

Post-Roman and Medieval Drying Kilns

Foundations of Archaeological
Research

Robert Rickett

Edited and with an introduction by Mark McKerracher

Access Archaeology





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I would like to dedicate this study to Dr Mark McKerracher, whose foresight and hard work have made it available for others to use in the future. Thank you.

Robert Rickett

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Robert Rickett

January 1975

University College, Cardiff

I am very grateful to Dr Mark McKerracher for reading my dissertation and offering to digitise it for publication, as he considers it still useful as a basis for further work by others. Mark's informative introduction places my work into context with what has been achieved since it was written and the current state of knowledge and research. He has done an incredible job, working from a faded copy, devising a simpler reference system which makes it easier to use, giving grid references to each site and producing new distribution maps. He has updated references to sites that are now published. As a result, it is a much better piece of work than the original. Thank you.

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Robert Rickett

June 2021

North Elmham, Norfolk

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The maps in this book have been produced using QGIS software (<http://www.qgis.org>, viewed 29 June 2021); Great Britain and islands boundary data from Ordnance Survey Open Data © Crown copyright and database right 2017, under the Open Government licence; Isle of Man boundary data from Hijmans *et al.* 2015 under the Attribution 3.0 Unported licence (<https://creativecommons.org/licenses/by/3.0>, viewed 29 June 2021); and island of Ireland boundary data from *Irish Townlands* (<https://www.townlands.ie>, viewed 29 June 2021) using OpenStreetMap data © OpenStreetMap contributors, under the Open Data Commons Open Database licence (<http://opendatacommons.org/licenses/odbl>, viewed 29 June 2021).

Mark McKerracher

June 2021

University of Oxford

Introduction

Mark McKerracher (2021)

When I began researching the corn-drying kilns of early medieval England in 2010, I found a subject which (to say the least) had not been over-studied. There was no lack of material, but rather a lack of synthesis. Numerous Anglo-Saxon corn-drying or malting kilns had been excavated by then, and although they were not as familiar and ubiquitous as their Romano-British counterparts, archaeologists had begun to divine their economic significance (e.g. Hamerow 2012: 151–155). Yet there appeared to be no publications dedicated specifically to the archaeology of drying ovens/kilns in Anglo-Saxon and medieval England. By contrast, the archaeology of drying kilns in early medieval Ireland was evidently an active and well-published field of research, advanced in particular by the work of Mick Monk of University College Cork.

Whilst exploring the work of Monk and his colleagues, I realised that a foundational study in the archaeology of drying kilns, in both early medieval Britain and Ireland, was an undergraduate dissertation submitted for a Bachelor's degree at University College Cardiff (now Cardiff University) in 1975. More than four decades later, Robert Rickett's *Post-Roman and Medieval Drying Kilns* remains a seminal work on the subject. Its scope is remarkably ambitious, taking in diverse drying kilns from across England, Scotland, Wales, the island of Ireland and the Isle of Man, and drawing upon both historical and archaeological evidence. Unfortunately, as I soon discovered, this work had never been published. In 2012, I was able to study the original dissertation in Cardiff University library for a single afternoon, as part of my doctoral research (McKerracher 2014a). Returning to the topic in 2019, however, I learned that the library no longer held undergraduate dissertations in its collection, and I was unable to locate the copy which I had seen in 2012. At the time of writing, its ultimate fate remains unknown to me.

I was therefore relieved and grateful to find that Mr Rickett was happy to lend me his personal copy, and to grant permission for its publication. Hence this book presents, some 45 years after its completion, a pioneering study of post-Roman and medieval drying kilns, explicitly intended to be 'a basis for future studies' (see page 4). I have digitised and edited the text and figures to enhance their utility and clarity, and I have added notes to the Gazetteer (see page 39) highlighting where, to the best of my knowledge, excavations discussed by Rickett have been published since 1975. Otherwise, the original dissertation's arguments, observations and evidential base remain intact in this book. No attempt has been made to update the content with post-1975 discoveries and ideas, as this would have obscured the real context and purpose of this book as a foundation or departure point for the topic based upon the evidence available around the advent of modern archaeology.

Nevertheless, a lot of relevant work has been undertaken since 1975. Within four years of Rickett's remark that 'a new assessment of the Roman drying kilns is needed' (see page 4), such an assessment duly appeared in Morris's *Agricultural Buildings in Roman Britain* (Morris 1979: 5–22). Alongside a detailed account of Romano-British corn-dryers, Morris assembled a large and important corpus of excavated examples and devised a corn-dryer typology. Though still useful, this corpus has largely been superseded by that of the *Rural Settlement of Roman Britain* project, which identified corn-dryers at 358

excavated rural settlements; their forms, construction, functions and distribution are covered in Lodwick's exemplary discussion (in Allen *et al.* 2017: 55–62).

Besides Morris' seminal survey, 1979 also saw the publication of an experiment at Butser Ancient Farm, where a replica of the Romano-British 'corn-dryer' excavated at Foxholes Farm (Hertfordshire) was found to be inefficient at drying corn but effective for malting (Reynolds and Langley 1979). The results only hold true, of course, for that particular reconstruction with – significantly – an impermeable drying floor. By contrast, Kelleher's experiments in Ireland achieved different results by using replica 'keyhole-shaped' structures with permeable drying floors (Monk and Kelleher 2005). Reynolds and Langley anticipated such a difference, and draw a distinction between the 'corn-drying kilns in the Northern Isles' and 'the so-called Romano-British corn-driers' (Reynolds and Langley 1979: 39) – though there is no reason to assume that all Romano-British corn-dryers were constructed like the Butser replica. Indeed, the excavator of the original Foxholes Farm kiln, Clive Partridge, was not entirely convinced that the drying floor had been impermeable (Mick Monk, pers. comm.).

