Intramural human remains from Roman towns in Britain: a case study from Late Iron Age and Roman Silchester

Britannia (2025), 1–26
doi:10.1017/S0068113X25100366

CAMBRIDGE UNIVERSITY PRESS

ARTICLES

Intramural Human Remains from Roman Towns in Britain: A Case Study from Late Iron Age and Roman Silchester

Michael Fulford[1] and Derek Hamilton[2]

[1]University of Reading; [2]University of Glasgow
Corresponding author: Michael Fulford; Email: m.g.fulford@reading.ac.uk

Abstract

Intramural adult human remains, whether articulated or disarticulated, from Roman towns in Britain are uncommon. There is evidence for some remains to have been deliberately curated and/or treated *post mortem* in a particular way before final deposition. This paper focuses on the disarticulated human remains from late Iron Age and Roman Silchester (*Calleva Atrebatum*), noting the parts of the skeleton represented, their contexts, and whether there is evidence for curation or treatment *post mortem*. Twenty-one examples have been radiocarbon dated, enabling an assessment of changes in spatial patterning over time. An early and a late cluster are identified. The results from Silchester follow a review of comparable evidence from the major towns of Roman Britain. This reveals a broad similarity in patterning between Silchester and the Romano-British countryside. There are several urban parallels for Silchester's late cluster, but only London for the early grouping.

Keywords: disarticulated; human; bone; radiocarbon date

Introduction

Roman law and custom required the dead to be buried *extra muros*, beyond the *pomerium*, the boundary of the town or city.[1] Despite this, human remains have been found in Britain within the walls of its major Roman towns and cities, or within those settlements before fortification. In his meticulous cataloguing of the human remains from within the *colonia* of *Augusta Raurica* (Kaiseraugst) beside the Rhine in Switzerland, the first Roman town to have had a comprehensive study of this kind, Kramis has brought together numerous other examples from major towns in the north-west provinces as well as from fortresses, forts, *vici* and rural settlements along the Rhine frontier to provide a wider context for this phenomenon.[2] The great majority of the remains from Kaiseraugst are of neonates and perinates, some 600 in all, but there are also adult remains, including of complete individuals. Contextual evidence suggests that the latter are for the most part later Roman, third century, in date.

[1] Duodecim Tabularum X.1 The Avalon Project: The Twelve Tables (yale.edu); Lennon 2014.
[2] Kramis 2020.

Neonate and perinate burials are common in Britain within settlements of every kind throughout the Roman period.[3] They are frequently documented and will not be considered further here. On the other hand, the remains of children, young adults and adults, whether as complete or partly articulated skeletons, or in disarticulated form as single bones, are rare within urban settlements, but they do occur in all types of rural settlement in Roman Britain, mainly in the South, Central Belt, East and North-East regions.[4] Any occurrence needs to be considered against the background where, in lowland Britain, as a general rule, cremation was customary in the first and second centuries A.D., and inhumation in the third and fourth centuries.[5] For south-east England cremation was also the norm for the late Iron Age, the first century B.C./first century A.D.[6] While the primary date of burial of complete individuals can often be reliably derived from the evidence of associated Roman material culture and context, this is not necessarily the case with single bones or partial articulated skeletons which may be curated in skeletonised form for some years before deposition or re-deposited in much later contexts. Using radiocarbon dating, the purpose of this paper is to determine the incidence over time of disarticulated human remains from within one major late Iron Age and Roman town in Britain, Silchester (*Calleva Atrebatum*).

Given the normal expectation of Roman burial in extramural cemeteries, how might we account for human remains buried within a town? Kramis rehearses a wide range of scenarios, noting how difficult it is to argue for one explanation rather than another.[7] For example, in the case of articulated remains, bodies — victims of homicide — might well have been disposed of clandestinely to conceal them from family, friends and authority, but in multiple instances, those skeletons from late or post-Roman Britain might also have been the victims of raids by barbarian groups with no survivors to give them a formal burial, or from other socially marginalised/deviant people. Absence of evidence of violence inflicted by sword, knife or blunt instrument by no means precludes a violent death. Disarticulation could result from accidental disturbances of burials preceding the foundation of the town, such as from the later digging of foundations, rubbish pits or wells, with bones or body parts potentially being redeposited higher in the stratigraphic sequence. Execution and/or preferential selection for trophy, ritual or other reasons may account for the high incidence of crania,[8] but they are also less easily missed on excavation than other parts or fragments of parts of the human skeleton. Some elements of the skeleton may have been deliberately curated for personal or religious reasons and may have been introduced as such to the site before deposition. At Wroxeter some of the cranial fragments appear to have been anointed with oil; one trimmed perhaps for use as a 'skull cap'.[9] In London, at Paternoster Square, a cranium was buried upturned with two mortaria in a pit dug after the Hadrianic fire.[10] Such pieces may be much earlier in date than their archaeological context. Special treatment of disarticulated remains is also evident at Silchester, where the mandible of a young adult female had been carefully placed in the foundations of a late first-/early second-century house in Insula IX (Table 1, no. 7).[11] At some point before disposal some teeth had become loose and had been replaced in the wrong sockets. In the early Roman recut ditch of the

[3] Carroll 2018; Millett and Gowland 2015.

[4] Smith 2018b, 275–7, figs 6.54–55.

[5] Philpott 1991.

[6] Cunliffe 2005, 151–9, fig. 7.6.

[7] Kramis 2020, 141–73.

[8] The term 'skull' occurs commonly in the historic literature when 'cranium', i.e. the skull without the mandible, would probably be the appropriate modern term. On the basis of what can be discerned from the relevant historic publication, we have replaced 'skull' with 'cranium' in this paper.

[9] Wilkinson and Barker 1997, 369.

[10] Watson 2006, 48.

[11] Lewis 2024.

https://doi.org/10.1017/S0068113X25100366 Published online by Cambridge University Press

defensive late Iron Age 'Inner Earthwork' where it runs beside the bath house, the cranium of a young adult male was placed on a triangular stretcher made of poles woven together which was itself laid across the early fills of the feature (Table 1, no. 10). A little lower in the fill, but close by and probably associated with the stretcher, were a canine mandible and three crania of dogs.[12]

Roman Britain

There are reports of finds of both articulated and disarticulated human remains from within Roman towns in Britain, including Silchester, from the nineteenth century to the present day. However, most of the early finds have little or no information about context. Best known, perhaps, are the numerous finds of crania recovered from the Walbrook valley in London and the middle and lower reaches of the River Thames. Once thought to be the heads of victims of the Boudican rebellion,[13] their interpretation has subsequently proved to be much more complex and interpretations include the practice of Celtic cults of the head, excarnation, the results of fluvial erosion from an upstream cemetery, executions or trophies associated with historic events such as the Boudican rebellion or Hadrian's war, victims of gladiatorial combat and routine judicial executions.[14] Radiocarbon dating of some crania from these riverine contexts has introduced a much longer chronology with examples dating from the Neolithic, the Bronze Age and through to the medieval period, though all the examples from the Walbrook returned a late Iron Age/Roman date.[15] A further programme of radiocarbon dating has now been applied to 16 (27%) samples taken from two groups of crania, totalling 59 altogether, from stratified contexts from recent excavation in the upper Walbrook valley. While most of the dates were consistent with the second-century dates suggested by their archaeological context, at least two were earlier than their date of deposition.[16]

As problematic as dating is the definition of context in relation to settlement. With Roman London's expansion between its foundation in the mid-first century and its peak around the mid-second century, it is difficult to determine at any one time what might have been deposited within the settlement and what was buried in an acknowledged cemetery outside it, the situation only becoming clear with the construction of the town wall *c.* A.D. 200. Even though some of the finds of crania and other disarticulated remains from the upper Walbrook valley lie inside the town walls, at the time of burial the location might be thought to lie outside what might reasonably have been regarded at the time as the settlement.[17] Nevertheless, both crania and other disarticulated human remains have been found demonstrably elsewhere within the town and its suburb, Southwark, south of the river, and have been dated by context rather than by radiocarbon dating between the mid-first century, including a possible association with the Boudican revolt, and the later second century.[18] To give examples: there is the inverted cranium from Paternoster Square (see above), while at Queen Street a human cranium was found in the fill of a first-/second-century well;[19] and eight post-cranial fragments from at least three individuals

[12] Fulford *et al.* 2019, 10–11.

