Britannia (2026), 1–31
doi:10.1017/S0068113X26100786

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ARTICLES

How Do We Make the River 'Roman'? Changing Depositional Patterns in the Middle Thames Valley

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Abstract

This paper offers the first detailed examination of riverine depositional practice in the Roman Middle Thames, using a comprehensive, multi-period dataset of river finds. The study reveals an abrupt deviation from long-standing martial traditions, replaced largely by low-value coinage and coarse-ware pottery. Comparative analysis of two crossing sites, the urban Kingston bridge and the rural Goring ford, demonstrates that deposition was a highly structured, likely intentional practice. It is argued that this change reflects Imperial influence and 'soft control', alongside the conscious adoption of new material proxies to maintain the role of ritual deposition within the new socio-political landscape.

Keywords: ritual; riverine deposition; taphonomy; Romanisation; soft control

Introduction

The long-term relationship between humans and river systems is a profoundly complex one, encompassing access to and the exploitation of riverine resources, the structuring of socio-political territories, and the river's paradoxical role as both barrier and gateway for communication, settlement and transport.[1] These functional roles are inextricably entangled with more ephemeral ritual ideas and complex local and regional mental geographies.[2]

While many aspects of human–river relationships do not survive in the archaeological record, the practice of riverine deposition provides perhaps the most tangible, if imperfect, expression of this interaction.[3] Riverine deposition represents a remarkably long-term phenomenon in the archaeological record, with intentional deposition in Britain beginning in earnest during the Mesolithic, if not earlier.[4] Typically, the term encompasses a vast array of material recovered within or adjacent to a fluvial context, including objects recovered from the river channel, its banks, or associated alluvial deposits. However, it is important to note that there is no widely agreed consensus regarding which contexts constitute a 'river find', and there is considerable variation, both in terms of interdisciplinary norms and study-specific categorisations determined by individual scholars.[5]

[1] Mullin 2012, 54; Campbell 2023, 9–11; Brudenell *et al.* 2024, 38–40.
[2] Hussain and Floss 2016, 1183; Fontijn 2020, 138–9.
[3] See Edgeworth 2011.
[4] Adkins and Jackson 1978, 10; Haughey 2009, 299–300.
[5] Cf. Lund 2008; York 2002.

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The objects recovered from these contexts present unique interpretative challenges, often centred around the notion of intentionality.[6] At one end of the interpretative spectrum is the intentional deposit, wherein one or more objects are deliberately deposited within the river or its immediate environment, typically interpreted through the lens of ritual practice, such as in the extensive literature exploring ritualised deposition in watery contexts in later European prehistory.[7] At the other end is the incidental or 'mundane' deposit,[8] representing accumulated refuse from riverine settlements, the accidental loss of objects during river crossings, or other activities or fluvial erosion of otherwise terrestrial deposits.[9]

For decades, the interpretation of riverine finds has been structured by this persistent and often unproductive ritual–rubbish dichotomy. Distinguishing between either category is seldom straightforward, and increasingly archaeologists studying both later prehistoric and Roman material have highlighted the imprudence of understanding ritual and rubbish as mutually exclusive from the other. Yet this dichotomy has shaped the study of watery finds in Roman Britain.

In particular, mundane disposal or accidental loss has often been treated as the default, functional interpretation for Romano-British river finds, particularly in the case of non-prestige, non-metal goods, which dominate riverine assemblages of that period. These narratives often follow the somewhat anachronistic notion that the inherent pragmatism of Roman governance and economic influence superseded earlier ritual traditions, a point further exacerbated by restrictive definitions of 'votive' finds: often only finds from temple grounds, ideally with dedicated inscriptions, warrant the 'votive' label of an offering.[10]

This leads to Roman finds from riverine contexts being understood as accumulated detritus, from a busy and increasingly urban landscape, effectively framing them as accidental losses from crossing points at bridges and fords, or chance losses from river craft and waterfront infrastructure.[11] This perspective problematically overlooks the inherent complexity of waste disposal as a highly structured, socially mediated activity, as highlighted by recent research into archaeological 'garbology'.[12]

Furthermore, neither interpretation actively considers the processes of fluvial taphonomy, overlooking the river's agentive role in sorting and depositing material. The issue is compounded by riverine recovery methods, particularly dredging, which decontextualise finds and bias the archaeological record towards larger, more robust objects.[13] The resulting lack of contextual data makes it easy to favour simplistic narratives of incidental loss or a generalised notion of 'ritual deposition', as the evidence required to identify more complex depositional practices has often been destroyed.[14]

This narrative is further complicated by the material character of the finds themselves. Across north-west Europe, prehistoric river assemblages are broadly associated with martial objects, particularly weaponry, with finds recovered in such large quantities that intentionality is taken as a given.

The present paper highlights one aspect of a wider research project examining riverine deposition from the Neolithic to the medieval period, focusing on the Middle Thames.

[6] See Eckardt and Walton 2021 for a recent summary.
[7] E.g. Bradley 1990, 16–20; Fontijn 2020, 162–3.
[8] For an in-depth overview of the debate, see Garrow 2012, 85–115.
[9] E.g. Needham and Longley 1980, 426–7; Knüsel and Carr 1995, 167.
[10] See Johns 1996, 9; Eckardt and Walton 2021, 72.
[11] E.g. Rogers 2011, 8.
[12] See Dicus 2022; Furlan 2024.
[13] Clifford 2026, 1–4.
[14] See Kappesser 2012.

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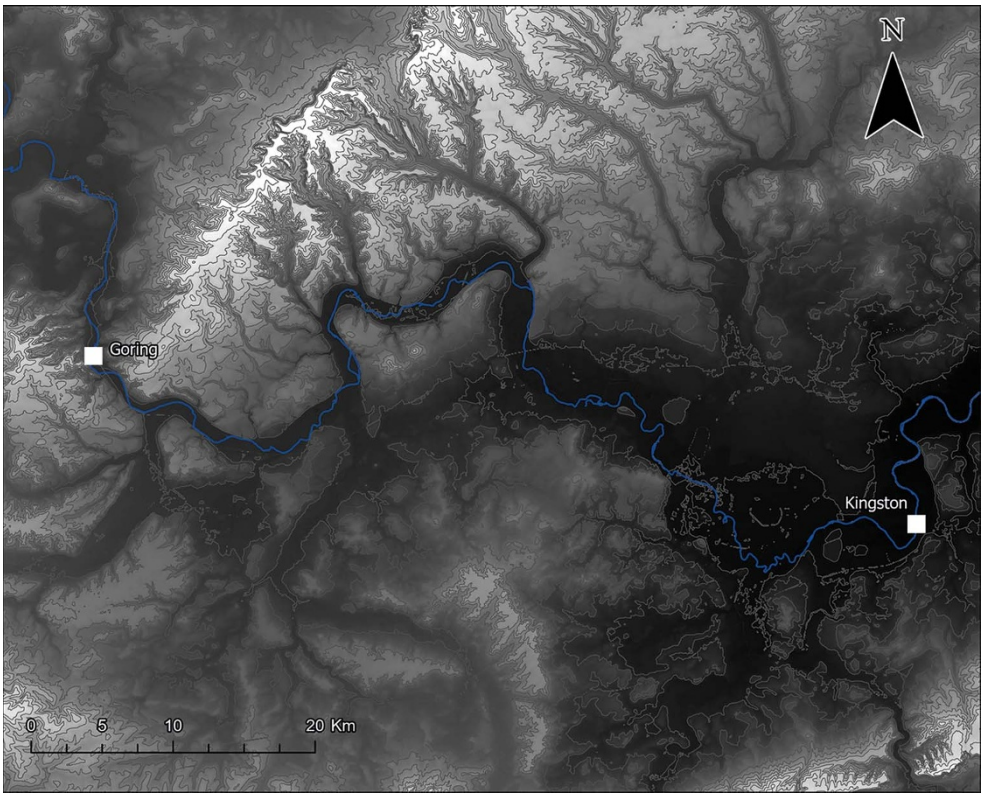


Fig. 1. Digital Terrain Model (DTM) of the Middle Thames Valley. (UK Centre for Ecology & Hydrology 2025; Clifford 2026).

This long-term study demonstrates that the quantity, composition and spatial distribution of objects deposited within the river change dramatically over time.[15] Recent research has demonstrated that the Romano-British period also presents a striking deviation from broader patterning observed elsewhere.[16]

I aim to examine the 'restructuring' of long-term depositional behaviour and practice through analysing two key crossing sites in the Roman Middle Thames landscape, Goring-on-Thames and Kingston-upon-Thames (Fig. 1). By moving beyond the increasingly outdated binary categorisations of 'ritual' or 'rubbish', and approaching the assemblage as a singular, complex entity, this study will avoid 'cherry-picking' prestige finds and explore how changing social norms and expressions of 'soft' control during the Roman period may have fundamentally altered the underlying logic of what was acceptable to deposit, and where.

Research framework and previous work

The analytical framework for this paper is derived from a wider research project that compiled a comprehensive dataset of river finds from the Middle Thames, defined here as the

[15] Clifford 2026, 25–38.
[16] Eckardt and Walton forthcoming; Clifford 2026, 9–10.

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125 km non-tidal stretch from the Goring Gap to Teddington Lock (Fig. 1). Data were collated from a wide range of sources, including the Portable Antiquities Scheme (PAS), national and local museum catalogues, regional Historic Environment Records (HERs) and the Thames Conservancy Archive (TCA).

A key methodological challenge was the prevalence of 'low-resolution' data, particularly finds recovered during eighteenth- and nineteenth-century dredging works with imprecise provenances (e.g. 'near Cookham' or 'between Staines and Teddington'). To overcome this, a novel raster-based approach was employed within a project Geographic Information System (GIS). Each find was assigned a 'spatial confidence' value, which weighted its contribution during rasterisation, with greater spatial confidence values presenting a higher weighted value which influenced fewer overall cells, and lower spatial confidence values presenting a weaker value across a greater range of cells.[17] This allowed high- and low-resolution data to be integrated, enabling the identification of macro-scale patterning that was not previously visible and revealing the dramatic restructuring of depositional practices during the Roman period.

Despite the richness of the local archaeological record, there has been a relative lack of research focused specifically on Roman river finds from the Middle Thames. This lacuna can be partially explained by historical trends in antiquarian collecting. While local interest peaked in the mid–late eighteenth century, the subsequent 'golden age' of collecting in the late eighteenth and early nineteenth centuries saw antiquarian attentions shift downstream towards London, particularly following the highly publicised Roman discoveries made during the construction of London Bridge.[18] Antiquarian collecting practices often introduced significant selection biases, favouring larger, visually impressive and valuable metalwork over more mundane or ephemeral finds such as pottery or non-metallic small finds.[19]

This comparative neglect of Roman finds recovered from the non-tidal Thames is particularly striking when contrasted with studies of adjacent periods and is symptomatic of a wider disciplinary separation that has hindered the development of a long-term perspective on riverine deposition in Britain. Research on the preceding Late Bronze Age/Iron Age, heavily influenced by Bradley's *The Passage of Arms*,[20] has long identified the Middle Thames as a significant arena for the votive deposition of weaponry,[21] with similar assertions having been made in relation to the significant quantities of weaponry recovered dated to the early medieval period.[22] In contrast, Romanists have been more reluctant to engage with votive narratives for river finds until recently, often dismissing ritual interpretations in favour of 'rational' explanations such as the erosion of terrestrial sites or the casual disposal of rubbish.[23] Consequently, within major syntheses of Thames finds, Roman material has been not only under-interpreted but entirely omitted, creating the misleading impression of a depositional hiatus in the period.

The inherent challenges of interpreting any river finds must be acknowledged. Issues of distinguishing deliberate deposition from accidental loss, the potential for erosion from bankside sites, the effects of post-depositional movement, and the difficulties of identifying corroded or 'river-rolled' material are all significant factors, as has been discussed in detail within specialist literature.[24] While dredging, the principal method by which archaeological

[17] Clifford 2026, 5–6.
[18] Smith 1859, 13–14; Rhodes 1991, 180–2.
[19] York 2002, 79; Naylor 2015, 125.
[20] Bradley 1990.
[21] Bradley 1990, 180; York 2002, 77; Brown 2003, 9.
[22] Naylor 2015, 137–8.
[23] See Eckardt and Walton 2021, 269.
[24] E.g. Hingley 2006, 240–2; Hosfield 2011, 48.

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finds are recovered from British rivers, has not been discussed in any detail within recent literature, an exhaustive review of dredging activity and archaeological recovery within the non-tidal Thames is forthcoming.[25]

This paper aims to mitigate and directly address these issues through fully contextualising the Roman Middle Thames as an active, depositional environment and fluvial landscape, and providing a timely reappraisal of the often tentatively identified 'Roman' finds recovered over the past 200 years.