A terminological distinction echoing Reynolds and Langley's functional distinction persists in much of the archaeological literature. Roman examples are typically called 'corn-drying ovens', 'corn-driers' or 'corn-dryers' (e.g. Lodwick in Allen *et al.* 2017), whereas Scottish and Irish examples are generally 'corn-drying kilns' (e.g. Dixon 2011; Monk and Power 2012). For post-Roman examples in Wales and England, 'grain dryer/drier', 'drying oven' and (particularly in Wales) 'drying kiln' are all common and often interchangeable (e.g. Britnell 1984; Heaton 1993; McKerracher 2014b). I am not aware that drying kiln terminology has been discussed at length in any publication, but two basic points may be noted here. The first (pedantic) point is that 'dryer', a noun, is arguably preferable to 'drier', usually an adjective. The second (semantic) point is that Rickett draws a useful distinction between kilns and ovens – the former intended for drying, the latter for baking (e.g. below, page 19) – and uses the generic term 'drying kiln' to allow for the variety of commodities that could be dried in the very same structures (see below, pages 20–22; Rickett's recognition that drying kilns were often likely multi-purpose remains an important contribution). An analogous distinction between ovens and kilns appears in twelfth- and thirteenth-century Welsh legal texts, which differentiate between an oven or furnace – *ffwrn* – and a dryer or kiln – *odyn* – a term still current in the 19th century (Rhiannon Comeau pers. comm.; Butler 1987: 53–54; Comeau and Burrow 2021).

While Morris' 1979 survey focused on Romano-British 'corn-dryers', research on post-Roman 'drying kilns' was carried on by Monk (1981), building upon his analysis of archaeobotanical remains from kilns excavated at Poundbury (Dorset), his experience as a field archaeologist, and his involvement in projects such as Butser Ancient Farm. He pioneered an archaeobotanical approach to the interpretation of kiln functions, which foreshadowed van der Veen's influential 1989 paper on the charred plant remains found in Roman corn-dryers (van der Veen 1989). Whilst working in Cardiff on the Poundbury plant remains, Monk read Rickett's unpublished work, which had been written before environmental sampling for plant remains had become routine excavation practice. Following his appointment as lecturer at University College Cork in 1978, the focus of Monk's work shifted from England to the drying kilns of Ireland, and this is perhaps why Rickett's influence has been stronger in Irish archaeology than in British research (Monk and Kelleher 2005: 78). The work of Monk and his colleagues has tracked the ever-growing corpus of Irish drying kilns, exploring chronological and distributional patterns and the wider significance of these increasingly ubiquitous discoveries (e.g. Monk and Power 2012; 2014). In addition, the monumental *Early Medieval Archaeology Project* has comprehensively surveyed drying kiln evidence in the wider context of early medieval Irish agriculture (O'Sullivan *et al.* 2014). To my knowledge, no similarly comprehensive surveys of early medieval archaeology have been undertaken

for Scotland, Wales, England, or the Isle of Man (though for some general coverage of the latter, see Davey 2014; McDonald 2019).

The study of Scottish drying kilns has benefited from the publication of Fenton's ethnographic work (Fenton 1978), and more recently from a survey by Dixon focusing on kilns of the 12th to mid-18th centuries (Dixon 2011). The first comprehensive survey of Welsh drying kilns has recently been completed by Comeau and Burrow: a tour de force of synthesis and interpretation, encompassing late prehistoric, Roman, post-Roman and medieval instances up to the 16th century (Comeau and Burrow 2021). Their gazetteer includes a further evolution of the kiln typology developed by Monk, which in turn represented an evolution of Rickett's scheme (Monk and Kelleher 2005; this volume, page 39). An important development has been the recognition that, whereas Rickett's typology is dominated by stone-built kilns, many kilns are now known with little or no stone lining (see, for example, the 'pear-shaped' dryers in Comeau and Burrow 2021) – likely a consequence, in part, of improved identification of non-stone structures in modern archaeology.

For England, Rickett noted that 'few Saxon drying kilns have been excavated' by 1975 (page 33). This is no longer the case, with abundant examples of varying size and shape having been excavated across the country, dating almost exclusively from the later 7th century onwards (e.g. Carver 2010; Hardy *et al.* 2007; Heaton 1993; Hinton and Peacock 2020). One especially noteworthy recent discovery is an elaborate malting complex of eighth- to ninth-century date at Sedgeford in Norfolk, the earliest such complex so far found in Anglo-Saxon England (Faulkner and Blakelock 2020). In my own research, I have undertaken a regional survey of some of the evidence for the 7th-9th centuries (McKerracher 2018: 76–79), but nothing approaching a national synthesis for the entire Anglo-Saxon period has been attempted. To the best of my knowledge, the same is true of the whole medieval period in England.

It thus remains that, in terms of geographical and chronological scope, Rickett's study is still unequalled. On the other hand, the huge and growing datasets now available have rendered such a wide-ranging survey impractical (Rickett had 58 entries in his gazetteer; Comeau and Burrow have now identified 148 in Wales alone). Radiocarbon dating has also become more routine and precise since 1975, meaning that we can gain a much clearer chronological perspective than was possible when Rickett completed his study. Challenges for future research therefore include not only the periodic updating of regional and national gazetteers, but also continuing inter-regional and international comparisons, the development of shared and consistent terminology, and a rigorous and evolving approach to interpretation. In these endeavours, we may follow the example of Mr Rickett.