[13] RCHM(E) 1928, 16.

[14] E.g. Marsh and West 1981; Cotton 1996; Redfern and Bonney 2014; Powers 2015; Ranieri and Telfer 2017, 120–8; Hingley 2018, 10–22, 47–9; Perring 2017; 2022, 109–13, 248–55.

[15] Bradley and Gordon 1988; Schulting and Bradley 2013.

[16] Ranieri and Telfer 2017, 111–12, 118.

[17] Indicative mapping by Ranieri and Telfer 2017, 122, fig. 104.

[18] Hingley 2018, 108–14; Perring 2022, 110, 255.

[19] Wilmott 1982, 9.

https://doi.org/10.1017/S0068113X25100366 Published online by Cambridge University Press

Table 1. Silchester: Human bone with radiocarbon dates. See Table 2 for full details of the radiocarbon dates and associated stable isotope measurements.

No.	Location	Body part	Context	Date of context	^{14}C date (B.P.)	Museum code	Reference
1	Insula III	cranium	30314	fill of antiquarian trench	1930±28	A2014.41 (SF690)	Fulford *et al.* forthcoming
2	Insula IV (Forum basilica)	cranium	1760	*c.* A.D. 43/4–85	2152±28	A80.30 (SF2563)	Firth 2000, 505
3	(SE angle forum)	cranium		unknown	2007±23	1995.92.181	Joyce, Journal, 16/05/1867
4	Insula VI (House 1)	zygomatic arch (sampled from a complete cranium, apparently all that remains of complete skeleton)	House VI.1 Room 17	unknown	1984±24	1995.92.13	Hope 1906, 159, 164–5
5	Insula IX	cranium	5641	*c.* A.D. 125/50–200	1923±32	A2004.30 (SF3549)	Lewis 2011, 241–2
6	Insula IX	femur	11193	*c.* A.D. 43/4–85	1945±32	A2010.48 (SF5896)	Lewis 2020, 439
7	Insula IX	mandible	733	*c.* A.D. 85–125/50	1989±27	A2006.50 (SF4467)	Lewis 2024
8	Insula XXI	left tibia	pit	unknown	2082±23	1995.92.70	Hope & Fox 1900, 111
9	Insula XXX	ulna	65	fill of antiquarian trench	2010±32	Silch 1994	Fulford *et al.* forthcoming
10	Insula XXXIII (Bath house)	cranium	3218	*c.* A.D. 50–70	1960±32	A2018.38	Fulford *et al.* 2019
11	Insula XXXIII (Bath house)	pelvis	3221	*c.* A.D. 50–70	2040±27	A2018.38	Fulford *et al.* 2019

(*Continued*)

Table 1. (*Continued.*)

No.	Location	Body part	Context	Date of context	^{14}C date (B.P.)	Museum code	Reference
12	Insula XXXIII (Bath house)	mandible	4101	*c.* A.D. 400	1718±31	A2018.38	Fulford *et al.* 2019
13	North Gate (1991)	radius	10	fill of antiquarian trench	1788±30	SIL 91	Firth & Fulford 1997
14	North Gate (1991)	femur	17	fill of antiquarian trench	1712±30	SIL 91	Firth & Fulford 1997
15	North Gate (1991)	cranium	35	fill of antiquarian trench	1707±30	SIL 91	Firth & Fulford 1997
16	North Gate (1991)	zygomatic	39	fill of antiquarian trench	1697±30	SIL 91	Firth & Fulford 1997
17	North Gate (1991)	cranium	54	fill of antiquarian trench	1793±30	SIL 91	Firth & Fulford 1997
18	North Gate (1991)	femur	Phase Group 10	fill of antiquarian trench	2320±40	SIL 91	Firth & Fulford 1997; Fulford 2000
19	North Gate (1991)	cranium	Phase Group 7.1	*c.* A.D. 400 re-cut of town wall ditch	1600±40	SIL 91	Firth & Fulford 1997; Fulford 2000
20	North Gate (1909)	left parietal		unknown	1685±24	1995.92.128	Hope & Stephenson 1910, 325
21	West Gate (1890)	occipital		unknown	1736±24	1995.92.113	Fox and Hope 1890, 755

were recovered from late first-/early second-century dumped material behind the waterfront at Billingsgate Buildings.[20] From a similar type of context but more closely dated to *c.* A.D. 60/1–80 and interpreted by the excavators as victims of the Boudican revolt are the finds at Regis House of disarticulated human bone from at least three individuals.[21] A slightly different pattern emerges in the later fourth century when, from recent excavations, inhumation burials containing complete, articulated skeletons have been found in and around the amphitheatre within the walled city as well as in Southwark south of the river.[22]

Beyond London, human remains have also been found within the walls of seven *civitas* capitals, including Silchester, and two *coloniae*. Where evidence of date is available, the great majority of occurrences are from late or immediately post-Roman contexts, and there are a few instances of an early Roman date. Examples of the latter occur at Colchester, where the legionary fortress was succeeded by the foundation of a *colonia* (*Camulodunum*). Here, the remains of six individuals, represented by six crania and 24 post-cranial bones, were found in the ditch of the legionary fortress (A.D. 44–49) at Balkerne Lane, Colchester and a further, chopped human humerus was found on Site V at Balkerne Lane.[23] These finds therefore relate to the activities of the legion and pre-date the founding of the city. From the *colonia* disarticulated human remains have been found in Boudican contexts from the Fenwick excavation and the earlier Telephone Exchange excavation and, possibly a Boudican context, at Lion Walk.[24] Military action may explain the find of part of a pelvis from a mid/late first-century context at Cirencester, Glos., where an auxiliary fort preceded the foundation of the *civitas* capital in the late first century.[25] At Leicester (*Ratae*), *civitas* capital of the *Coritani*, leg bones, one with evidence of trauma, and an almost complete skull were found in Causeway Lane in the north-east quarter of the town in Phase 3 and 4 ditch and pit fills spanning the period between the mid-second and the mid-third century.[26] From the Roman *civitas* capital at Wroxeter (*Viroconium*), Shropshire, also formerly a legionary fortress, Bushe-Fox reported the find of part of a cranium in pit 64 associated with late first- and early second-century pottery.[27]

Evidence for late and immediate post-Roman deposition of articulated and disarticulated human bone in the major towns of Roman Britain is more plentiful. However, the first case is the most problematic. Caerwent (*Isca Silurum*), *civitas* capital of the *Silures*, was, like Silchester, extensively but superficially excavated at the beginning of the twentieth century and, while descriptions of location within the town and of the general context, e.g. from a pit or well, are generally good, the citing of associated dating evidence, such as of coins or pottery, is almost non-existent. Remains at depth from the closure fills of deep wells include the bones 'of two or more adult individuals ... covered by a number of large stones' from one well,[28] 'two or three fragments of a human skull' from the lower fills of a second,[29] 'fragments of a human skull, part of the lower jaw, arm-bones and ribs' with 'more

[20] Morgan 1980.