The Roman shift: an overview

To understand the nature of Roman deposition, and how much it differs from other time periods, it is necessary to contextualise it briefly within the *longue durée* of depositional practice in the Middle Thames. Throughout later prehistory, the content of riverine deposits was overwhelmingly martial in character and broadly deposited across the Middle Thames valley (Fig. 2). The rate of deposition peaked in the Late Bronze Age before falling significantly during the Iron Age, but the composition of the assemblage remained focused on weaponry, particularly large, bladed objects such as swords and spearheads.[26] This martial character has led to a dominant, and often default, votive interpretation for these finds, while non-metal finds, such as pottery, are typically interpreted through a mundane, disposal-oriented lens. [27]

The Roman period marks a complete reconfiguration of this established long-term tradition. The overall rate of deposition increases significantly, with a peak in the later Roman period (third–fourth centuries A.D.). Compositionally, there is a profound change: the deposition of martial objects effectively ceases, while considerable quantities of pottery, particularly coarse wares, and coins, predominantly lower-value bronze issues, enter the depositional record. This is particularly notable due to the comparative absence of any significant quantity of coins in the preceding Iron Age and following early medieval period, a pattern which mirrors terrestrial patterns of general coin use across these periods.[28]

Spatially, the focus of deposition also changes. The greatest concentrations of Roman material are consistently recovered in direct relation to major urban centres, particularly where permanent bridges on arterial roads crossed the river, or in rural settings associated with potential fording points and high-status villa sites, as shown in Fig. 3.

This Roman pattern is, in turn, supplanted by restructuring in the early medieval period with a resurgence in martial deposition, which intensifies over time. It is important to note that the resurgence of weapon deposits in this period is not entirely limited to riverine contexts but is also reflected more broadly in burial practices and terrestrial metalwork hoards.[29] In line with prehistoric material, the return to weapon-dominated assemblages, particularly in riverine contexts, has led to a renewed emphasis on votive interpretations.[30]

The spatial focus of Middle Thames finds then shifts again, with significant concentrations around emerging royal centres and ecclesiastical sites (Fig. 3).[31] This long-term sequence of distinct depositional regimes underscores the Roman period as a fundamental, but apparently temporary, break from an otherwise deeply embedded tradition of martial deposition in the Thames.

[25] Clifford forthcoming.
[26] Clifford 2026, 39.
[27] Bradley 1990, 36.
[28] See Creighton 2000; Astill 2011.
[29] Härke 2014, 45–8.
[30] Naylor 2015, 137.
[31] Clifford 2026, 36–7.

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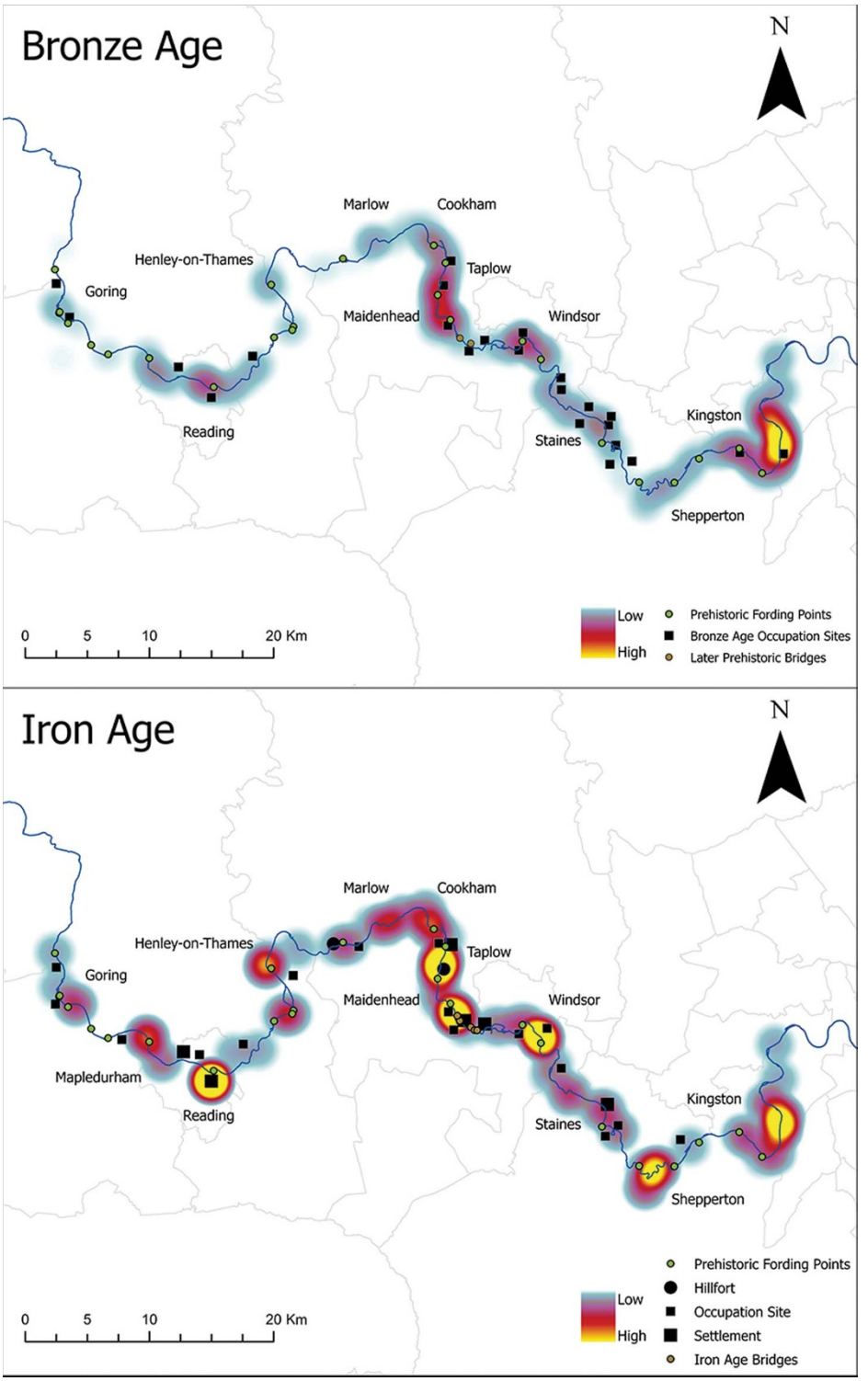


Fig. 2. Distribution of Middle Thames river finds as KDE plots by period: above, Bronze Age; below, Iron Age. (Clifford 2026).

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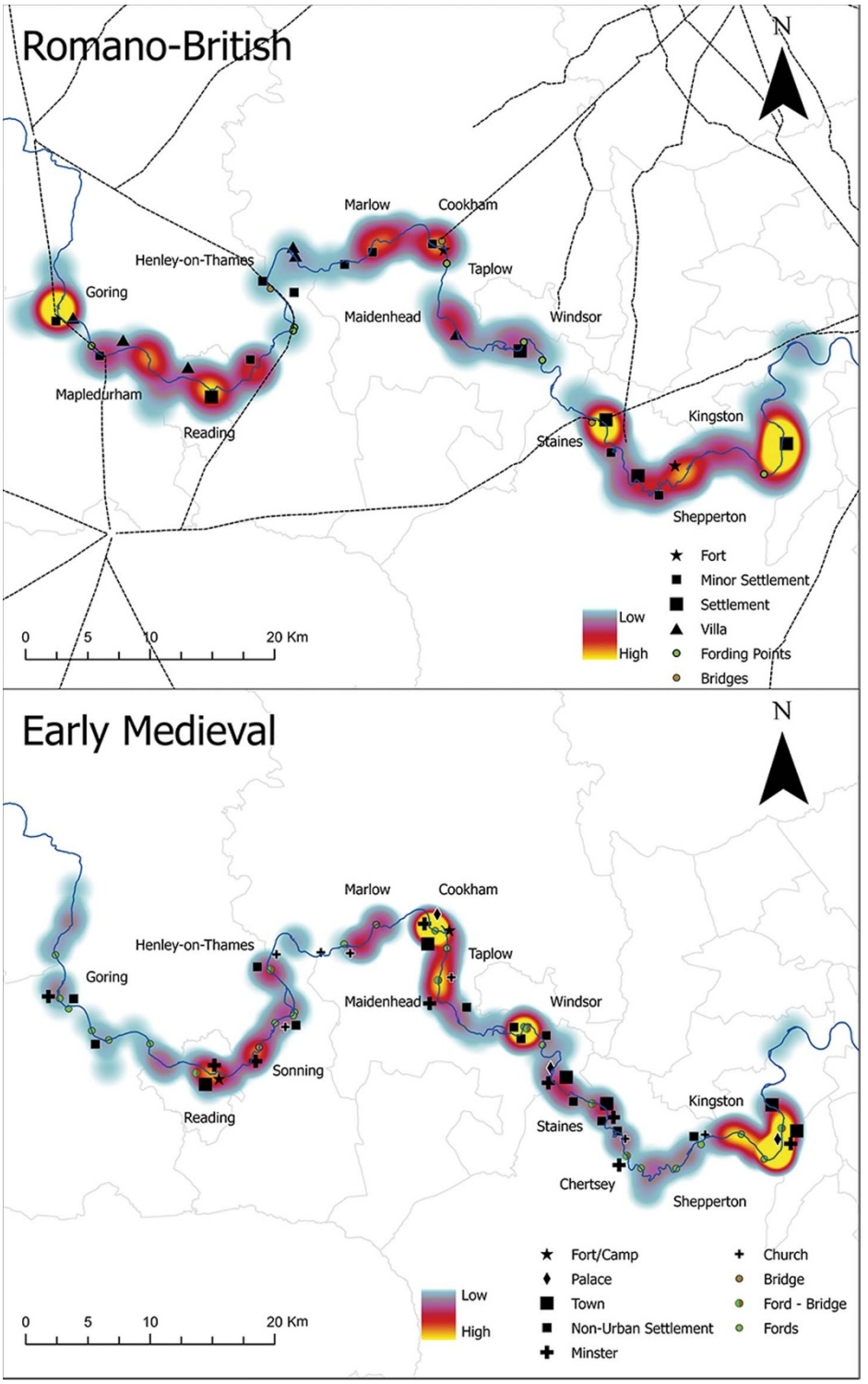


Fig. 3. Distribution of Middle Thames river finds as KDE plots by period: above, Roman; below, early medieval. (Clifford 2026).

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While the macro-scale analysis of Middle Thames finds is useful for identifying broad-scale patterns in riverine deposition, a more focused scale of analysis is needed to draw out more nuanced patterns and trends. The crossing points at Goring-on-Thames/Streatley and Kingston-upon-Thames were selected to offer this level of analytical acuity. These sites provide a valuable contrast between a rural ford/ferry crossing context (Goring) and a probable permanent bridge on a major Roman road associated with a small town (Kingston), allowing for an exploration of how local context influenced the intricate, localised expression of otherwise widespread depositional behaviour.

Kingston-upon-Thames

Kingston-upon-Thames, colloquially referred to as 'Kingston', represents a small Roman settlement and a principal crossing point of the non-tidal Thames (Fig. 4). While the Roman settlement at Kingston is not well understood, commercial excavations from the 1960s onwards have indicated it does not meet the defined criteria for a 'small town', which would typically include evidence of a planned street system;[32] instead, the archaeological evidence suggests it was a nucleated, river-side settlement.[33] The crossing point itself was likely facilitated by a permanent timber-framed bridge, although no direct archaeological evidence for this has been recovered.[34]

The construction of a bridge at Kingston may therefore represent a characteristically 'Roman' investment in transport infrastructure, stabilising and controlling a seasonal/semi-permanent ford which formed a natural focal point for movement and activity over thousands of years.

Archaeologically, the crossing point at Kingston is associated with significant multi-period concentrations of river finds, recovered from the channel itself during dredging operations and from the northern and southern banks during construction and maintenance activities.[35] The broad range of recovered material, encompassing finds from the Neolithic through to the medieval period, allows for direct comparisons between the Roman assemblage and the preceding and succeeding periods, particularly notable in the case of the martially dominated assemblages of later prehistory and the early medieval period.[36]

The Kingston assemblage

A total of 425 Romano-British finds have been recovered from the River Thames at Kingston. The majority (approximately 70%) of archaeological finds are directly associated with the construction of the current Kingston Bridge between 1825 and 1828, which replaced earlier timber-framed structures dating back to at least the twelfth century A.D.[37] Direct records of finds and the circumstances of their recovery are sparse; however, Biden's *The History and Antiquities of the Ancient and Royal Town of Kingston upon Thames* provides an anecdotal account of the objects recovered during these bridge works.[38]

The remainder of the finds are either broadly recorded to the local area, such as 'Kingston' or 'near-Kingston' (approximately 25%), or attributed to a specific, local stretch of river like 'north-bank, downstream of bridge' (approximately 5%).

[32] Wacher 1997, 19–21.
[33] Bradley 2005, 175-77.
[34] Andrews 2004, 171.
[35] Hawkins 1996, 49–50.
[36] York 2002, 89; Naylor 2015, 130.
[37] Cotton 2020, 10–11.
[38] Biden 1852.

