the activities of our ancestors. In fact, when construction officially started in 1998, there were more

<sup>2</sup> [https://en.wikipedia.org/wiki/High\\_Speed\\_1](https://en.wikipedia.org/wiki/High_Speed_1)

<sup>3</sup> Abbots Court, Broomfield Farm, Cheekborough Farm, Crossness Farm, Cudhill, Dampfield Farm, Dampton, Ebbsfleet Village, Faversham Road, Foxhall, Great Leyborough, Halstow's Grange, Highnest Farm, Kingston, Landspring, Little Ekerds, Milton Ridge, Northwich Fields, Old Bouverie, Patenorne Farm, Pepper Hill Farm, Perry Court, Ridgeway Farm, Shorne Lane, Stokes Farm, Swanscombe Village, Tilden Farm, Thornhill Farm, Upton Farm, Westcourt Farm and White House Farm.

archaeologists on site than construction workers’ (Helen Glass in HS1 Limited 2011: 7). This quote alone highlights how important – for archaeological knowledge, for the profession, and for the public – such infrastructure projects can be.

### **Ensuring development-led discoveries advance understanding of the past**

The HS1 example above shows the demands of infrastructure archaeology for excavation and processing of its findings, but it does not tell us how much of the work eventually makes its way to full reporting and publication. As various of the contributors to this volume highlight, many of the larger archaeological projects undertaken across Europe as part of infrastructure programmes still await (or indeed lack any or proper funding for) full publication, let alone wider academic study and synthesis. This apparent lack of interest in the outcomes of the archaeological investigations risks undermining the principle that developers should be paying for them.

However, the high value of synthesis is evident in those instances where it has taken place. A decade ago in the Netherlands, the *Valletta Harvest* project initiated by the Dutch Cultural Heritage Agency (RCE) set out to evaluate what large-scale, development-led archaeology since c. 1995 had actually added to our understanding of the medieval origins and development of nucleated villages. Despite formidable obstacles in bringing together a vast amount of evidence of variable quality from very disparate sources, the results were successfully published in 2018 as *Village Formation in the Netherlands during the Middle Ages* (Rennes *et al.* 2018). The authors showed that synthesis of the mass of new archaeological data was able to significantly refine and advance our understanding of medieval settlement development in the Netherlands: it showed there was no single standard pathway to nucleated village formation; that many villages evolved from previously loosely dispersed settlements; that settlement continuity was less stable than previously assumed; and that local factors and human agency mattered more than top-down planning. The authors also noted that, while development-led archaeology had dramatically expanded the evidence base, archaeological data alone could not fully explain the development of medieval rural settlement patterns. Most importantly, the very existence of this volume helped make the case for the value of development-led archaeology for advancing knowledge and understanding both in the Netherlands and more widely across Europe.

### **The aims of this volume**

Taking inspiration from the Dutch initiative, the present volume aims to examine how the threats and opportunities of infrastructure archaeology for medieval rural settlement have been met in 15 different European states. Our focus is wider than in the above-cited *Village Formation*, not only because our volume covers 15 countries, but also because we allow the authors in each country to focus on whatever themes within medieval rural settlement suit their data, not just on the origins of the nucleated village. Conversely, the analyses here cannot be as comprehensive as the Dutch survey because they do not include a bottom-up ‘harvest’ of all data, and they also focus on infrastructure archaeology alone, not all development-led archaeology. Additionally, in the interests of accessibility, achievability and cost for an unfunded venture, we asked authors to observe a tight limit of c. 6,000 words.

The chapters in this volume are based on papers given to a series of four transnational seminars held across 2021–2023, hosted by the Medieval Settlement Research Group (MSRG) and organised by Professor Carenza Lewis as the then President of the MSRG. The seminars were organised as online events, with invited experts from different European countries each given the same brief: to review the impact of large infrastructure projects on medieval rural settlement, in terms both of a)

the threats posed by such developments, and b) the advancement of knowledge and understanding achieved by investigations occasioned by these developments.

The first seminar, in April 2021, covered Ireland, Scotland, Wales and England; the second (October 2021), Belgium, Denmark, the Czech Republic and Germany; the third (October 2022), Spain, France, Italy and Croatia; and the final session (March 2023), Austria, Bulgaria, Hungary and Poland. Each set of papers was followed by an informal panel discussion, with invited panel members who reflected and probed on issues and results highlighted by speakers. Panel discussants included Helena Hamerow, John Blair, Christopher Dyer, Heleen van Londen, Eva Svensson, Mark Gardiner, Catarine Tente, Neil Christie, Sam Turner, Tomas Klir, Claudia Theune and Miklos Takas. Questions from the online audience added further to the lively discussions. Each seminar was recorded and all recordings are available online.<sup>4</sup> The quality of the seminar contributions, and the evident value of the insights provided by speakers and discussants, demonstrated the desirability of formal publication that would benchmark achievements to date and, by synthesising the full range of insights, not only elicit and characterise the wider contribution made to our understanding of medieval rural settlement by infrastructure archaeology, but also identify where difficulties remain and what practices are likely to work best to mitigate these.