[21] Brigham and Watson 2024, 76–7; Conheeney 2024.

[22] Perring 2022, 381–4.

[23] Crummy 1984, 94–8; Luff 1984. The chopped humerus was from a Period 2 (A.D. 49–60/1) floor make-up and so thought to be residual from the fortress phase.

[24] Curl forthcoming; Crummy 1984, 47 (Building 9).

[25] Gilmore 2008.

[26] Wakely 1999. The skull was found in the top fill of the pit which also had intrusive medieval pottery and so may be later than the mid to late second-century date assigned to the lower fills (Connor and Buckley 1999, 32).

[27] Bushe-Fox 1916, 20.

[28] Hudd 1901, 311.

[29] Ashby 1906, 130, below a depth of 18 ft.

https://doi.org/10.1017/S0068113X25100366 Published online by Cambridge University Press

human bones' a little further down from a third.[30] The remains from the latter well were also found beneath building material: stone roofing-tiles, rough blocks of building stone, a column drum and base. Two human skulls were found in a pit (probably a well) at depths of 12 and 15 ft.[31] Other remains found in more superficial contexts include fragments of human skull outside the base of a wall of House III,[32] a whole human skeleton under a wall of Block A,[33] part of a human skeleton at the broken or unfinished end of the apse of House IN,[34] upper and lower jaws of a human were found above an *opus signinum* floor in House XII,[35] and the lower jaw of a human skull from just above the early foundations of House XXN.[36] The above contexts are suggestive of late or post-Roman dates, but without radiocarbon dating, we cannot be more certain.

From within the *civitas* capital at Caistor-by-Norwich (*Venta Icenorum*) around 130 fragments of crania, predominantly of vaults and amounting to about 35 individuals, were found in Building IV loosely associated with a Theodosian coin hoard.[37] These remains were unfortunately destroyed in World War II. Across the province to the west at Cirencester (*Corinium Dobunnorum*) and from late Roman to early post-Roman contexts in Insulae V and VI in the heart of the town, we have a human skull from an intrusion cutting the latest floor surface of Room 5 of shop V.4 and 'some disarticulated human bone' from a robber trench associated with possible sub-Roman pottery in Building VI.3.[38] On the rampart of the town's defences and in third-/fourth-century deposits arm and leg bones and a fragment of skull are recorded.[39] We should also note the 'human skeleton' and the upper torso of a human skeleton from two different locations in the silts of the main thoroughfare, Ermine Street, within the walls.[40] Some eight late Roman burials have been recorded from within the walls at Colchester, 'the remains rest on or slightly cut into the latest Roman levels'.[41] These include two inhumations which were found under the north aisle of Building 127 with radiocarbon dates suggesting contemporaneity with the life of the building and a date range of A.D. 225–375, and two inhumations from East Hill House which had been decapitated *post mortem* and were also late Roman in date.[42]

At Leicester the excavations at Causeway Lane also produced, from Phase 5 and 6 contexts ranging in date between the late second century and the mid/late fourth century, two human trochanters, a fragment of a femur, a vertebra and two adult skull fragments.[43] At the *colonia* of Lincoln (*Lindum*), besides the find of part of a human jaw bone in mid-Roman, probably early third-century,[44] rampart dumps at Silver Street, other finds of human remains come from deposits loosely dated between the very late Roman and the late Saxon have been recovered from deposits at Saltergate and Hungate, both also in the

[30] Ashby *et al.* 1911, 411, beneath stone roofing-tiles, blocks of building stone, a column drum and base at a depth of 26 ft 6 in with more (unspecified) human remains below; the bottom of the well at 30 ft.
[31] Ashby *et al.* 1902, 151; with an Antonine *terminus post quem*, Boon 1976.
[32] Hudd 1901, 311.
[33] Ashby *et al.* 1902, 151.
[34] Ashby *et al.* 1904, 101.
[35] Ashby 1905, 300.
[36] Ashby *et al.* 1910, 18.
[37] Darling 1987.
[38] Holbrook 1998, 207, 243.
[39] Gilmore 2008.
[40] Holbrook 1998, 26.
[41] Crummy 1992, 323.
[42] Crummy 1992, 114–15, 323.
[43] Wakely 1999.
[44] Steane *et al.* 2016, 179.

https://doi.org/10.1017/S0068113X25100366 Published online by Cambridge University Press

Lower City. From the former were found the disarticulated remains of a young adult sealing very late fourth-century riverine deposits which had built up against the city wall;[45] from the latter, a fragment of human skull from dumps of 'dark earth' over the remains of Structure 2 with a further fragment of human skull and an adult femur, probably from the upcast from the digging of an adjacent late Saxon pit.[46] If the above remains survive and can be located, they would clearly merit radiocarbon dating.

From the 1961–71 excavations in Winchester (*Venta Belgarum*) several finds of human bone were found from late and post-Roman (fifth- to seventh-century) contexts: a fragment of an adult human cranium was found among occupation material dated to the mid- to late third century which had been dumped on the late second-century town rampart at Tower Street, near the North Gate,[47] while bones of an adult female were found in a dark loam sealing the mid-fourth century destruction of Building 1B.[48] The other finds, mostly of cranial fragments and potentially of late Roman date through their association with late Roman material culture, but from post-Roman contexts, were reported from the South Gate, Cathedral Green, Wolvesey Palace and Lower Brook Street.[49]

Atkinson reported both complete skeletons and disarticulated remains from his excavations of the forum basilica at Wroxeter.[50] Information on context is very limited and he assumed that they were all late Roman, although one skeleton was recovered at depth. Earlier, Bushe-Fox had reported a partial and a complete inhumation in courtyard 32 of Site VI, which he thought could be post-Roman.[51] Other disarticulated human remains were found close by, west of room 37.[52] Without independent dates we cannot be certain whether these finds are residual from the legionary fortress or are associated with the life of the town.[53] More recently at Wroxeter excavations of the baths' basilica produced some 60 cranial fragments as well as six further fragments of human bone from late fourth- to sixth-century dumps and surfaces, although these were perhaps derived from fourth-century (or earlier) deposits elsewhere in the town.[54] The cranial fragments represented at least nine individuals and, as noted above, the fragments were contaminated, perhaps deliberately anointed, with organic oils. A few fragments have evidence of knife or sword cuts, one of scalping and one, as we have seen above, may have been turned into a 'skull cap'.[55] Three cranial fragments were radiocarbon dated, returning Roman rather than the late or post-Roman dates which would be consistent with their stratigraphic contexts.[56] In the 1860s, the antiquarian Thomas Wright found a dozen burials in the hypocaust around the *frigidarium* of the bath house, either very late Roman or post-Roman in date.[57]

[45] Steane *et al.* 2016, 207.
[46] Steane *et al.* 2016, 258, 261.
[47] Morris and Biddle 2023, 121, n. 27.
[48] Morris and Biddle 2023, 325.
[49] Morris and Biddle 2023, 187, 293, 325 and 408.
[50] Atkinson 1942, 112–13.
[51] Bushe-Fox 1916, 19–20.
[52] Bushe-Fox 1916, 20.
[53] And Bushe-Fox concluded his report on Site VI (1916, 20) 'and a few other human bones including three lower jaw-bones of adults, were met with lying loose in the soil in different parts of the site.'
[54] Barker *et al.* 1997, 198, 216–17.
[55] Wilkinson and Barker 1997.
[56] Barker *et al.* 1997, 168, 369.
[57] Ellis 2000, 369; White and Barker 1998, 125.