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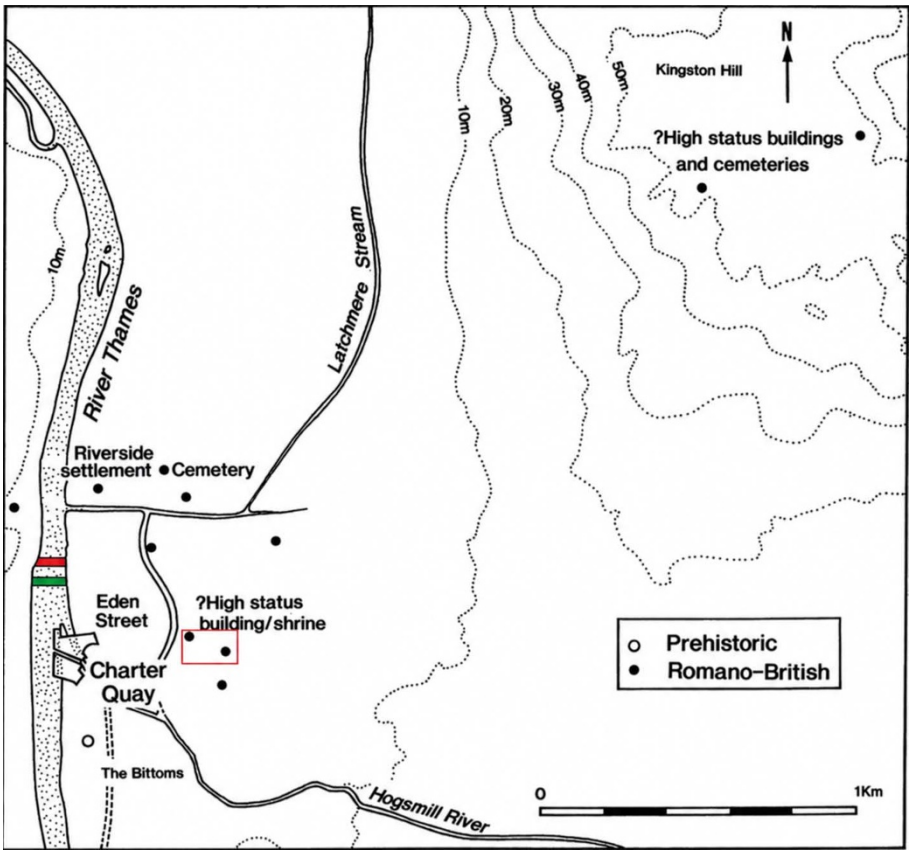


Fig. 4. Later prehistoric and Roman archaeological sites in Kingston-upon-Thames, with modern bridge (green), early medieval/Roman bridge (red) and Eden Street site highlighted by red box. (After Hawkins 1996, fig. 1).

Perhaps the most immediately noticeable aspect of the Kingston assemblage is the conspicuous lack of military equipment. While antiquarian accounts do refer to Roman weapons, these claims require re-appraisal. For instance, a bronze sword and an iron axe-head recovered in 1842 (Fig. 5), both published as Roman by Biden,[39] have since been re-identified as being of Middle Bronze Age[40] (*c.* 1550–1150 B.C.) and early medieval (A.D. 900–1100) date, respectively.[41] Additional weapons described by Biden as Roman, including an iron dagger, several spearheads or 'lances' (see Fig. 5), and a military standard, are now untraceable.[42] As no illustrations were provided, a modern typological reassessment of the suggested Roman date is impossible.

It is important to note that British antiquaries in the late eighteenth and nineteenth centuries held Roman objects in particular esteem and frequently identified prehistoric and later medieval objects as Roman.[43] Therefore, while is possible that the remaining weaponry recovered from Kingston was Roman, this cannot be confirmed and it is entirely plausible

[39] Biden 1852, 5–6.
[40] Colquhoun and Burgess 1988.
[41] See Garrow and Gosden 2012; Humphreys 2021.
[42] Biden 1852, 5–6.
[43] Lynch and Lynch 1968, 37.

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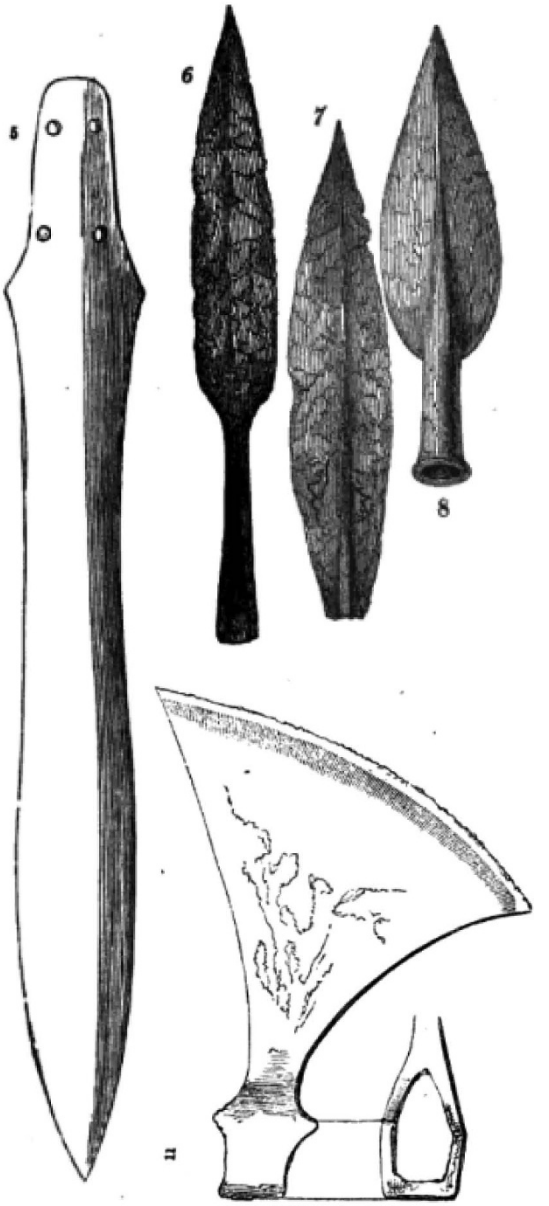


Fig. 5. Illustrated weapons recovered in 1842 during the construction of Kingston Bridge, all erroneously identified as Roman: MBA sword, early medieval/Viking axe head, Middle Saxon spearheads. (After Biden 1852).

that these 'Roman' weapons, such as the iron dagger identified by Biden, also represent early medieval or later prehistoric finds. Even if they were positively identified as Roman, weaponry would represent a minor component of the overall assemblage (1.4%).

The Kingston assemblage is dominated by domestic, civilian material with no distinct military connections, much of which is broadly dated. This includes significant quantities

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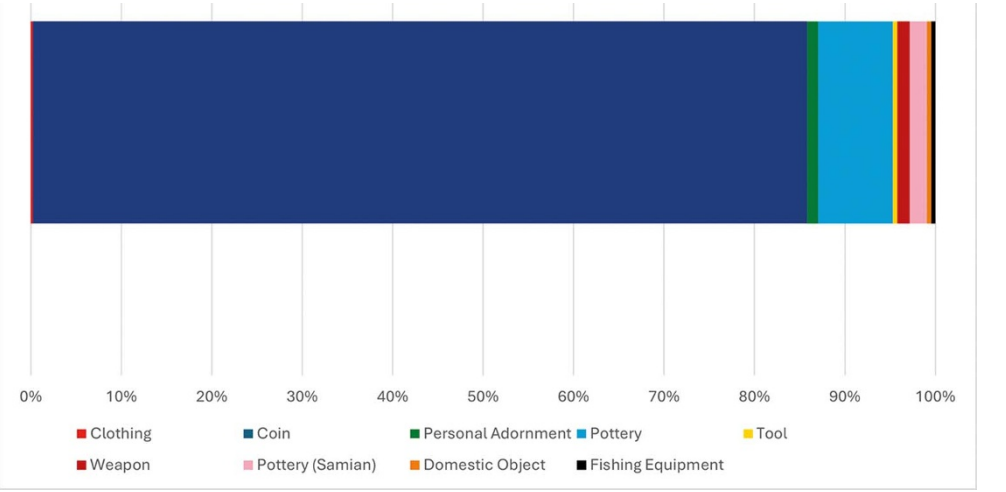


Fig. 6. Archaeological finds recovered from the River Thames at Kingston, by object category (%). (Clifford 2026).

of pottery (Fig. 6), predominantly utilitarian, consisting of locally produced coarse wares such as storage jars, bowls and drinking vessels which make up 81% of the Kingston pottery sub-assemblage and 8.5% of the Kingston assemblage, alongside a smaller but notable quantity of Samian vessels, representing 19% of the pottery and 2% of total finds. It is important to note that the recorded quantity of ceramic material is likely a significant underrepresentation of the archaeological reality, as nineteenth-century recovery practices frequently overlooked or discarded such finds in favour of more prestigious and valuable metal finds; due to its distinctive visual qualities, Samian ware is more likely to be recognised and retained than coarser wares.[44]

The assemblage also includes other small finds, such as ornamental dress accessories including brooches, alongside objects such as styli, fishing hooks and keys, which are broadly consistent with material patterning expected from accidental loss or the discard of waste observed in other Roman riverine settlement contexts, although deliberate deposition of individual objects can never be excluded.[45] Significant quantities of ceramic building material have also been noted in the context of riverine finds from Kingston, but specific quantities have not been recorded and therefore cannot be directly quantified in this analysis.[46]

The extensive numismatic assemblage recovered from Kingston was interpreted as a dispersed hoard (IARCH-CA989C), recovered during excavations at Eden Street approximately 250 m from the modern bridge (Fig. 4). The hoard is described as 'a group of over 350 coins, mostly of fourth-century date, excavated from alluvial silt and gravel in an old side-channel of the Thames at Kingston'.[47]

The hoard is broadly dated to the later third and fourth centuries A.D., the bulk of it comprising Nummi from the House of Constantine (310–365); the latest individual coin is attributed to the House of Theodosius between 388 and 402 and the earliest coins are late third-century coins of Claudius II (268–270).[48] The interpretation as a hoard implies

[44] Black 2000, 32.
[45] See Eckardt and Walton 2021, 277–99.
[46] Bird 2004, 67.
[47] Pirie and Saunders 1990.
[48] Bland *et al.* 2020, 279.

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a specific, likely singular depositional event, fundamentally different from attritional loss or repeated small-scale offerings which might be expected from daily activity around a crossing. It is therefore important to scrutinise this initial interpretation further.

When initially discovered in 1989, the Kingston finds were described as a dispersed assemblage.[49] It is difficult to comment on this initial ascription, as the excavation has not yet been published in full, leaving the relative location of individual finds, and therefore the spatial basis by which these coins were interpreted as a 'hoard' rather than an accumulation of individual finds, entirely obscured.

It is therefore feasible that the Kingston 'hoard' represents either a single depositional event, or a series of individual depositions which have accumulated as a result of hydrological action in the fluvial environment. In the context of a single depositional event, dispersal of a hoard deposited in a bag or similar vessel could be the result of fluvial action.

Alternatively, it could reflect an event such as the *sparsio*, recorded by various late Roman authors including Claudian and later regulated by Justinian,[50] which consisted of the ritual throwing or scattering of coins (*missilia*) during religious festivals or civic ceremonies, by which the local elite would demonstrate their wealth and generosity.[51]

Another pertinent note regarding the Kingston 'hoard' is the quality and condition of the coins themselves. The excavator's initial report included the comment 'Many of them are forgeries',[52] referring explicitly to the potential hoard. They also comment that an undetermined quantity of the coins were filed or otherwise defaced prior to deposition.

Defaced or otherwise 'mutilated' coins in Roman contexts are typically linked directly to votive practices, with modified coins frequently being interpreted as having been ritually killed or sacrificed before being permanently deposited.[53] While various authors have provided suggestions as to how mutilated coins might be interpreted through a strictly utilitarian perspective, such as chop-marking representing a means of checking purity,[54] the severity of modification would be immediately apparent, rendering these coins unusable as currency in day-to-day life, effectively precluding any monetary function and reinforcing the interpretation of the hoard as an intentional, votive deposit.

The use of forgeries of counterfeit coins in ritual contexts is similarly well attested in provincial Roman settings, though the presence of these coins within temples, sanctuaries and within votive assemblages has elicited a range of interpretations from Romanists.[55] On one hand, the presence of forgeries in votive contexts may represent a form of substitution or tokenisation of currency as a votive; where the financial loss to the depositor is minimal, while the counterfeit retains its potency as a ritual object, its value is detached from the intrinsic value of the coin itself.

On the other hand, forgeries within votive contexts may simply reflect their general prevalence at the time of deposition. In this light, the presence of forgeries amongst the late third-century coins of the Kingston 'hoard' is entirely unsurprising, given the epidemic of coin copying under way in Britain during this period.[56] Unfortunately, while the Kingston 'hoard' remains unpublished, all interpretation is almost entirely speculative.

[49] Pirie and Saunders 1990, 148 cited in Bland *et al.* 2020.
[50] Claud., *Cons. Hon.* VI.605–610 (Claudian 1922); Justinian, *Novellae Constitutiones*, 105.2 (Justinian 1932).
[51] Lim 2018.
[52] Pirie and Saunders 1990, 147.
[53] Pirie and Saunders 1990, 147–8, cited in Bland *et al.* 2020; see also Walton 2024, 311–12; Wigg-Wolf 2020, 16–21.
[54] Wigg-Wolf 2020, 17–18.
[55] See Kemmers 2020, 200–3.
[56] Kemmers 2020, 194–9.