### **Defining terms**

In a volume spanning 15 different countries with many distinctive historical trajectories, heritage structures, academic frameworks and first languages, it is important to be aware that the key terms that define the focus of the volume – medieval, rural settlement, infrastructure – may be conceived and used differently in different chapters. Here, we offer here some broad definitions for those key terms and note how their use may vary.

#### ***Medieval***

The medieval period is defined in this volume as broadly encompassing the millennium from the 5th to 16th centuries AD. This period is particularly important to understanding both the past and its place in the world today, because it connects the world of Late Antiquity that is very unfamiliar to most people, with the early modern world whose features are much more familiar to people today and with which they can more easily connect. For example, few members of the wider public may be familiar with what a Roman temple or villa was or looked like, but most will have an idea of what a church or a manor house was.

In reading this volume, it is important to recognise that the term ‘medieval’ can embrace different timespans in different parts of Europe. In some regions, ‘medieval’ is only used for the period after AD 1000: in southern Europe, the period as late as the 8th century might still be referred to as the Late Antique or Byzantine rather than medieval, while in Scandinavia ‘Iron Age’ often continues to be used until the early 9th century. In many regions, the names of dominant cultural groups are used to define eras of the earlier medieval period – thus Avar (c. AD 560s–820s) in Hungary, Frankish (c. AD 480s–980s) in France, Byzantine (c. AD 530s–750s) and Lombard (c. AD 560s–770s) in Italy, and Viking (from the 9th to 11th centuries) in Scandinavia. In some instances, longer periods are broken down into more short-lived eras, such as the Merovingian (AD 480s–750s) and Carolingian (AD 750s–880s) Frankish periods. In others, shorter periods are wrapped up into broader terms such as the Migration period (generally covering the 4th to 7th centuries AD in Europe) or the Anglo-Saxon period (covering the 5th to 11th centuries in England). The complexity of these often rapidly changing geographies of power, and lack of consensus whether political or cultural identity is in any

<sup>4</sup> <https://medieval-settlement.com/events/past-events/> under 2022 and 2023.

case necessarily directly reflected in archaeological remains, encourages the use of broader period labels such as 'early medieval' and 'late medieval'. In this, the 11th century is widely used to divide the 'early medieval' from the 'late medieval', with 'high medieval' used sometimes to additionally distinguish the period between the 11th and the 13th centuries. But readers may find that the terms 'early', 'high' and 'late' medieval are thus not used consistently across the chapters in this volume, reflecting practice in different countries. To compensate, we have encouraged (but not imposed) the use of dates rather than period names where possible.

One value of this volume is showing how interest in some regions or countries has focussed more on the early or late medieval period, and how infrastructural archaeology has prompted fuller recognition of the longer medieval span and its settlement forms. Each chapter will give voice to chronologies and archaeological emphases in their respective 'Middle Ages'.

### ***Rural Settlement***

The term 'settlement' within the context of medieval rural settlement studies refers to places of secular domestic habitation, excluding specialised types such as monasteries and castles. With some variation, the adjective 'rural' is used for settlements which were predominantly directly reliant on exploitation of the countryside, such as crop cultivation, livestock management, rural craft and industry (e.g. pottery making, charcoal burning), extraction (e.g. stone quarrying and mining, peat cutting) and so on. The definition of *rural* settlement excludes urban centres, where the majority of residents did not make their living directly from the land, relying instead on activities such as manufacturing, trade and commerce; however, it is recognised that most rural communities were integrally interconnected with urban communities and their commercial networks. The division between rural and urban is not always clear-cut, either during archaeological excavation or in the past. In some regions, urban settlement was entirely absent in some periods and thus all settlement was rural, while many settlements changed their status over the course of the medieval period, transitioning from rural to urban or from urban to rural, sometimes more than once. In some studies, settlements may be defined as towns which would be categorised as villages in other areas, periods or academic contexts. Accordingly, in this volume, we have avoided seeking to impose strict definitions of 'rural' and 'urban'.

Rural settlements thus include unenclosed and enclosed villages, hamlets, farmsteads and informal settlements, where most rural people lived, as well as some specialised and elite sites, such as mills, sheilings, seasonal settlements, manorial sites, raths, ringworks and so on. Rural settlements range from arable villages or pastoral farms to granges, mining villages and woodland charcoal-burning sites, which may be linked to activity by lords (secular or ecclesiastical) or peasants as independent collectives, or extensions of family-led farms and hamlets. All these form part of the rural settlement pattern of medieval Europe.