https://doi.org/10.1017/S0068113X25100366 Published online by Cambridge University Press

Silchester

At Silchester the antiquarian reports mention a few complete skeletons of adults as well as infants and partial skeletons, and disarticulated remains including 'skulls' (crania).[58] They are all undated but were attributed to the period around the end of the Roman town.[59] A male skeleton was found in the cold plunge-bath of the bath house of the *mansio* in 1833 with a suggested date of burial in the 430s, while the greater part of a skeleton was found in the 1860s by Joyce in the (forum) basilica from a context later than the supposed destruction horizon. From the same general location were two or three cranium fragments with further pieces from the North and West Gates. In addition to a complete skeleton from House 1 in Insula VI, part of the body of a child was found in a well in the same insula. Unfortunately, only a few items among the surviving human remains in Reading Museum thought to come from Silchester are marked with a provenance from within the town.

The more recent excavations, two of which involved total excavation to the geological subsoil, have provided better contextual information. From beneath the forum basilica in Insula IV a complete adult skeleton, a partial skeleton and other disarticulated remains were found in the ditches and shallow pits either side of the north-east/south-west-aligned late Iron Age street, *c.* 15 B.C.–A.D. 40/60 (Fig. 1). Other disarticulated remains including a cranium fragment were found in a late Iron Age well with further disarticulated remains from Claudio-Neronian contexts.[60] From the total excavation of the north-east quarter of Insula IX came three pieces: a femoral head of a young adult from a Claudio-Neronian pit,[61] a mandible from a female adult aged 25–35 buried in the floor of one of the late first-/early second-century timber buildings (see above),[62] and cranium fragments of an adult from an early second-century context in an adjacent timber building.[63] Excavation at the North Gate in 1991 produced two adult cranium fragments from a fourth-century context in the gateway, a further, partial cranium from the late fourth-century fills of the town wall ditch and a radius from late fourth-century middening south of the gate. A further cranium fragment and fragments of arm and leg bones, including a femur with a cut across the trochanter, were recovered from the backfill of antiquarian excavation trenches.[64] Two bones were radiocarbon dated: the femur gave an Iron Age date (2320±40 B.P.; Table 1, no. 18) while the partial cranium from the late Roman ditch dated to the fifth century (1600±40; Table 1, no. 19).[65] Most recently, unpublished excavations next to the public bath house have produced an adult mandible from a late Roman context and the cranium and pelvis fragment from the mid-first-century A.D. re-cut of the late Iron Age defensive ditch known as the 'Inner Earthwork' (see above).[66] An earlier excavation across this ditch at the north-east corner of Insula XXIII produced three cranial fragments from the fill.[67] Further fragments were also recovered from the backfill of antiquarian trenches in unpublished excavations in Insula III and XXX (Table 1, nos 1 and 9).

The great majority of the stratified occurrences of disarticulated bone from modern excavations at Silchester have occurred in contexts dated between the end of the first century B.C. and *c.* A.D. 200 with only a couple from fourth-century or potentially post-Roman contexts. Just as radiocarbon dating of human remains from Roman London and

[58] Listed in Creighton with Fry (2016, 371–3) and summarised here.
[59] Boon 1974, 81–2.
[60] Firth 2000.
[61] Lewis 2020.
[62] Lewis 2024.
[63] Lewis 2011; 2024.
[64] Firth and Fulford 1997.
[65] Fulford 2000.
[66] Fulford *et al.* 2019, 10–11.
[67] Boon 1969, 52.

https://doi.org/10.1017/S0068113X25100366 Published online by Cambridge University Press

Fig. 1. Silchester: conquest-period human remains on the site of the forum-basilica (forum-basilica outline in light grey and late Iron Age 'lanes' in dark grey). North at top of image.

https://doi.org/10.1017/S0068113X25100366 Published online by Cambridge University Press

from Wroxeter, too (discussed above), has indicated that some are earlier than their date of final deposition, the question of the extent of residuality also arises in the case of Silchester. To resolve this, it was decided to embark on a programme of radiocarbon dating of disarticulated human remains from modern excavations, viz. at Insulas III (1), IV (forum basilica) (1), IX (3), XXX (temple enclosure) (1), XXXIII (3) (the public bath house) and the North Gate (7) (Table 1). In addition, all five unstratified pieces with provenance from antiquarian excavations (Insulas IV, VI, XXI and the North and West Gates), which are archived in Reading Museum, were also included (Table 1). Altogether 21 samples of human bone from Silchester have now been radiocarbon dated.

Radiocarbon dating and chronological modelling

The radiocarbon dates from the 21 bone samples were processed at the laboratories at the University of Oxford (OxA-) and the University of Glasgow (SUERC-). They were pretreated and measured following the methods described by Brock *et al.* and Dunbar *et al.*, respectively.[68] The radiocarbon results (Table 2) are conventional radiocarbon ages.[69] While a radiocarbon measurement is an accurate reflection of the amount of radiocarbon in a sample, the actual amount can be affected by carbon from non-terrestrial reservoirs, which has the potential to make a sample appear to be older than it is. The stable isotopes from most of the people indicate measurable levels of marine resource consumption, which is well-known to induce a radiocarbon age offset in the consumer.[70]

The plot of the $\delta^{13}C$ *versus* $\delta^{15}N$ values for the Silchester inhumations (Fig. 2; Table 3) shows the trend toward the incorporation of some degree of marine protein in the diet. While a shift toward heavier (i.e. less negative) $\delta^{13}C$ values can be indicative of the incorporation of C_4 plants in the diet, data from modern millet suggest $\delta^{15}N$ values of 3–4‰ can be expected,[71] which would result in lighter observed $\delta^{15}N$ values in the human population. Although it is possible that some of the dietary isotopic signal observed is derived from the consumption of C_4 plants, such as millet, the pattern observed strongly suggests that many of the individuals were consuming marine protein, with most perhaps receiving around 5–8% of their dietary protein from marine foods, and two potentially receiving more than 20% of their diet from marine protein (Table 1, nos 7 and 10).

In order to determine the 'percent marine diet' for the inhumations, the methodology described in Sayle *et al.*[72] was employed using the FRUITS software package for unmixing the diet for each individual following a Bayesian approach.[73] This has a benefit over using a simple linear mixing model[74] because it allows the error to be quantified for each person. The $\delta^{13}C$ and $\delta^{15}N$ values used were, respectively: Terrestrial: −21.4±0.6‰ and +6.3±2.3‰ and Marine: −14.3±0.4‰ and 13.4±0.8‰. The trophic offset used for producer collagen to consumer collagen was 1.0±0.2‰ for $\delta^{13}C$ and 4.0±0.5‰ for $\delta^{15}N$. These values are similar to those used in Sayle *et al.*[75] and reflect the expected ranges given by Bocherens and Drucker.[76]

The estimated percent marine value is used for the modelled calibration that mixes the international terrestrial and marine radiocarbon calibration curves of Reimer *et al.* and

[68] Brock *et al.* 2010; Dunbar *et al.* 2016.
[69] Stuiver and Polach 1977.
[70] Ascough *et al.* 2012; Hamilton and Sayle 2019.
[71] McGovern *et al.* 2004.
[72] Sayle *et al.* 2016.
[73] Fernandes *et al.* 2014.
[74] See Arneborg *et al.* 1999 or Cook *et al.* 2015 for more on this methodology.
[75] Sayle *et al.* 2016.
[76] Bocherens and Drucker 2003.

https://doi.org/10.1017/S0068113X25100366 Published online by Cambridge University Press

Table 2. Radiocarbon dates and associated isotope results on inhumed human bone from Silchester.