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While they fall outside of the period considered 'Romano-British', a notable, though now untraceable, hoard of 'at least 10' gold tremisses of Justin I (A.D. 518–527) was dredged during bridge works in 1849, perhaps hinting at continuing ritual deposition.[57]

In addition to the bronze coin hoard, a limited quantity of nine individual coin finds have been recovered from the Thames at Kingston. In contrast to the later gold hoard, the vast majority (96%, 359) of coins recovered from the river at Kingston, including the previously mentioned individual finds, are low-value, bronze issues from the later Roman occupation, chronologically skewed to the late third and early–mid-fourth centuries.

Spatially, the distribution of the Kingston assemblage appears highly concentrated around the inferred site of the Roman crossing, with the Kingston 'hoard' recovered from a side channel approximately 250m from the crossing point (Fig. 4). However, any interpretation of this pattern is severely complicated by numerous methodological issues, including taphonomic processes and recovery biases. Most of the assemblage was recovered during nineteenth-century dredging operations, a process which has become notorious in archaeological scholarship for its imprecise and non-systematic recording practices.[58]

In the case of Kingston, this issue is further compounded by river dynamics around bridge foundations and the dynamics of dredging itself. Bridge foundations such as those of Kingston Bridge act as significant obstructions to the flow of water and sediment, causing high-velocity flow to scour the riverbed immediately surrounding bridge piers, dislodging sediment and any embedded archaeological material.[59] This scoured sediment and displaced archaeological material is transported in suspension, alongside any other suspended material from upstream, and deposited in slower-moving water immediately downstream, forming shoals in extremely close proximity to the bridge itself.[60]

These shoals therefore effectively act as 'nets' capturing sediment, debris and archaeological material into a single stretch of riverbed. Additionally, the intensive dredging required to remove these shoals for the purpose of navigation essentially targets a concentration of finds, which may not accurately reflect the full archaeological record and the original patterning of past depositional activity.

It is also important to note that the foundations of a Roman bridge, if present, would have the same hydrological impact on the Roman river system. The foundations would act as anchor points for the advection or transportation of archaeological material deposited upstream; therefore, while archaeological concentrations at bridge site may reflect genuine archaeological patterning, they may not directly reflect the specific location where past depositional activity itself took place. In effect, the bridge may have functioned as a depositional locale itself, but it also likely would have functioned as a net for material deposited further upstream.

Previous work has generally favoured a non-votive, incidental perspective towards the archaeological material recovered from Kingston. Early work in the 1800s connected the discovery of 'Roman' weaponry at Kingston with a local Roman-period cemetery, which itself was then broadly associated with Caesar's campaigns in Britain and military crossing of the Thames.[61] Later scholarship drew on the significant quantities of pottery and ceramic building material recovered via dredging tentatively to suggest that a significant portion of the Roman settlement on the northern bank was destroyed by hydrological change and riverine erosion over a period of centuries.[62] This explanation was posited to account for the large quantities of material recovered across the wider Kingston stretch of the Thames,

[57] Hume 1956, 101; Butters 2013, 48.
[58] Ehrenberg 1980, 4–5; Bradley 1990, 6–7.
[59] Link *et al.* 2020, 5.
[60] Unger and Hager 2007, 6.
[61] Biden 1852, 1–7.
[62] Bird 2004, 67.

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alongside its alluvial deposits and gravels downstream, suggesting they were the product of riverside middens and other terrestrial deposits gradually washed into the modern river channel.

The cumulative impact of these processes means it is now methodologically impossible to adequately distinguish between material that was deliberately deposited directly into the river and the material which has been redeposited from elsewhere. While the absence of later medieval finds may appear to suggest that erosion is unlikely to be the primary mechanism of deposition, it is highly likely that the Kingston assemblage contains material from both sources, and both now form a heterogenous 'riverine' assemblage.

Goring-on-Thames–Streatley

The Goring–Streatley crossing is located within the Goring Gap, a narrow geological corridor and natural constriction where the river Thames cuts through the chalk plateau of the Chiltern Hills and the Berkshire Downs (Fig. 1). This is a region with a solid, highly compact gravel bed and prehistoric and later settlements on both corresponding banks. The crossing point itself is represented by a natural ford, likely present and maintained throughout later prehistory and supported with a causewayed crossing point in the Roman period.[63]

In the early medieval period, widespread hydrological changes throughout the Middle Thames valley caused previously stable crossing points to become increasingly unreliable, at which point the ford was probably replaced by a local ferry.[64] The site of the crossing broadly corresponds with a potential crossing point of the Icknield Way, a later prehistoric and medieval trackway connecting Wessex and East Anglia,[65] and while not crossing the river, the road between Roman Dorchester-on-Thames and Silchester (*Calleva Atrebatum*) (Margary no. 160c) passes through the settlement (Fig. 7).

While recent research demonstrates an increasingly sceptical attitude to the prehistoric dating of the Icknield Way,[66] this reassessment has little bearing on the interpretation of Goring as a Roman crossing point.

In contrast to Kingston, there is no indication of a major nucleated settlement located at Goring, instead, the Goring–Streatley ford appears to have served dispersed, rural settlements.[67] The surrounding landscape is generally characterised as a productive agricultural hinterland, within which several villa estates are attested, often within close proximity of the river, including Gatehampton Villa and a potential villa at Pangbourne (Fig. 7). It should be noted that the extent to which these estates relied upon this particular crossing is uncertain and almost entirely speculative. It is also important to note that the Goring–Streatley crossing has not been the subject of any recent archaeological investigation, and interpretations are based on limited, indirect evidence.

Current archaeological and documentary evidence provides no indication of a bridge and it is unclear whether the crossing was a permanent, year-round ford or a seasonal crossing point. Palaeoenvironmental evidence suggests that increased agricultural runoff and alluviation during the Roman period led to the Thames becoming deeper, increasingly turbid, and its flow increasingly erratic. This would render fords increasingly unreliable and hazardous to traverse, particularly during periods of higher water.[68]

While directly reconstructing the seasonality of the Goring–Streatley ford in the Roman or later prehistoric periods is beyond the capacity of current archaeological evidence,

[63] Grayson 2010, 12.
[64] Cooper 2006, 22; Grayson 2010, 11–12.
[65] Peberdy 2012, 101.
[66] See Bell 2020, 195–7.
[67] Walker *et al.* 2021, 487–8.
[68] Oliver 2013, 224-5.

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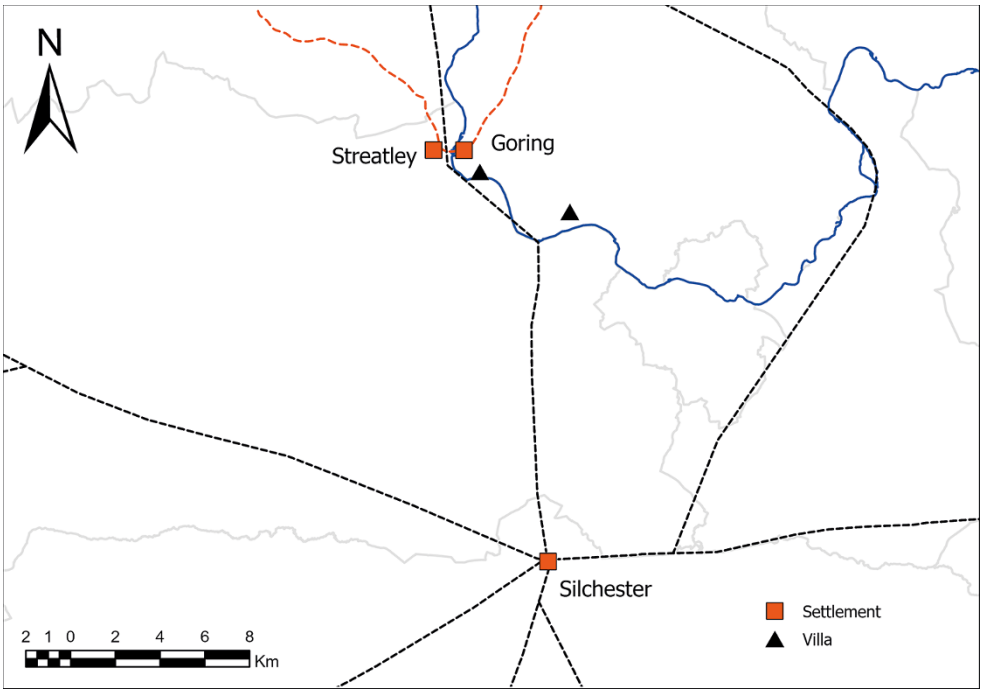


Fig. 7. Map depicting the course of the Dorchester–Silchester Roman Road (Margary 160c) and the Icknield Way (orange). (Roman Roads Research Association 2016; Clifford 2026).

modern river levels provide a useful analogue for exploring the potential fluctuations of a past fording point. Fig. 8 provides an overview of the changing water level of the river Thames at Goring Gap between 2012 and 2026. Seasonal fluctuations are immediately apparent in the modern data, with significant peaks in flow in late winter and generally stable flow during the summer months. This patterning falls within the parameters generally expected from any slow-moving, lowland river system, which in terms of crossing at a ford, would be far more accessible during summer and likely entirely inaccessible during late winter.

While these modern data should not be used as a direct proxy for past river conditions, it is pertinent to note that modern hydrological control measures and flood management schemes have resulted in a far less variable river system than would have been the case throughout the Roman and later prehistoric periods, with environmental archaeological sampling suggesting far more erratic flow with intensive, seasonal flood events.[69]

While individual finds have appeared in broader, period-specific syntheses[70] or been discussed in relation to broader arguments,[71] the Goring–Streatley assemblage as a whole has not previously been the subject of detailed analysis.

[69] Gooley 2016, 60.
[70] E.g. Naylor 2015, 127.
[71] E.g. Hume 1956, 120.

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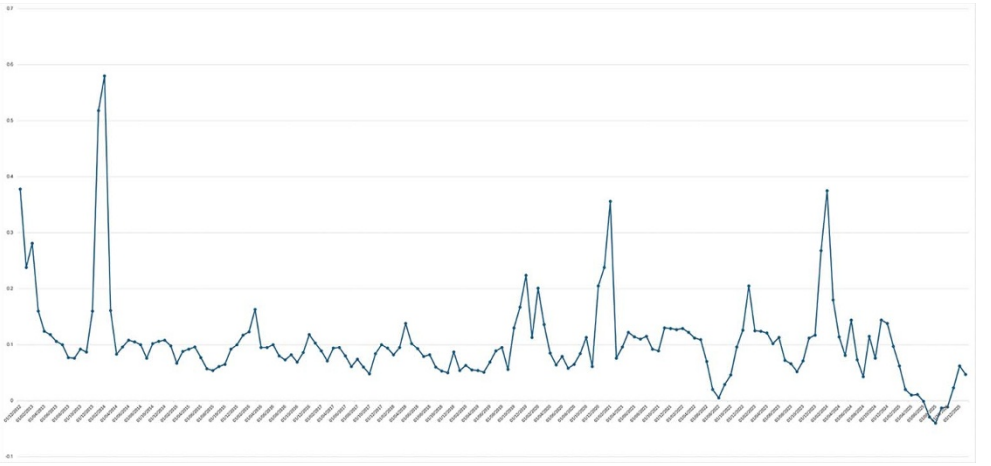


Fig. 8. Graph of modern Thames river levels recorded at Goring between 2012 and 2026, demonstrating significant seasonal variation. (Environment Agency 2026).

The Goring–Streatley assemblage

A minimum of 99 individual Roman finds has been documented from the Goring-Streatley crossing. This recorded total, however, likely represents a significant underrepresentation caused, as discussed above, by biases in late eighteenth- and early nineteenth-century recovery practices.[72]

The Goring–Streatley assemblage is not only smaller but also compositionally distinct from that at Kingston. The complete absence of weaponry and military objects is again particularly notable, as is the lack of 'military-adjacent' objects such as highly 'militarised' brooch types or horse harness fittings typically associated with a military identity.[73]

The only potentially military associated find is one of two brooches recovered from the crossing, previously identified as a trumpet brooch, a type sometimes linked to Roman military identities, particularly in a British provincial setting.[74] However, a re-examination of the museum's accession records shows that the object held under the 'Goring-Thames' provenance does not conform to the typological description of a trumpet brooch, or the physical description of the Goring brooch. It appears likely that mislabelling has resulted in confusion with a genuine trumpet brooch from another unrelated local site, and the second brooch in the assemblage may represent the original Goring–Streatley find. Due to this uncertainty regarding the actual provenance of the find, it cannot be reliably leaned upon as evidence of a potential military connection, which further emphasises the overall non-martial character of the remaining Goring–Streatley finds.

Instead, the assemblage is dominated by domestic, 'civilian' archaeological material with no clear military associations, primarily pottery and coinage. The ceramic finds consist entirely of coarse wares, with high-status finer wares such as Samian absent, and eight complete vessels recorded. The dominant pottery types recovered at the Goring–Streatley crossing point are grey ware and black-burnished ware, though specific types and forms are not frequently recorded. This lack of detail is symptomatic of a wider issue within British

[72] See Black 2000, 32; Lynch and Lynch 1968, 37.
[73] Wood 2023, 68–9.
[74] Bayley and Butcher 2004, 163; Ivleva 2017, 122–3.