Some rural settlements may have been inhabited for just a generation or so, others for centuries, others again episodically. Some eventually became permanently deserted, whereas others are still inhabited today. Some sites include the cemeteries where the dead from the settlement were interred as cremations or inhumations; in that regard, some contributors here include reference to burials and cemeteries. Some of those of early medieval date contained furnished burials with grave-goods, others of later medieval date are usually associated with a church. In this volume, the term 'settlement' (unless specified otherwise by the author) excludes specialised places such as monasteries or castles; however, we do want to highlight something of the landscape that sustained the communities whose settlements we study, including features such as fields, woodlands, drainage ditches, boundaries, extraction sites, roads and so on.

## ***Infrastructure***

The term ‘infrastructure’ refers to the physical and organisational structures essential for societal operation. Today, this includes installations for transportation (such as roads, railways, airports, ports), utilities (including for processing, storing and/or supplying water, energy, refuse, etc.) and communication (telecommunications, internet), as well as public institutions (schools, hospitals, prisons, etc.), extraction works (mining, quarrying, etc.) and even recreation facilities (golf courses, theme parks, ski lifts, etc.). While infrastructure developments are often perceived as linear (e.g. roads, railways or pipelines), others are area-based (e.g. wind farms, reservoirs, refineries, energy plants, industrial estates) and require extensive land stripping or intrusive insertions. Modernization linked to infrastructure can also threaten inhabited places and historic buildings through alteration or demolition.

Infrastructure projects are typically of high social value and high strategic importance, and so are usually publicly funded via government grants, sometimes combined with private investment. Much recent infrastructure development in Europe has been funded by European Union grants. Compared with localised or private building projects, infrastructure schemes are typically large-scale, high-budget and time-sensitive. Their strategic importance also sets infrastructure projects apart: because they are considered nationally or regionally critical, planning and funding may be prioritised, approvals may be streamlined, and changes of route or location to avoid sensitive sites may not be countenanced. These factors make infrastructure development a greater and more persistent challenge to archaeological preservation than most other forms of construction. And yet, paradoxically, these same factors also mean that infrastructure development provides opportunities to find and investigate new and unknown sites.

## **Conclusion**

Given the long and often intense history of settlement, land-use and resource exploitation across Europe, it is inevitable that archaeologies of many diverse periods, types and scales will be encountered in excavations prompted by infrastructural works. Rural settlements of the medieval millennium and their landscapes, might be expected to be well represented in such encounters.

Infrastructure development presents both a threat and an opportunity for the study of medieval rural settlement, as succinctly expressed in this volume by Tibor Ákos Rácz and Edit Sárosi in their review of infrastructure archaeology in Hungary:

‘While, on the one hand, large-scale projects of this kind represent a major challenge for archaeology, on the other hand, they also offer opportunities to expand scientific knowledge, improve research methods, involve and raise public awareness towards archaeology, and inform us of past cultures on a scale impossible before.’

This volume seeks to explore this paradox, reviewing the processes, the impacts and the legacies of archaeology prompted by infrastructure development on the condition, knowledge and understanding of medieval rural settlement across Europe. The chapters in this volume review what has been done, what has been found, and what it has told us in 15 different countries, with the final synthesising chapter distilling the overarching insights transnationally and offering recommendations for the future.

## Bibliography

- Bradley, R., Haselgrove, C., Vander Linden, M. and Webley, L. (eds) 2015. *The Later Prehistory of Northwest Europe: The Evidence of Development Led Fieldwork*. Oxford: Oxford University Press.
- Darvill, T., Barrass, K., Constant, V., Milner, E. and Russell, B. 2019. *Archaeology in the PPG16 Era. Investigations in England 1990–2010*. Oxford: Oxbow Books.
- Heighway, C.M. (ed.) 1972. *The Erosion of History. Archaeology and Planning in Towns: A study of historic towns affected by modern development in England, Wales and Scotland*. London: Council for British Archaeology.
- HS1 Limited. 2011. *Tracks & Traces. The Archaeology of High Speed 1*. London: IC Art and Design Ltd.
- Renes, J., Verspay, J.P.W., Huijbers, A.M.J.H., van Londen, H. and Symonds, J. 2018. *Village Formation in the Netherlands during the Middle Ages (800–1600): An Assessment of Recent Excavations and a Path to Progress*. Nederlandse Archeologische Rapporten 56. Amersfoort: Rijksdienst voor het Cultureel Erfgoed.