Lab ID	Sample ID	Material dated	$\delta^{13}C$ (‰)	$\delta^{15}N$ (‰)	C:N	Radiocarbon age (B.P.)	%Marine	*Modelled radiocarbon date (95% probability)*	*Modelled radiocarbon date (68% probability)*
SUERC−109192	SIL 91 N. Gate (17)	femur	−20.4	8.7	3.3	1712±30	5.7±4.3	*cal.* A.D. *260−280 (4%)* or *cal.* A.D. *325−425 (91%)*	*cal.* A.D. *350−410*
SUERC−109196	SIL 91 N. Gate (35)	cranium	−20.0	10.1	3.3	1707±30	8.2±5.4	*cal.* A.D. *260−280 (3%)* or *cal.* A.D. *325−435 (92%)*	*cal.* A.D. *355−415*
SUERC−109197	SIL 91 N. Gate (39)	zygomatic	−19.9	8.5	3.2	1697±30	8.2±5.4	*cal.* A.D. *260−280 (2%)* or *cal.* A.D. *325−440 (93%)*	*cal.* A.D. *360−420*
SUERC−109198	SIL 91 N. Gate (54)	cranium	−19.9	7.9	3.3	1793±30	8.3±5.5	*cal.* A.D. *250−410*	*cal.* A.D. *300−380*
SUERC−95416	3221 (A: 2018.38)	pelvis	−20.2	10.7	3.3	2040±27	7.8±5.3	*95 cal.* B.C.*–cal.* A.D. *110*	*50 cal.* B.C.*–cal.* A.D. *55*
SUERC−103233	80/30 SF2563 (1760)	cranium	−20.4	10.5	3.2	2152±28	6.5±4.6	*335−325 cal.* B.C. *(1%)* or *205−45 cal.* B.C. *(94%)*	*200−100 cal.* B.C.
SUERC−103234	A2014.41 SF690 (30314)	cranium	−20.2	11.1	3.4	1930±28	7.8±5.5	*cal.* A.D. *25−215*	*cal.* A.D. *75−175*
SUERC−93672	SF5896 (11193)	femur	−21.5	7.1	3.3	1945±32	2.7±2.4	*cal.* A.D. *5−205*	*cal.* A.D. *25−130*
SUERC−93673	SF3549 (5641)	cranium	−19.7	9.7	3.4	1923±32	10.7±5.8	*cal.* A.D. *25−220*	*cal.* A.D. *80−185*
SUERC−93674	SF8 (4101)	mandible	−20.1	9.7	3.4	1718±31	7.7±5.1	*cal.* A.D. *260−285 (5%)* or *cal.* A.D. *320−430 (91%)*	*cal.* A.D. *350−410*
SUERC−93675	SILCH 94 (65)	ulna	−19.6	11.5	3.3	2010±32	13.6±6.4	*50 cal.* B.C.*–cal.* A.D. *155*	*cal.* A.D. *5−120*

(*Continued*)

Table 2. (*Continued.*)

Lab ID	Sample ID	Material dated	$\delta^{13}C$ (‰)	$\delta^{15}N$ (‰)	C:N	Radiocarbon age (B.P.)	%Marine	*Modelled radiocarbon date (95% probability)*	*Modelled radiocarbon date (68% probability)*
SUERC−93679	3218 (A2018.38)	skull	−18.6	9.4	3.4	1960±32	22.4±7.0	*cal.* A.D. *25−220*	*cal.* A.D. *80−185*
OxA−18362	SF4467 (A 2006.50)	human bone	−18.8	11.5	3.1	1989±27	21.6±6.9	*cal.* A.D. *10−210*	*cal.* A.D. *30−155*
SUERC−111217	1995.92.181	cranium	−20.7	12.2	3.3	2007±23	5.3±4.1	*45 cal.* B.C.*– cal.* A.D. *115*	*35 cal.* B.C.*– cal.* A.D. *65*
SUERC−111210	1995.92.13	zygomatic	−19.2	10.4	3.3	1984±24	16.5±6.9	*cal.* A.D. *10−205*	*cal.* A.D. *25−130*
SUERC−111211	1995.92.70	left tibia	−21.0	11.7	3.3	2082±23	4.3±3.5	*165 cal.* B.C.*–cal.* A.D. *10*	*145 cal.* B.C.*–cal.* A.D. *1*
OxA−8732	SIL 91 N. Gate (Phase Group 10)	femur	−21.6	4.4	3.2	2320±40	2.3±2.1	*405−355 cal.* B.C. *(8%)* or *300−195 cal.* B.C. *(87%)*	*275−205 cal.* B.C.
OxA−8733	SIL 91 N. Gate (Phase Group 7.1)	cranium	−19.7	8.8	3.2	1600±40	9.7±5.7	*cal.* A.D. *345−500*	*cal.* A.D. *380−465*
SUERC−111216	1995.92.128	left parietal	−19.9	10.4	3.3	1685±24	9.4±5.7	*cal.* A.D. *265−275 (1%)* or *cal.* A.D. *335−475 (94%)*	*cal.* A.D. *365−430*
SUERC−111212	1995.92.113	occipital	−19.7	8.9	3.3	1736±24	10.2±5.9	*cal.* A.D. *260−285 (5%)* or *cal.* A.D. *320−420 (90%)*	*cal.* A.D. *345−405*
SUERC−109191	SIL 91 N. Gate (10)	radius	−22.1	5.4	3.3	1788±30	1.9±1.6	*cal.* A.D. *245−405*	*cal.* A.D. *290−380*