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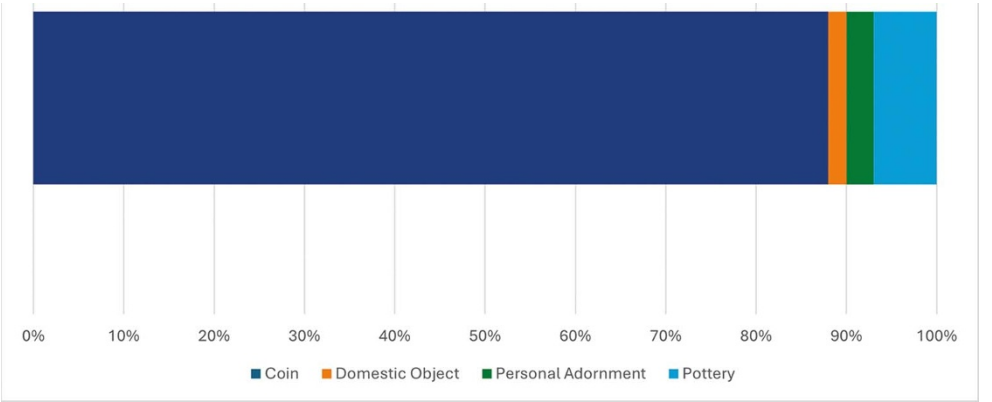


Fig. 9. Archaeological finds recovered from the River Thames at Goring, by object category (%). (Clifford 2026).

river archaeology, wherein pottery, particularly sherds, was not generally retained or examined by a specialist prior to being redeposited back into the river or repurposed as ballast. Consequently, while the Goring–Streatley assemblage appears to be particularly notable for its numerous intact ceramic vessels, which represent over 90% of the pottery recovered from the crossing, this likely reflects a significant recovery bias, where sherds of fragmented vessels may simply not have been recorded. However, a recent appraisal of Thames Conservancy Dredging records indicates that this stretch of the Thames was dredged relatively frequently in relation to the surrounding area, which would appear to suggest that if significant quantities of sherds were present, they would have been encountered at least in small quantities.[75] The dominance of intact vessels, therefore, appears to be a genuine, if potentially exaggerated, archaeological pattern.

Coins make up the bulk of the assemblage, accounting for approximately 88% of the finds recovered from the crossing (Fig. 9). There is no contextual evidence to suggest that these coins predominantly derive from a single large deposit or hoard, as at Kingston. The available information regarding provenance indicates scatterings of coins recovered at various locations along the Goring–Streatley stretch of river, although specific findspots are not typically recorded. This pattern would appear to be more consistent with the gradual accumulation of individual or small group losses or deposits over a period of time. The chronological profile of the recovered coins, with a small quantity of first- and second-century silver issues (7.95%, 7) alongside a majority of later Roman, low-value bronze issues (92%, 81), appears to suggest a general longevity throughout the Roman period.

The Goring–Streatley assemblage presents an entirely different set of interpretative issues when compared to the assemblage from Kingston, centred around the processes influencing deposition at a rural, likely seasonal ford. The notion of accidental loss is a plausible, though partial, explanation for material deposited specifically at crossing points, particularly fords. An individual could feasibly lose a coin or drop an intact vessel while wading through the water, but in these circumstances the hypothetical resulting patterning of random, chance losses does not match the specific character of the material recovered.

As Richard Bradley has famously argued for later prehistoric assemblages, a highly specific composition of particular object types and significant quantities of finds are strong indicators of structured, intentional practice, rather than the gradual accumulation of

[75] Thames Conservancy 1696–1974.

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accidental losses.[76] While Bradley's original argument focuses on deposits of prestige metalwork, the same underlying logic applies. The clear preference for two specific finds categories, coins and intact ceramic vessels, appears to indicate a selectivity to deposition at Goring–Streatley.

Another key issue is the consideration of taphonomic formation processes, which address the question of whether the recovery location reflects the original point of deposition, particularly in relation to the potential for post-depositional transportation from upstream. Hydrologically, a shallow, gravelly ford in a lowland river system, such as that at Goring–Streatley, acts as a low energy 'trap' or functional 'riffle'.[77] As water flows over the shallow gravel bed of the crossing, the velocity of flow changes, causing objects to be rolled along the bed or transported in suspension to drop out and become lodged amongst the gravel and fine sediments.[78] This process leads to the ford becoming a natural accumulation point which primarily traps objects deposited at or very near the crossing.[79]

This contrasts with the greater potential energy obstruction represented by a bridge pier, which can accumulate material transported from a much larger upstream area through obstructing flow and creating a depression and vortex which wraps around the bridge piers.[80] The presence of numerous intact ceramic vessels recovered from the Goring–Streatley stretch suggests the material was likely deposited directly at, or very near, the crossing, as it is highly unlikely that fragile ceramic vessels would have survived transportation in high-energy scour or flood conditions.

Explaining the transformation: *Romanitas* and the river

The key changes under Roman rule

Throughout later prehistory and the early medieval period, the communities of the Middle Thames Valley engaged with the river through a long-standing tradition of intentionally depositing prestigious metal objects, particularly weapons.[81] The onset of the Roman occupation marked a profound and abrupt departure from this long-established practice. The large, bladed weapon deposits which characterise earlier and later assemblages effectively vanish from the river, replaced by an entirely new suite of material composed almost entirely of pottery and coinage. It is this influx of new materials, rather than an intensification of existing practices and behaviours, which accounts for the overall rise in the rate of deposition in the Romano-British period (Fig. 10).

The widespread adoption of coinage in Roman Britain, particularly the proliferation of low-value bronze coins, provided a new, accessible medium for depositional activity. It is plausible that the deposition of coins was seen as a new, 'Roman' alteration of existing depositional practice, a more abstract and less overtly 'native' practice than the deposition of weaponry, suitable for multiple scales of activity. The contrasting assemblages from the case studies at Kingston-upon-Thames and the Goring–Streatley crossing exemplify this; the large hoard from Kingston suggests a significant single event, while the attritional patterning of small, isolated deposits at the Goring–Streatley ford suggests a more dispersed pattern of repeated, small-scale deposits.

This compositional shift was also notably accompanied by a spatial one. The broad concentrations of finds seen in later prehistory are replaced by tight clusters of material almost

[76] See Bradley 1990.
[77] Knighton 1998, 193–5.
[78] Knighton 1998, 141–3.
[79] Link *et al.* 2020, 5; see also Goda 2010, 360–2.
[80] See Melville and Coleman 2000, 11–14.
[81] Clifford 2026, 38–41.

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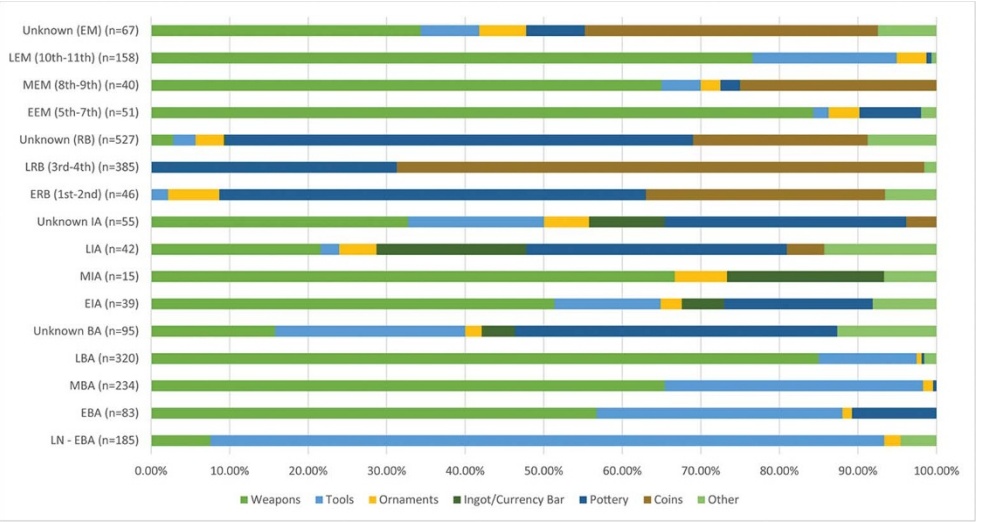


Fig. 10. Relative proportions of Middle Thames finds per chronological sub-period by object category. (Clifford 2026).

exclusively associated with specific nodes in the Roman landscape.[82] The greatest concentrations are found at urban centres that also served as major crossing points on the arterial road network, such as Kingston and Staines. Smaller concentrations are also found at rural crossing points, further highlighting the link between depositional hotspots and the highly managed, settled landscape of Roman Britain.

Negotiating flow: hydrology, taphonomy and experience

An often overlooked aspect of riverine deposition is the physicality of the river itself, particularly the dynamic nature of flow. The hydrological characteristics of a river change significantly along its course; this is demonstrated particularly clearly by the vastly different physical environments at Goring–Streatley and Kingston, where a low-energy, relatively shallow meander sharply contrasts with a high-energy, deep and channelled straight. This changing physicality naturally impacts the nature of human–river interaction, both in terms of the direct, lived experience engaging with the river and the taphonomic processes which influence the survival, transportation and recovery of deposited objects.

The sensory and physical experience of crossing a deep, potentially fast-flowing and dark fording point is often alluded to in archaeological discussions regarding rivers and movement, with a general sense of focus on the hazard and danger of such a crossing in contrast to a bridge.[83] In archaeological explorations of deposition at crossing sites, this experience is typically emphasised in terms of providing psychological impetus for small, propitiatory 'votive' offerings intended to ensure safe passage or provide a means of thanks for a successful one.[84] Similar ideas are explored in analyses of larger prehistoric

[82] Clifford 2026, 33–4.
[83] E.g. Ingate 2013, 137; Leary 2014, 68–9.
[84] E.g. de Groot and de Kort 2021.

https://doi.org/10.1017/S0068113X26100786 Published online by Cambridge University Press

and early medieval deposits, which are often framed as highly emotive, ritualised reactions to increasing hazardous hydrological conditions amongst riverine settlements and communities, such as in direct response to intensive flooding.[85]

While a model centred on accidental loss is plausible for isolated finds, it is insufficient adequately to explain the quantity and specific patterning of the assemblages from either site. The different fluvial profiles and hydrological processes at either site further support an intentional, structured depositional narrative. At Kingston, the greater rate of flow in the lower–Middle Thames, which would only be accentuated locally by the inferred bridge piers, would allow objects to become trapped within accumulated fine sediment and debris.

However, turning attention to the Kingston hoard, hydrological forces would be insufficient to transport a heavy, contained deposit of this nature from upstream; even models accounting for the highest potential rate of flow in a deeper, faster river system do not permit the transportation of a weighty, intact vessel or such a large quantity of individual, accumulated coins.[86]

Conversely, at the rural Goring–Streatley crossing, the natural form of the ford itself dictates local hydrological conditions. The Goring–Streatley ford functions as a semi-artificial riffle, a shallow section of the river with a coarse, solid gravel bed where the river's flow, despite surface turbulence, has significantly reduced capacity to transport heavy objects in suspension or through rolling them across the riverbed.[87] Relatively dense objects, such as coins, dropped into such a hydrological environment would quickly lose any downstream momentum imparted by the rate of flow and become lodged within the interstitial spaces of the gravels, effectively becoming 'trapped' *in situ*.

The accumulation of individual coins here is therefore better explained through repeated deliberate or non-deliberate action at this specific location, rather than through fluvial transportation from upstream. So, at both Kingston's urban bridge site and Goring–Streatley's rural ford, the available contextual information appears to indicate a structured, likely intentional pattern of depositional activity, despite the contrasting hydrological conditions at either location.

The question of retrieval

While the specific hydrological conditions at river crossings such as Kingston Bridge and the Goring–Streatley ford provide an explanation as to why river finds might artificially concentrate at these points, the sheer quantity of valuable material deposits raises another fundamental question: why were they not retrieved? It is important to note that the problem of retrieval in watery contexts is not a new issue, but has been a recurrent problem first addressed in some of the earliest archaeological literature exploring river finds. For example, G.F. Lawrence in 1929 noted that the apparent failure to recover valuable objects from rivers is puzzling:

> The great intrinsic value of many of these to primitive man, able presumably to swim and dive, makes it difficult to account for all of these ...[88]

Lawrence's observation, although predating any systematic study of river finds, directly confronts an often unstated but nevertheless underlying assumption prevalent in archaeological study. Most contemporary interpretations of river finds, whether viewing them as

[85] E.g. Brown 2003, 11.
[86] Gaspari 2003, 46; Sartori *et al.* 2022, 195–6.
[87] Sear 1996, 247; Theule *et al.* 2015, 103–4.
[88] Lawrence 1929, 71.

https://doi.org/10.1017/S0068113X26100786 Published online by Cambridge University Press

intentional votive offerings or accidental, chance losses, operate on the premise that once deposited, these objects were physically impossible to retrieve.[89]

This assumption is difficult to sustain, with historical accounts providing clear counter-examples. For instance, in seventeenth-century Denmark, military accounts describe civilians hiding silverware and other valuables in watery contexts, including lakes, bogs and rivers, during times of war, with the explicit intention of recovery.[90] Though functional rather than votive, these retrievable watery hoards clearly demonstrate the feasibility of recovering objects from riverine contexts. This principle is even more applicable in the specific context of a river ford.