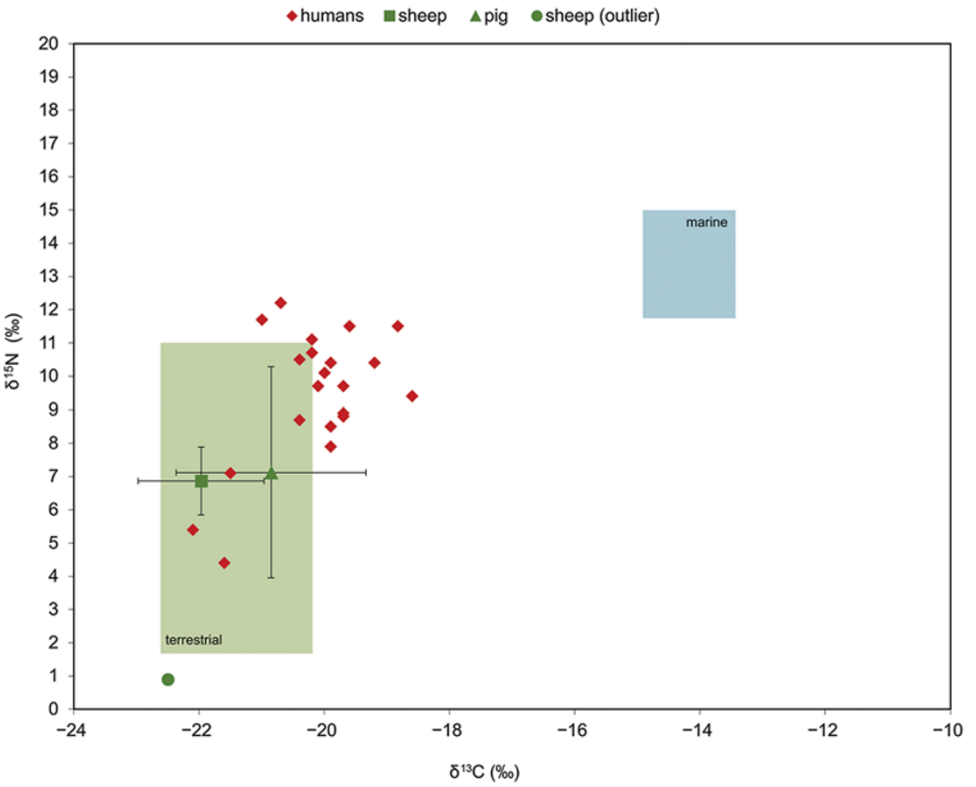

Fig. 2. Plot of the $\delta^{13}C$ versus $\delta^{15}N$ values for the Silchester burials. The boxes represent the typical area where terrestrial mammals and marine fish and mammals would be expected to fall, while measurements made on sheep and pig bone from Silchester are given with 95% error bars (data are given in Table 3). This provides a general representation of how a linear mixing model might be used to determine where along that gradient for $\delta^{13}C$ each individual can be determined to lie.

Heaton *et al.*, respectively.[77] Since the offset between these two curves is both spatially and temporally dependent, a further ΔR correction of −150±52 years was applied, calculated as the average ΔR around the coast of Britain using the Calib.org Marine Reservoir database (http://calib.org/marine/).

Within OxCal, the %Marine value with percentage error calculated using FRUITS was used with the Mix Curves parameter to develop a modelled calibration curve that is individualised for each sample result. An unfortunate side-effect of marine reservoir correction is that the modelled dates will decrease in precision with the 'mixing' of the two calibration curves and the increased errors that produces. However, Bayesian chronological modelling has been shown to account accurately for these negative effects and produce accurate chronological frameworks in even the most extreme cases.[78]

A Bayesian approach was applied to the radiocarbon-dated human remains from Silchester[79] using the computer program OxCal v4.4.[80] The algorithm used in the models can be derived from the OxCal keywords and bracket structure shown in Fig. 3. In

[77] Reimer *et al.* 2020; Heaton *et al.* 2020.
[78] Hamilton and Sayle 2019.
[79] Buck *et al.* 1996.
[80] Bronk Ramsey 2009.

https://doi.org/10.1017/S0068113X25100366 Published online by Cambridge University Press

Table 3. Stable isotope measurements from faunal remains at Silchester used to develop the local terrestrial diet baseline.

Lab ID	Sample ID	Material	$\delta^{13}C$ (‰)	$\delta^{15}N$ (‰)	C:N	%C	%N
GUsi14862 A	A2008.31 (7796)	sheep tibia	−22.5	6.3	3.2	40.4	14.7
GUsi14862 B	A2008.31 (7796)	sheep tibia	−22.5	6.3	3.2	40.1	14.6
GUsi14863	A2008.31 (7796)	pig tibia	−19.6	4.9	3.2	29.0	10.5
GUsi14865	A.2009.20 (8930)	pig mandible	−21.3	7.9	3.3	30.7	11.0
GUsi14866	A.2013.09 (14047)	sheep tibia	−22.5	0.9	3.3	39.6	13.9
GUsi14867	A.2013.09 (14047)	pig ulna	−20.6	6.3	3.3	38.8	13.8
GUsi14868 A	A.2012.12 (15008)	sheep tibia	−21.9	7.0	3.2	39.2	14.2
GUsi14868 B	A.2012.12 (15008)	sheep tibia	−21.9	7.0	3.2	39.0	14.2
GUsi14869	A.2012.12 (15008)	pig tibia	−21.5	9.0	3.2	35.0	12.6
GUsi14870	A.2012.12 (15012)	sheep metacarpal	−21.5	7.3	3.2	38.0	13.9
GUsi14871	A.2012.12 (15012)	pig metapodial	−21.2	7.6	3.2	36.8	13.4

summary, while there were no stratigraphic relationships noted between individual find locations, it was felt the samples could be grouped based on the relative phase/level, which a cursory view of the results suggested might hold up as being temporally significant. The first group included all the remains, except one piece, excavated from around the North Gate of Silchester in 1991, as well as single finds from antiquarian excavations at both the West and the North Gate, and a mandible from an undisturbed late deposit adjacent to the bath house (Fig. 6). The remaining samples came from a mix of deposit types: well stratified contexts dating between the mid-first and the late second or early third century A.D. (Insulas IV, IX and XXXIII), stratified but from the backfill of antiquarian excavations (III, XXX and N. Gate); and from antiquarian excavations (IV, VI and XXI) (Fig. 5). The model, therefore, has grouped these two sets into an earlier and later group of results and modelled each group completely independently of one another.

The model has good agreement between the groupings and the dates (Amodel=95). It estimates the earlier group of inhumed remains are indicative of activity beginning in *465–205 cal. B.C.* (*95% probability*; Fig. 3; *start: Silchester human remains (earlier)*) or *320–215 cal. B.C.* (*68% probability*). This period of dated activity ended in *cal. A.D. 105–335* (*95% probability*; Fig. 3; *end: Silchester human remains (earlier)*) or *cal. A.D. 145–250* (*68% probability*). The overall span of the earlier period is estimated at *345–730 years* (*95% probability*; Fig. 4; *span: Silchester human remains (earlier)*) or *390–565 years* (*68% probability*).

The model estimates the later group of inhumed remains are indicative of activity beginning in *cal. A.D. 200–395* (*95% probability*; Fig. 3; *start: Silchester human remains (later)*) or *cal. A.D. 245–345* (*68% probability*). The later period of dated activity ended in *cal. A.D. 365–555* (*95% probability*; Fig. 3; *end: Silchester human remains (later)*) or in *cal. A.D. 405–480* (*68% probability*).

https://doi.org/10.1017/S0068113X25100366 Published online by Cambridge University Press

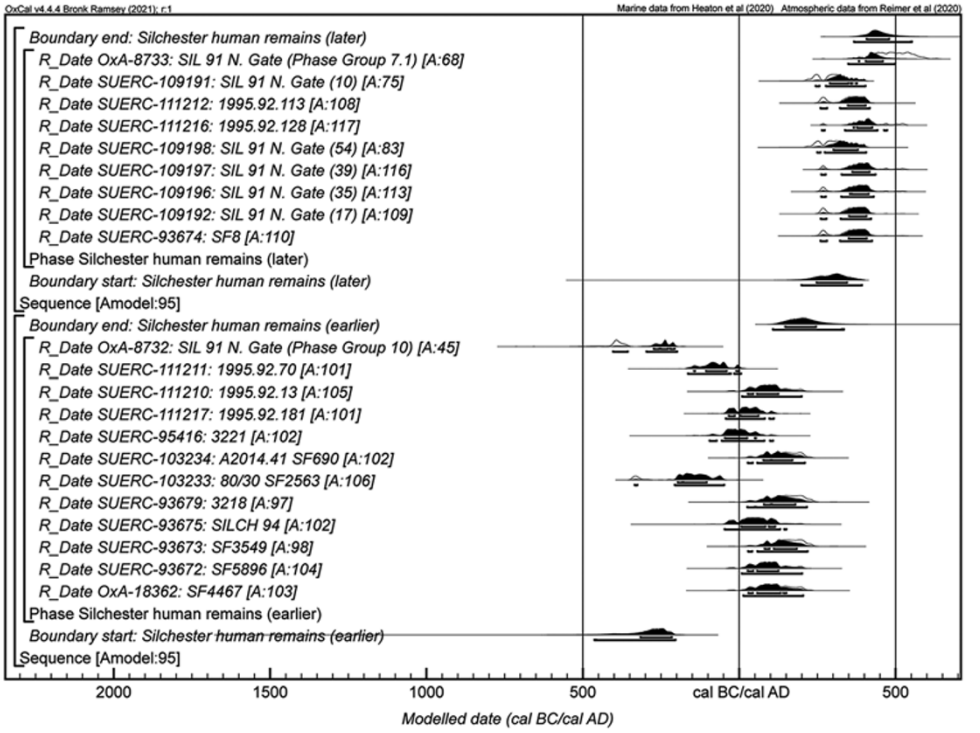

Fig. 3. Probability distributions and chronological model for the human inhumations at Silchester. Each distribution represents the relative probability that an event occurred at some particular time. For each of the radiocarbon measurements two distributions have been plotted, one in outline, which is the result of simple radiocarbon calibration, and a solid one, which is based on the chronological model used. The large square 'brackets' along with the OxCal keywords define the overall model exactly.

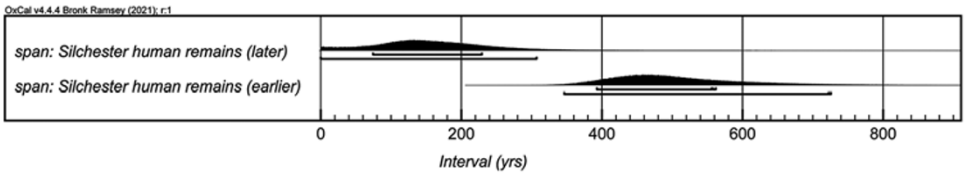

Fig. 4. Span of the dated periods of inhumation at Silchester. The spans are derived from the modelling shown in Fig. 3.

The overall span of the later period is estimated at *1–310 years* (*95% probability*; Fig. 4; *span: Silchester human remains (later)*) or *70–230 years* (*68% probability*).

Discussion

The distributions of the two groups are plotted on Figs 5 and 6. They are almost mutually exclusive. With one exception adjacent to but outside the North Gate, the findspots of the early group are otherwise to be found within the town rampart and later walls,[81] while, with one exception from beside the bath house in Insula XXXIII, all the late dates are to be

[81] The town rampart and gates are dated *c.* 200, the town wall *c.* 280 (Fulford 1984).

https://doi.org/10.1017/S0068113X25100366 Published online by Cambridge University Press

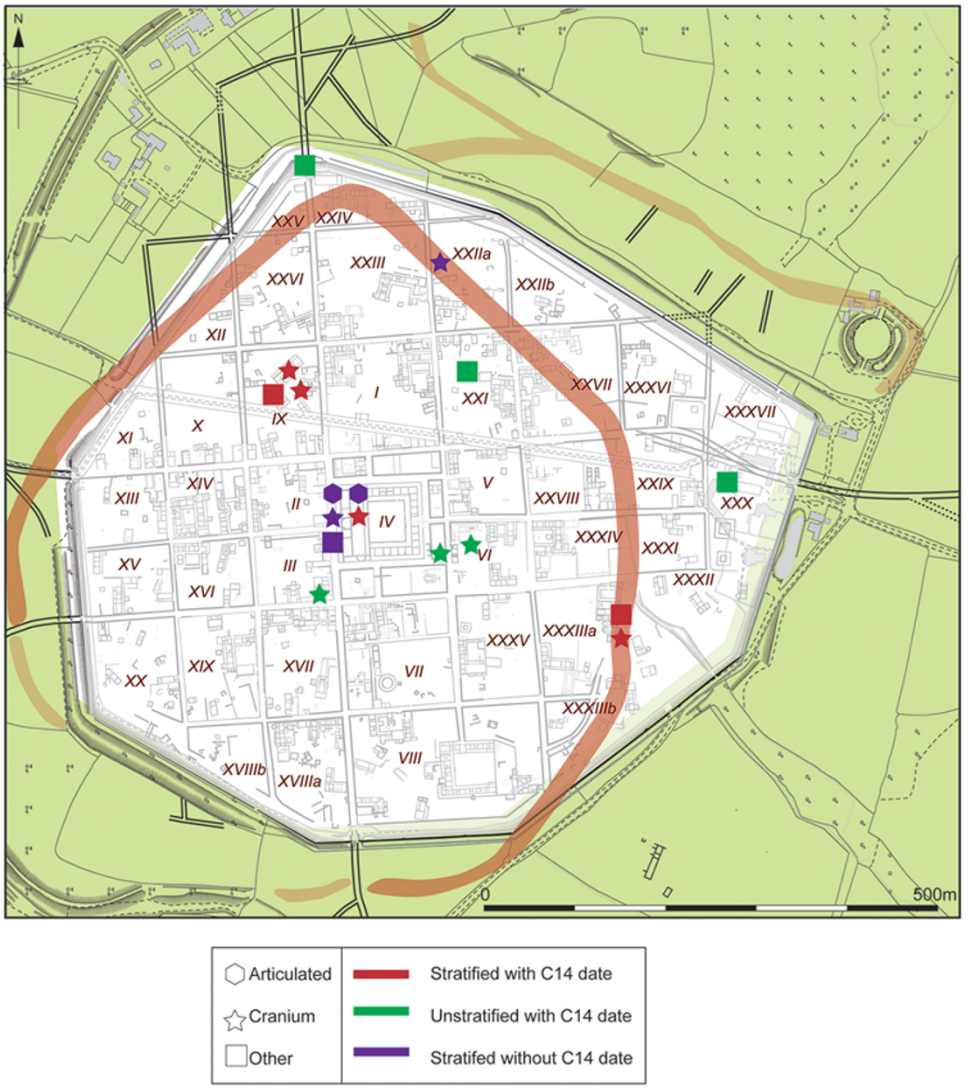

Fig. 5. Silchester: distribution of the early Roman group including articulated and disarticulated human remains.

found at the North and West Gates with a cluster at the former. Whereas the early group divides evenly between six crania or cranial fragments, including the Insula IX mandible, and six post-cranial bones, the late group comprises seven cranial fragments as well as the mandible from beside the bath house and two post-cranial bones.