The physical characteristics of a ford make the suggestion of irretrievability particularly tenuous. Fords are shallow, relatively stable and accessible sections of a river, meaning the recovery of a dropped or intentionally deposited object would be comparatively easy. The locations where finds are most concentrated are also locations where physical retrieval should have been easiest, suggesting that the barriers to retrieval were not physical, but perhaps also mental and/or social.

The notion that a prevailing cultural taboo prevented objects deposited in certain contexts, particularly watery places, from being recovered has a strong basis within the Graeco-Roman world.

The role of water in Roman religious beliefs is complex and multifaceted,[91] but the potential for watery places, including springs, bogs, lakes and rivers, to be active, sacred spaces is widely acknowledged.[92] Once an object entered such a space, it plausibly ceased to be worldly, terrestrial property and became *res sacra*, with ownership immediately and irrevocably transferred to the divine. This transfer was rooted in the sacred place itself, a concept perhaps most clearly embodied by the Graeco-Roman *temenos*, with the example of animals wandering into the precinct of Zeus Temenites, which were instantly consecrated by and immediately became legal property of the god.[93] Julius Caesar provides another account of this taboo in his *Commentarii de Bello Gallico*.[94] While focused on cult sanctuaries rather than rivers, he notes that piles of metalwork were left in plain sight as retrieval was strictly forbidden.

Roman literary sources demonstrate this retrieval taboo applying to watery *loci sacri*. For example, Strabo describes vast quantities of material deposited in both sacred lakes and a local temple, emphasising 'it was the lakes, most of all, that afforded the treasures their inviolability'.[95] For these deposits, the prohibition against their retrieval was clear: 'numerous people had dedicated them and no one dared lay hands on them'.[96]

The strength of this culturally specific taboo is ironically highlighted by its breach. After the Romans conquered the region, the lakes were sold to private citizens, who promptly dredged them to recover the valuables, demonstrating the barrier was a social one, not a matter of practicality.

Changing legal and social norms

The fundamental restructuring of depositional practice observed across the Middle Thames in the Roman period should not be attributed to any singular phenomenon, but rather to a

[89] E.g. Bradley 1990, 6; York 2002, 91.
[90] Olrik 1909, cited by Randsborg 2002, 417.
[91] See Henig and Lundock 2022.
[92] Edlund-Berry 2006, 162–3; Aldhouse-Green 2018, 93–6.
[93] *IG* XII 7.62, 35–7, cited by Ekroth 2024, 76.
[94] Caes., *BGall.* 6.17.
[95] Strabo, *Geography* 4.188.13.
[96] Strabo, *Geography* 4.188.13.

https://doi.org/10.1017/S0068113X26100786 Published online by Cambridge University Press

complex interplay of evolving social norms, new material cultures and a changed relationship with the landscape. Perhaps the most dramatic shift in the overall depositional profile of the Roman Middle Thames is the near-total disappearance of weaponry deposits from the Thames. This reflects a wider trend across the Roman province of *Britannia*, where the previously well-attested tradition of depositing martial equipment in watery places declines significantly during the Roman period, with the sole exception of frontier, militarised areas.[97]

This was likely not the result of any specific legal prohibition or governed control regarding civilian weapon ownership. While commonly misunderstood, Roman laws in this area, such as the often cited *Lex Julia de vi publica*, were primarily concerned with preventing organised sedition and armed provincial insurrections through criminalising the stockpiling of arms, but did not extend to curtail personal weapon ownership.[98] Widespread disarmament of the provincial population would have been both impractical to enforce and counter-productive within a landscape where banditry and predatory threats to livestock remained a persistent reality.[99]

Rather, the change is perhaps best understood as an expression of 'soft control' exerted by the Roman state. *Soft control* refers to an indirect and often intangible modality of influence which blends Foucault's conception of an inherently diffuse, disciplinary authority with a distinctly 'hardened' variety of Nye's 'soft power', informally shaping social norms and behaviours.[100] Drawing on Foucauldian ideas relating to informal social control, it depends upon the internalisation of authority and the 'quiet' regulation of conduct at the wider socio-cultural level; while in line with Nye's framework, it also draws on the unconscious cultivation of consent, whereby the values of the governing state are semi-independently reproduced amongst the population without the state taking an active, agentive role.[101] In this sense, Roman soft control naturalised 'hard' authority within everyday life. Yet whereas Nye's model of soft power relies solely on the principal of cultural attraction, the efficacy of Roman soft control was ultimately underwritten by the latent coercive threat of 'hard power' and military force.

The habitual, highly visible presence of a professional, heavily armed and active military, which functionally held a monopoly on legitimised violence, would have rendered any overt or public acts of deposition of weaponry or militaristic paraphernalia a socially and politically inadvisable action.[102] The issue of civilian, non-military weapon ownership at the individual level is rarely addressed in Roman literary sources; however, a notable example appears in the fictional *Satyricon* (late first century A.D.):

> But while I raged with a face like fury, dreaming of nothing but blood and slaughter, repeatedly toying with the hilt of the sword I'd devoted to the task, *a soldier saw me*, he being either a swindler or a night-prowler, and cried: 'Why now, comrade, of what regiment and company are you?' As I was lying steadfastly about my company and regiment, he said: 'So, do the men in your troop march about in white leather boots?' When my face, with its look of alarm, revealed that I was lying, *he ordered me to hand over my weapon*, and beware misfortune. [103]

[97] Cf. van de Zande 2023, 148–9; Franconi 2023, 221.
[98] Cf. Tysse 2004, 168–70; Wood 2023, 49.
[99] Wood 2023, 45.
[100] Foucault 1977, 209–12; Nye 2004, 5–7.
[101] Nye 2004, 25–6.
[102] Wood 2023, 53–4.
[103] Petr., *Satyricon* 82.3–7, trans. Kline.

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This example vividly illustrates the distinction between the formal legality of civilian weapon ownership and the social reality enforced by the Roman military. Here, a civilian is directly challenged precisely because he is carrying a sword, and the initial challenge 'of what regiment and company are you?' reveals an underlying social assumption, that the open carrying of a weapon, particularly a sword, was the sole prerogative of the Roman military. The subsequent confiscation of the weapon is a direct example of soft control; it is an informal assertion of the military's authority over weapons and martial symbols, enforced with an implicit threat of violence. While fictional, this example demonstrates how the ever-present authority of the Roman military could effectively police the public display of weapons without requiring a formal, legal statute, providing a powerful social deterrent against the expression of martial ideas and associations that characterised prehistoric depositional traditions.

The Middle Thames assemblages illustrate this social dynamic, charting a widespread shift that culminates in the effective abandonment of riverine weapon deposition. The assemblage from Goring–Streatley, with its complete absence of weaponry or any militaria, exemplifies a fully realised shift towards a non-martial depositional grammar in a dispersed, rural landscape. This is particularly notable given that weapon ownership in rural settings was likely far more socially acceptable, given the persistent need for personal protection, defending livestock from predators or actively taking part in hunting.[104] The absence of weapons finds from the Goring–Streatley crossing does not imply a disarmed local populace, which would have been neither practical nor realistically possible for the Roman state;[105] rather it suggests a shift in social norms, where the intentional deposition of weaponry was no longer considered an acceptable or publicly permissible act, even in a setting where such objects would have been commonplace.

The small and problematic group of weapons and militaria from Kingston, however, offers a more multifaceted perspective. While most do appear to be prehistoric or medieval objects, misidentified by their nineteenth-century finders, if the five iron spearheads and dagger (all sadly not illustrated) are Romano-British, they would represent a significant change in the underlying logic governing depositional practice in the region, contrasting with the highly structured mass depositions characteristic of later prehistory and the early medieval period.[106]

The absence of swords is particularly noteworthy, as they are markedly present in every other period.[107] In Roman Britain, swords are quintessential martial objects directly associated with a military identity;[108] their absence suggests the Kingston weapons may not represent a martial assemblage. This interpretation finds some support in the ambiguous nature of the items present. Spearheads, for instance, are well attested in both military settings and non-military contexts like boar and deer hunts.[109] However, the line between military and hunting equipment was often blurred; even swords and shields could be considered legitimate hunting tools in the correct context.[110] Secondly, and more convincingly, the dagger suggests a purely civilian interpretation of the weapons may be overly presumptive. Despite their potential use in both military and civilian contexts, daggers and hunting knives (*cultri*) are conspicuously absent from non-military iconography, including hunting

[104] Nollé 2005, 67.
[105] Wood 2023, 45.
[106] Ehrenberg 1980, 5–6; Naylor 2015, 127.
[107] Clifford 2026, 11–13.
[108] See Coulston 2004, 141–3.
[109] Anderson 1985, 93.
[110] Coulston 2004, 141; Wood 2023, 282.

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scenes.[111] This absence lends the dagger a more distinct military association with a distinct link to a martial identity, akin to that of the sword, and in stark contrast to the more polyvalent spear.

As discussed earlier, within a Roman provincial context, soldiers held a monopoly on legitimate, public displays of violence and the expression of a martial identity. At an individual scale, military equipment was not only functional, but it also provided a physical medium through which to broadcast a complex, multi-layered identity, inextricably tied to the formal structures and power of the Roman state and military.[112]

The scarcity of large-scale martial deposits from the Middle Thames stands in stark contrast to the abundant Roman weaponry recovered from frontier zones across north-west Europe, such as Germany's lower Rhine and Slovenia's Ljubljanica river.[113] The absence of militaria, particularly weaponry, within British rivers appears to be unique within the Western European provinces, with weapon finds from British rivers in highly militarised frontier zones also extremely rare in comparison to the continent.[114] It seems likely, therefore, that the conspicuous absence of weapons and militaria reflects the civilian character of the Middle Thames region overall and southern Britain more broadly, a point which is further supported by the general prevalence of low-value bronze coins at both case-study sites, given high-value coinage in Britain is predominantly recovered from military installations.[115]

The civilian nature of riverine deposition across the Middle Thames Valley does not necessarily indicate a population devoid of military experience. The recruitment of local auxiliaries and the eventual settlement of legionary veterans across southern Britain suggests that martial knowledge and a military identity would be widespread amongst the population.[116] The Roman military apparatus, through the imposition of its own internal culture and values or *disciplina*, effectively blurred the military and civilian identities of its members.[117]

Therefore, while weapons certainly were present in provincial settings, particularly amongst rural populations, the expression of their relationship with weaponry and other militaria or martial equipment would have been heavily influenced by a military 'subculture', extending far beyond the occasional presence of armed soldiers.

The distinct absence of weaponry in the Roman period, alongside the abrupt resurgence of martial deposition across the Middle Thames in the early medieval period, suggests that for the wider population, new material in the form of pottery and coinage acted as behavioural proxies, filling the same functional role that martial objects previously occupied, within a new socio-cultural framework brought about through Roman occupation.[118]

The not-quite-right thing in the right place

While the use of coins as substitutes for weapons and militaria might initially appear to be a perplexing choice, coins acting as martial proxies are largely unsurprising within a provincial Roman setting. Coins are strongly associated with a military identity; in Britain

[111] Fischer 2017, 23–4.
[112] Wood 2023, 19–21.
[113] See Kappesser 2012; Istenič 2019.
[114] Eckardt and Walton forthcoming.
[115] Walton 2024, 310.
[116] James 2001, 82–4.
[117] Phang 2011, 119.
[118] Wood 2023, 243.

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this relationship is especially prominent between the first and third centuries,[119] and the deposition of coins in 'watery' contexts is a well-attested practice across the Roman Empire, notably including vast quantities of coins deposited at fording points and bridge sites.[120]

The significant rise in the rate of coins deposited within the river during the Roman period cannot be attributed solely to the 'Romanising' monetisation of the province and the corresponding availability of coinage. It appears to represent the distinct adoption of an intentional ritualised practice especially in the later Roman period, a notion supported by the concurrent spike in the number of coin hoards, both terrestrial and riverine, from the same Late Romano-British period (fourth–fifth centuries A.D.). The widespread adoption of coin deposition in the Middle Thames therefore appears to represent the direct exchange of one long-standing votive tradition for another, more explicitly 'Roman', behaviour.

A closer examination of the coin assemblage suggests that this practice was not monolithic; rather it may have accommodated a range of depositional ideas, some of which appear to demonstrate a continuity of pre-Roman practices. On the one hand, the majority of coins recovered are low-value bronze issues. Their proliferation suggests a potential universalisation of deposition, where the act becomes an accessible and ubiquitous practice in stark contrast to earlier Bronze Age and Iron Age traditions which focused on high-status, high-value objects.[121]

On the other hand, the presence of gold and silver coins alongside intentionally modified bronze coins suggests a more complex amalgam of 'new' and 'old' ideas. The deposition of significant quantities of high-value coins appears to echo the pre-Roman emphasis on high-value, socially and culturally inaccessible deposition of prestigious objects. Similarly, the intentional modification of coins, including bending, filing and cutting, mirrors the intentional destruction or mutilation of weaponry and metalwork seen in river finds dated to the late Bronze Age and Iron Age.[122] This act of conscious, intentional modification suggests that, while the material 'vocabulary' of what constitutes a martial object changed, the conceptual 'syntax' governing the appropriate treatment of such objects was transposed onto new objects. The presence of modified coins at Kingston, but not Goring, highlights the potential for local variations in these practices, demonstrating that deposition represents a negotiation between imported Roman ideas and long-standing local traditions, rather than a singular monolithic tradition.

The sudden influx of Roman pottery presents a greater interpretative challenge. Pottery is ubiquitous in the domestic assemblages of the later prehistoric, Roman and early medieval periods, yet its presence in the Middle Thames is a uniquely Roman phenomenon. The 'traditional' Romanist interpretation leans towards a functional explanation, with riverside settlements such as those at Kingston and Goring utilising the river as a convenient means of rubbish disposal, in the same manner identified at Roman fort sites.[123]

Using a river as a convenient means of waste disposal is not a uniquely Roman idea; it represents a commonplace practice throughout prehistory and the post-Roman period, as demonstrated by the riverside midden at Dorestad Wic in the Netherlands[124] or the systematic disposal of waste attested by archaeological excavations of London's medieval waterfront.[125]

This 'traditional' perspective is not without merit; it is entirely plausible that the disposal of waste was the primary driver behind Roman deposition in the Middle Thames.

[119] See Ripollès 2005, 81–2; Walton 2012, 9–10.
[120] Rhodes 1991, 183.
[121] E.g. Bradley 1990, 186.
[122] See York 2002, 88–9; Bradley 1982.
[123] Eckardt and Walton 2021, 9.
[124] See van Es and Verwers 1980.
[125] See Milne and Milne 1982.

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While it may initially appear logical to expect a relatively consistent, low-level presence of ceramic materials from all periods, this is unrealistic when the physicality of refuse assemblages and the hydrological environment presented by an active river system are considered together. The unique characteristics of Roman pottery, with broadly consistent fabrics and high-temperature firing, provide it with far greater durability when compared with later prehistoric and early medieval material, which demonstrates far greater variation in quality and is often porous and friable, rarely surviving even in terrestrial settings.[126]

Furthermore, while a midden site in a terrestrial setting would be expected to produce a broad spectrum of refuse material, such as animal bone or mollusc shells, the inherent selectivity of riverine collecting practices would invariably exclude such material. Therefore, the apparent selectivity for coins and pottery observed across the Roman Middle Thames can just as plausibly reflect 'cherry-picking' from riverine middens as it does genuinely selective, structured deposition.

However, the interpretation of the Middle Thames assemblage in terms of structured, deliberate deposition is supported by the condition of the finds. The discovery of intact or near-intact vessels is inconsistent with casual discard. At Goring, for example, numerous intact vessels were recovered, alongside at least one vessel with holes deliberately made in its fabric prior to deposition. This may have served a practical purpose, such as suspension or use as a timer, but the act of intentional modification, alongside the potential for display, situates the vessel against a wider backdrop of Romano-British ritual behaviour seen in other watery contexts, such as wells.[127]

The intentional modification of objects, including pottery and coins, as well as the intentional selection of particular objects for deposition, indicates a highly structured practice, governed by a largely consistent underlying logic. While remarkably consistent from a long-term perspective,[128] this underlying logic does appear to have been somewhat adaptable. For example, the depositional locales demonstrate a continued focus on specific places, typically crossing points, now re-framed by Roman infrastructure and settlement, while the adaptability of the practice is apparent in the changing material corpus.

Changes in depositional norms through time are not unprecedented in the archaeological record. For instance, in the southern Netherlands, Fontijn highlighted gradual changes between Bronze Age and Iron Age depositional traditions, suggesting that any changes to long-term established behaviours were likely imperceptible to the participants, who would believe they were maintaining an identical practice.[129] However, the Roman Middle Thames appears to present a far more abrupt shift, with Roman social-cultural influence causing the sudden and widespread adoption of the 'not-quite-right thing', as depositional practice is adapted in line with the exclusive Roman ownership of a martial identity. The equally abrupt return to weapon deposition in the early medieval period suggests this change was not only conscious, but importantly, did not erase the underlying association between rivers, martial equipment and militaria among the wider population.

The persistence of these ideas, despite the apparent effectiveness of Roman soft control in curtailing practice, may lie in the unique physical characteristics of the river as a depositional context. Unlike other watery contexts, rivers are dynamic and characterised by constant movement and flow. In a flood, scour would periodically unearth and move older deposits, while in shallow areas, prehistoric weaponry and other deposits may have been

[126] See Schofield 1989, 461–3; Sutton 2020, 61–4.
[127] See Fulford and Timby 2001, 295–6.
[128] Clifford 2026, 39–41.
[129] Fontijn 2020, 165–6.

https://doi.org/10.1017/S0068113X26100786 Published online by Cambridge University Press

visible from the surface,[130] providing a tangible and active experiential link to prehistoric ideas, despite their temporary prohibition.

Conclusion

In conclusion, the process of 'making the river Roman' fundamentally reconfigured the material vocabulary of depositional practice in the Middle Thames. While an initial appraisal of this change may appear to reflect a traditional, one-sided narrative of 'top-down' Romanisation, the composition and spatial patterning of the Middle Thames assemblages frame this change as an active negotiation, with communities across the Middle Thames navigating the socio-political realities of Imperial control while maintaining a connection to long-standing traditions.

Once contextualised within the wider Roman world, the drastic shift away from martial deposition does not appear to reflect formal, legal changes governing depositional behaviour or weapon ownership, but instead demonstrates the pervasiveness of Imperial 'soft control', the implicit social and cultural pressure, likely inadvertently exerted by the Roman state and its military.

Through compiling a comprehensive, multi-period dataset of river finds recovered from the non-tidal Middle Thames, the specific character of the Roman Middle Thames as a highly structured, intentional and distinctly civilian depositional environment has become apparent. Perhaps most significantly, the long-term resilience of martial deposition has been emphasised through its temporary discontinuity in the Roman period, with the early medieval resurgence of weapon deposition *en masse* presenting a significant challenge to the narratives of gradual, almost invisible changes to depositional behaviour suggested throughout prehistory.

As such, the Middle Thames provides a clear demonstration of the potential of the riverine archaeological record, alongside the inherent value in moving beyond the 'ritual/rubbish' dichotomy, with the potential to act as a unique lens through which to explore the complex entanglement of long-term memory, identity and authority against a backdrop of profound social, cultural and political change.

Acknowledgements. The author would like to thank Profs Hella Eckardt, Gabor Thomas and Duncan Garrow for their support and guidance over the course of the project and for their thoughts on previous drafts of this paper. He would also like to thank the numerous members of the University of Reading's Archaeology Roman Reading Group for their suggestions and assistance in preparing the arguments presented, with special thanks to Dr Owen Humphreys for his invaluable help identifying river finds and for his insightful comments. Finally, he would like to thank Jessica East for her constant encouragement and for proofreading the text; any remaining flaws remain entirely his own.

Bibliography

Adkins, R. and Jackson, R. 1978: *Neolithic Stone and Flint Axes from the River Thames: An Illustrated Corpus*, vol. 1, London.
Aldhouse-Green, M. 2018: *Sacred Britannia: Gods and Rituals in Roman Britain*, London.
Anderson, J.K. 1985: *Hunting in the Ancient World*, Berkeley (CA).
Andrews, P. 2004: 'Kingston – Saxon royal estate centre to post-medieval market town: the contribution of archaeology to understanding towns in Surrey', in Cotton, Crocker and Graham 2004, 169–85.
Astill, G. 2011: 'Coinage and the economy of early medieval England', in J. Escalona and A. Reynolds (eds), *Scale and Scale Change in the Early Middle Ages*, Turnhout, 253–72.
Bayley, J. and Butcher, S. 2004: *Roman Brooches in Britain: A Technological and Typological Study Based on the Richborough Collection*, London.
Bell, M. 2020: *Making One's Way in the World: The Footprints and Trackways of Prehistoric People*, Oxford.
Biden, W.D. 1852: *The History and Antiquities of the Ancient and Royal Town of Kingston-upon-Thames*, London.

[130] see Plin., *Ep*. 8.8.

https://doi.org/10.1017/S0068113X26100786 Published online by Cambridge University Press

Bird, D. 2004: 'Surrey in the Roman period: a survey of recent discoveries', in Cotton, Crocker and Graham 2004, 65–76.
Black, B.J. 2000: *On Exhibit: Victorians and Their Museums*, Charlottesville (VA).
Bland, R., Chadwick, M.A., Ghey, E., Haselgrove, C., Mattingly, D.J., Rogers, A. and Taylor, J. 2020: *Iron Age and Roman Coin Hoards in Britain*, Oxford.
Bradley, R. 1982: 'The destruction of wealth in later prehistory', *Man* 17.1, 108–22.
Bradley, R. 1990: *The Passage of Arms: An Archaeological Analysis of Prehistoric Hoards and Votive Deposits*, vol. 1, Cambridge.
Bradley, T. 2005: 'Roman occupation at Skerne road, Kingston upon Thames', *Surrey Archaeological Collections* 92, 171–85.
Brown, T. 2003: 'Divisions of floodplain space and sites on riverine "islands": functional, ritual, social, or liminal places?', *Journal of Wetland Archaeology* 3.1, 3–15.
Brudenell, M., Cooper, A., Green, C., Nimura, C. and Schulting, R. 2024: 'What rivers did: a study of if and how rivers shaped later prehistoric lives in Britain and beyond', *Proceedings of the Prehistoric Society* 90, 37–62.
Burström, N.M. and Ingvardson, G.T. (eds) 2020: *Divina Moneta: Coins in Religion and Ritual*, London.
Butters, S. 2013: *'That Famous Place': A History of Kingston Upon Thames*, London.
Campbell, P.B. 2023: 'The archaeology of rivers: processes and patterns', in Tibbs and Campbell 2023, 3–19.
Claudian. 1922: *Panegyricus De Sexto Consulatu Honorii Augusti*, trans. M. Platnauer, *On the Sixth Consulship of the Emperor Honorius*, Cambridge (MA).
Clifford, M. 2026: 'Flowing through time: a *longue durée* perspective on riverine deposition in the Middle Thames Valley', *Archaeological Journal*, 1-48. https://doi.org/10.1080/00665983.2025.2590652
Clifford, M. forthcoming. 'Uninterested, unsophisticated and dirty: dredging and archaeological recovery in British rivers'.
Colquhoun, I. and Burgess, C.B. 1988: *The Swords of Britain*, Prähistorische Bronzefunde 4.5, Munich.
Cooper, A. 2006: *Bridges, Law and Power in Medieval England, 700–1400*, Woodbridge.
Cotton, J., Crocker, G. and Graham A. (eds) 2004: *Aspects of Archaeology and History in Surrey: Towards a Research Framework for the County*, Guildford.
Cotton, J. 2020: 'William Roots and the early history of Kingston', in *Kingston Upon Thames Archaeological Society: Proceedings of the Fiftieth Anniversary Conference Held on Saturday, 20th July 2019*, Epsom, 7–17.
Coulston, J. 2004: 'Military identity and personal self-identity in the Roman army', in L. de Ligt, E. Hemelrijk and H.W. Singer (eds), *Roman Rule and Civic Life: Local and Regional Perspectives*, Leiden, 133–52.
Creighton, J. 2000: *Coins and Power in Late Iron Age Britain*, Cambridge.
de Groot, T. and de Kort, W. 2021: *Veilig naar de overkant. Onderzoek naar een muntvondst uit de Romeinse tijd in het dal van de Aa bij Berlicum (gemeente Sint-Michielsgestel)*, Rapportage Archeologische Monumentenzorg 267, Amersfoort.
Dicus, K.D.A. 2022: 'Refuse and the Roman city: determining the formation processes of refuse assemblages using statistical measures of heterogeneity', *American Journal of Archaeology* 126, 543–66.
Eckardt, H. and Walton, P. 2021: *Bridge over Troubled Water: The Roman Finds from the River Tees at Piercebridge in Context*, London.
Eckardt, H. and Walton, P. forthcoming: *Rubbish and Retrieval: Roman Finds From British Rivers*.
Edgeworth, M. 2011: *Fluid Pasts: The Archaeology of Flow*, London.
Edlund-Berry, I. 2006: 'Hot, cold, or smelly: the power of sacred water in Roman religion, 400–100 BCE', *Religion in Republican Italy* 33, 162–80.
Ehrenberg, M. 1980: 'The occurrence of Bronze Age metalwork in the Thames: an investigation', *Transactions of the London and Middlesex Archaeological Society* 31, 1–15.
Ekroth, G. 2024: '"A room of one's own?": exploring the *temenos* concept as divine property', in M. Haysom, M. Mili and J. Wallensten (eds), *The Stuff of the Gods: The Material Aspects of Religion in Ancient Greece*, Stockholm, 69–82.
Environment Agency. 2026: 'River Thames level downstream at Goring Lock', https://check-for-flooding.service.gov.uk/station/7101/downstream (accessed 10 February 2026).
Fischer, N.L. 2017: *Iron Men: Roman Masculinity and the Roman Military Dagger*, New York.
Fontijn, D. 2020: *Economies of Destruction: How the Systematic Destruction of Valuables Created Value in Bronze Age Europe, c. 2300–500 BC*, London.
Foucault, M. 1977: *Discipline and Punish: The Birth of the Prison*, London.
Franconi, T. 2023: 'Do rivers make good frontiers? Environmental change and military policy along the Roman Rhine', in Tibbs and Campbell 2023, 210–27.
Fulford, M. and Timby, J. 2001: 'Timing devices, fermentation vessels, "ritual" piercings? A consideration of deliberately "holed" pots from Silchester and elsewhere', *Britannia* 32, 293–7.

https://doi.org/10.1017/S0068113X26100786 Published online by Cambridge University Press

Furlan, G. 2024: 'The ragpicker's dream: notes on the continuous role of junk dealers in past urban economies from the Roman period onwards', in I. Bavuso, G. Furlan, E.E. Intagliata and J. Steding (eds), *Economic Circularity in the Roman and Early Medieval Worlds: New Perspectives on Invisible Agents and Dynamics*, Oxford, 1–14.

Garrow, D. 2012: 'Odd deposits and average practice: a critical history of the concept of structured deposition', *Archaeological Dialogues* 19.2, 82–115.

Garrow, D. and Gosden, C. 2012: *Technologies of Enchantment? Exploring Celtic Art: 400 BC to AD 100*, Oxford.

Gaspari, A. 2003: 'Archaeology of the Ljubljanica River (Slovenia): early underwater investigations and some current issues', *International Journal of Nautical Archaeology* 32.1, 42–52.

Goda, L. 2010: 'The fords of the Danube', in M. Brilly (ed.), *Hydrological Processes of the Danube River Basin: Perspectives from the Danubian Countries*, Dordrecht, 343–66.

Gooley, T. 2016: *How to Read Water*, London.

Grayson, A.J. 2010: 'Thames crossings near Wallingford from Roman to early Norman times', *Oxoniensia* 75, 1–14.

Härke, H. 2014: 'Grave goods in early medieval burials: messages and meanings', *Mortality* 19, 41–50.

Haughey, F.M. 2009: *People and Water: A Study of the Relationship between Humans and Rivers in the Mesolithic and Neolithic with Particular Reference to That within the Thames Basin*, unpub. PhD thesis, University of London.

Hawkins, D. 1996: 'Roman Kingston-upon-Thames: a landscape of rural settlements', *London Archaeologist* 8, 46–50.

Henig, M. and Lundock, J. 2022: *Water in the Roman World: Engineering, Trade, Religion and Daily Life*, London.

Hingley, R. 2006: 'The deposition of iron objects in Britain during the later prehistoric and Roman periods: contextual analysis and the significance of iron', *Britannia* 37, 213–57.

Hosfield, R.T. 2011: 'Rolling stones: understanding river-rolled Paleolithic artifact assemblages', in A.G. Brown, L.S. Basell and K.W. Butzer (eds), *Geoarchaeology, Climate Change, and Sustainability*, Boulder (CO), 37–52.

Hume, I.N. 1956: *Treasure in the Thames*, London.

Humphreys, O. 2021: *London's Roman Tools: Craft, Agriculture and Experience in an Ancient City*, London.

Hussain, S.T. and Floss, H. 2016: 'Streams as entanglement of nature and culture: European Upper Paleolithic river systems and their role as features of spatial organization', *Journal of Archaeological Method and Theory* 234, 1162–1218.

Ingate, J. 2013: 'Hybrid bridges: an exploration into how traditionally 'Romanised' elements of the town interacted with meaning-laden pre-historic waterscapes', in A. Bokern, M. Bolder-Boos, S. Krmnicek, D. Maschek and S. Page (eds), *TRAC 2012: Proceedings of the Twenty-Second Annual Theoretical Roman Archaeology Conference, Frankfurt 2012*, Oxford, 133–49.

Istenič, J. 2019: *Rimska vojaška oprema iz reke Ljubljanice: arheološke in naravoslovne razsikave/Roman Military Equipment from the River Ljubljanica: Typology, Chronology and Technology*, Ljubljana.

Ivleva, T. 2017: '"Active brooches": theorising brooches of the Roman north-west (first to third centuries AD)', in F.T. Martin and R. Weetch (eds), *Dress and Society: Contributions from Archaeology*, Oxford, 69–93.

James, S. 2001: 'Soldiers and civilians: identity and interaction in Roman Britain', in S. James and M. Millett (eds), *Britons and Romans: Advancing an Archaeological Agenda*, CBA Research Report 125, York, 77–89.

Johns, C. 1996: 'The classification and interpretation of Romano-British treasures', *Britannia* 27, 1–16.

Justinian. 1932: *Novellae Constitutiones*, trans. S.P. Scott, *The Enactments of Justinian: The Novels*, Cincinnati (OH).

Kappesser, I. 2012: *Römische Flussfunde aus dem Rhein zwischen Mannheim und Bingen: Fundumstände, Flusslaufrekonstruktion und Interpretation*, Bonn.

Kemmers, F. 2020: 'Worthless? The practice of depositing counterfeit coins in Roman votive contexts', in Burström and Ingvardson 2020, 193–208.

Knighton, D. 1998: *Fluvial Forms and Processes: A New Perspective*, London.

Knüsel, C.J. and Carr, C.G. 1995: 'On the significance of the crania from the River Thames and its tributaries', *Antiquity* 69, 162–9.

Lawrence, G.F. 1929: 'Antiquities from the Middle Thames', *Archaeological Journal* 86.1, 69–98.

Leary, J. 2014: *Past Mobilities: Archaeological Approaches to Movement and Mobility*, London.

Lim, R. 2018: 'Sparsio', in O. Nicolson (ed.), *The Oxford Dictionary of Late Antiquity*, Oxford.

Link, O., García, M., Pizarro, A., Alcayaga, H. and Palma, S. 2020: 'Local scour and sediment deposition at bridge piers during floods', *Journal of Hydraulic Engineering* 146.3, 04020003.

Lund, J. 2008: 'Banks, borders and bodies of water in a Viking Age mentality', *Journal of Wetland Archaeology* 8.1, 53–72.

Lynch, B.D. and Lynch, F.T. 1968: 'The beginnings of a scientific approach to prehistoric archaeology in 17th and 18th century Britain', *Southwestern Journal of Anthropology* 24.1, 33–65.

Melville, B.W. and Coleman, S.E. 2000: *Bridge Scour: Water Resources*, New York.

Milne, G. and Milne, C. 1982: *Medieval waterfront development at Trig Lane, London*, London and Middlesex Archaeological Society Special Paper 5, London.

https://doi.org/10.1017/S0068113X26100786 Published online by Cambridge University Press

Mullin, D. 2012: 'The river has never divided us: Bronze Age metalwork deposition in western Britain', *Oxford Journal of Archaeology* 31.1, 47–57.
Naylor, J. 2015: 'The deposition and hoarding of non-precious metals in Early Medieval England', in J. Naylor and R. Bland (eds), *Hoarding and the Deposition of Metalwork from the Bronze Age to the 20th Century: A British Perspective*, Oxford, 125–46.
Needham, S. and Longley, D. 1980: 'Runnymede Bridge, Egham: a Late Bronze Age riverside settlement', in J. Barrett and R. Bradley (eds), *Settlement and Society in the British Later Bronze Age*, London, 397–436.
Nollé, J. 2005: 'Boars, bears and bugs: farming in Asia Minor and the protection of men, animals, and crops', in S. Mitchell and C. Katsari (eds), *Patterns in the Economy of Roman Asia Minor*, Swansea, 53–82.
Nye, J.S. 2004: *Soft Power: The Means to Success in World Politics*, New York.
Oliver, S. 2013. 'Liquid materialities in the landscape of the Thames: mills and weirs from the eighth century to the nineteenth century', *Area* 45.2, 223–9.
Olrik, J. 1909: *Drikkehorn og Sølvtøj fra Middelalder og Renaissance udgivet af Nationalmuseets AndenAfdeling*, Copenhagen.
Peberdy, R.B. 2012: 'From Goring towards Henley: the course, history and significance of a medieval Oxfordshire routeway', *Oxoniensia* 77, 91–105.
Phang, S. 2011: 'New approaches to the Roman army', in L. Brice and J. Roberts (eds), *Recent Directions in the Military History of the Ancient World*, Claremont (CA), 105–44.
Pirie, J. and Saunders, V. 1990: 'Roman: finds from water-logged deposits in Southwark and Kingston', *London Archaeologist* 6, 146–8.
Randsborg, K. 2002: 'Wetland hoards', *Oxford Journal of Archaeology* 21.4, 415–18.
Rhodes, M. 1991: 'The Roman coinage from London Bridge and the development of the City and Southwark', *Britannia* 22, 179–90.
Ripollès, P.P. 2005: 'Coinage and identity in the Roman Provinces: Spain', in C. Howgego, V. Heuchert and A. Burnett (eds), *Coinage and Identity in the Roman Provinces*, Oxford, 79–94.
Rogers, A. 2011: 'Reimagining Roman ports and harbours: the port of Roman London and waterfront archaeology', *Oxford Journal of Archaeology* 30.2, 207–25.
Roman Roads Research Association. 2016. '*Ordnance Survey Roman road files for England*', https://romanroads.org/osarchive.html (accessed 12 May 2025).
Sartori, J., Carrasco, A. and Ramonell, C. 2022: 'Experimental study in flume with pottery sherds: first implication for insular sites located in the middle Paraná River, Argentina', *SN Social Sciences* 2.10, 196.
Schofield, A.J. 1989: 'Understanding early medieval pottery distributions: cautionary tales and their implications for further research', *Antiquity* 63, 460–70.
Sear, D.A. 1996: 'Sediment transport processes in pool–riffle sequences', *Earth Surface Processes and Landforms* 21.3, 241–62.
Smith, C.R. 1859: *Illustrations of Roman London*, London.
Sutton, A. 2020: 'Resistance is futile? Ceramic technology and social change in later Iron Age and early Roman Britain: Silchester Ware as a case study', *Britannia* 51, 53–82.
Thames Conservancy Collection. 1696–1974: Royal Berkshire Archives, Reading.
Theule, J.I., Liébault, F., Laigle, D., Loye, A. and Jaboyedoff, M. 2015: 'Channel scour and fill by debris flows and bedload transport', *Geomorphology* 243, 92–105.
Tibbs, A. and Campbell, P.B. (eds) 2023: *Rivers and Waterways in the Roman World: Empire of Water*, London.
Tysse, W. 2004: 'The Roman legal treatment of self defense and the private possession of weapons in the Codex Justinianus', *Journal on Firearms & Public Policy* 16, 163.
Unger, J., and Hager, W.H. 2007: 'Down-flow and horseshoe vortex characteristics of sediment embedded bridge piers', *Experiments in Fluids* 42.1, 1–19.
UK Centre for Ecology & Hydrology. 2025: 'Integrated Hydrological Digital Terrain Model', https://www.ceh.ac.uk/data/integrated-hydrological-digital-terrain-model (accessed 14 July 2025).
van de Zande, D. 2023: 'Nodes and networks: military and civilian trade and transport in the Roman Dutch southwest delta', in Tibbs and Campbell 2023, 146–61.
van Es, W.A. and Verwers, W.J.H. 1980: *Excavations at Dorestad 1: The Harbour, Hoogstraat 1*, Amersfoort.
Wacher, J. 1997: *The Towns of Roman Britain*, 2nd edn, London.
Walker, T., Sharpe, R.J. and Williams, H. 2021: 'Barn owls and black rats from a rural Roman Villa at Gatehampton, South Oxfordshire', *Environmental Archaeology* 26.5, 487–96.
Walton, P. 2012: *Rethinking Roman Britain: Coinage and Archaeology*, Wetteren.
Walton, P. 2024: 'Bent, broken and pierced: the assemblage of mutilated coins from Piercebridge, County Durham in a Romano-British context', in G. Pardini and C. Perassi (eds), *Monete frazionate. Quadri regionali, questioni cronologiche, aspetti economici*, Salerno, 309–15.

https://doi.org/10.1017/S0068113X26100786 Published online by Cambridge University Press

Wigg-Wolf, D. 2020: 'Death by deposition? Coins and ritual in the late Iron Age and early Roman transition in northern Gaul', in Burström and Ingvardson 2020, 13–29.
Wood, E. 2023: *Roman Military Finds from Non-Military Contexts in South-East England and the Role of the Roman Army in Romano-British Society*, unpub. PhD thesis, King's College London.
York, J. 2002: 'The life cycle of bronze age metalwork from the Thames', *Oxford Journal of Archaeology* 21.1, 77–92.

Cite this article: Clifford, M. How Do We Make the River 'Roman'? Changing Depositional Patterns in the Middle Thames Valley. *Britannia* 2026, 1–31. https://doi.org/10.1017/S0068113X26100786

https://doi.org/10.1017/S0068113X26100786 Published online by Cambridge University Press