The early group includes three outliers with Iron Age dates: a cranial fragment from a pre- or early Flavian context from beneath the forum basilica (Table 1, no. 2), a tibia from an otherwise undated pit in Insula XXI (no. 8) and — the earliest of the three — a femur from the backfill of an antiquarian trench outside the North Gate (no. 18). Two of the early group of radiocarbon-dated bone (nos 10 and 11) were stratified in the lower fills of the late Iron Age Inner Earthwork defensive ditch where it was sectioned beside the bath house in Insula XXXIII and are associated with a small assemblage of pottery of Claudio-Neronian

https://doi.org/10.1017/S0068113X25100366 Published online by Cambridge University Press

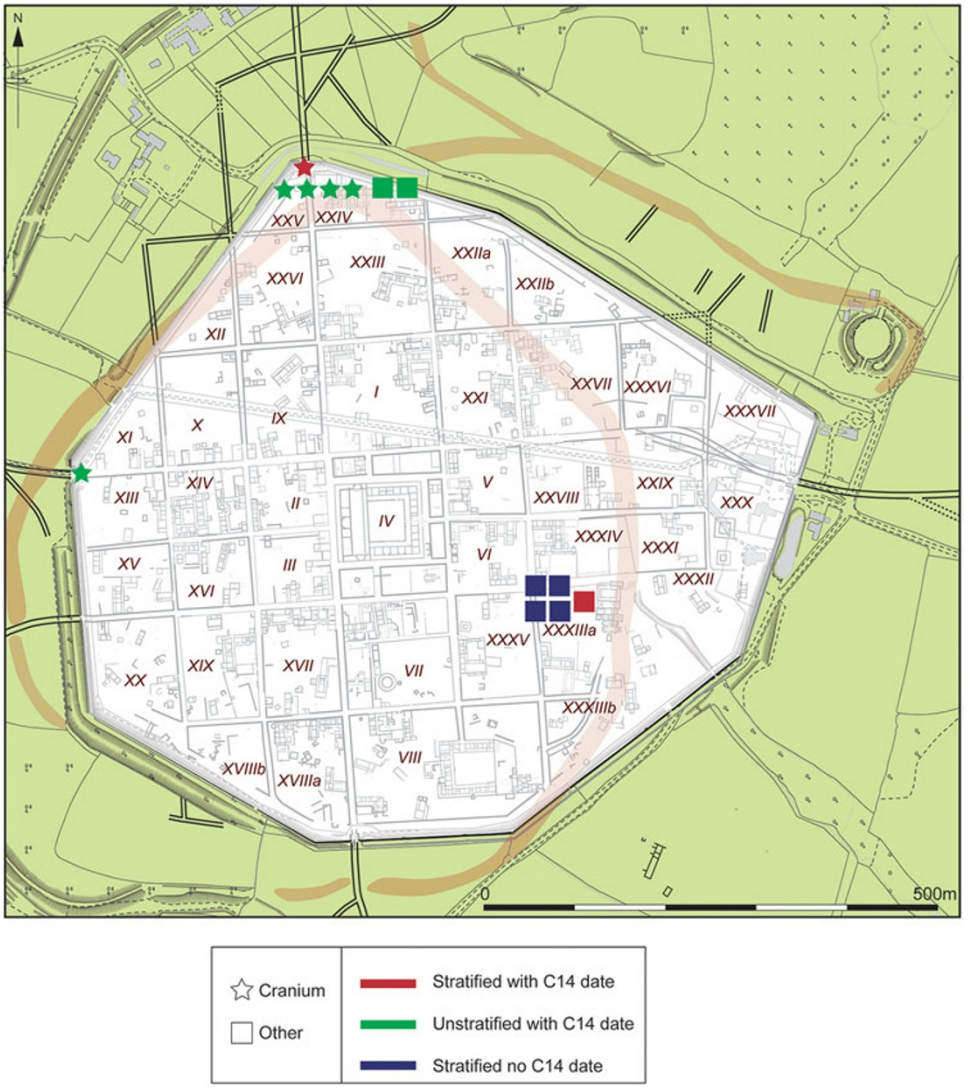

Fig. 6. Silchester: the distribution of the late Roman group of disarticulated human bone.

date. The radiocarbon-dated pieces from Insula IX (nos 5–7) are from slightly later contexts: late first- to end of second-/beginning of third-century contexts. Other early, but not radiocarbon-dated remains include cranial fragments from a section of the Inner Earthwork ditch between Insulas XXIII and XXIIa associated with Claudio-Neronian pottery[82] and from beneath the forum basilica. The latter include a complete and a partial skeleton from pits beside the late Iron Age lanes and dated to the Tiberian-Claudian period as well as other cranial and post-cranial fragments from Claudio-Neronian contexts.[83] Of these, the complete adult male skeleton recalls the complete skeleton from Insula VI, House 1 whose cranium we have dated here. The latter was found at a depth of two feet below the foundations of

[82] Boon 1969, 52.
[83] Firth 2000.

https://doi.org/10.1017/S0068113X25100366 Published online by Cambridge University Press

Room 17 and four feet below the ground surface, an equivalent depth to that of the human remains from beneath the forum basilica, and so quite possibly from a Late Iron Age or earliest Roman context. Given the likelihood that the foundation trench was no wider than the foundations, we should not be too concerned by Newton's opinion that its proximity to the wall of the room precluded it being earlier than the house.[84]

To conclude, all the insulas (III, IV, IX, XXX, XXXIII) which have been sampled by modern excavation (i.e. post 1950) have produced at least one fragment of human skeleton which belongs to our early radiocarbon-dated group. The early radiocarbon-dated antiquarian finds have added a further two insulas, VI and XXI, and a second location in Insula IV. To these we might arguably add the three other instances of finds of disarticulated human bone reported by the antiquarians but which cannot be identified among the surviving pieces in the Reading Museum collection. These include a cranium fragment found in the south of Insula I in 1890,[85] the arm bones and part of the cranium of a 12–14-year-old individual found in a 'wooden tub' at the bottom of a well in Insula VI[86] and an adult mandible found in either the southern part of Insula XXVIII or in Insula XXXV.[87]

In this particular context we should not take the relative lack of records of finds from the extensive antiquarian excavations compared with those from the modern investigations too literally. Despite their apparent completeness, the early excavations within the town walls were superficial: shallow trenching identified the remains of masonry buildings each of whose full ground-plan was then revealed immediately below the ploughsoil, leaving, as the excavations within Insula IX have demonstrated, the archaeology between and under the buildings untouched. While, as the record shows, the workmen employed by the antiquarians could recognise (and retain) complete or partial human skeletons and human crania, this was not the case with disarticulated post-cranial human bone as the modern finds from the fills of antiquarian trenches around the North Gate and in Insulas III and XXX demonstrate (Table 1, nos 1, 9, 13–18). The difficulty of recognising disarticulated human bone during the excavation and the onsite finds processing is also a feature of contemporary excavations at Silchester, where all the isolated fragments except crania and mandibles were only recognised when the faunal assemblages were submitted for analysis. This in turn raises the question of recognition more widely, particularly before the last decades of the twentieth century, when animal bone was more routinely retained and subjected to analysis; the Silchester experience is unlikely to be unique. Thus, we can only be confident of being positive about absence in those instances where the animal bone has been retained, analysed and the results reported. By comparison with the antiquarian investigations, the total excavations to the geological subsoil in Insula IX and beneath the forum basilica in Insula IV give a better idea of the potential for future finds. We should also note that, of the three narrow trenches dug in modern times through the ditch of the late Iron Age Inner Earthwork, together representing less than one per cent of the whole length of the ditch, two have produced human remains. These, as we have seen above, are stratigraphically contemporaneous. On the basis of the finds made so far to date, we can safely predict further investigations within the town walls are highly likely to produce more disarticulated remains to be associated with our early group.

Although the radiocarbon dates allow us to distinguish an 'early' and a 'late' group of disarticulated human remains, we cannot presume that they correspond with particular short-lived episodes within the life of the town which left bodies, whether as victims of

[84] Hope 1906, 159, 164-5.
[85] Fox and Hope 1890, 743-744.
[86] Hope 1906, 161, 165.
[87] Hope 1908, 213–14.

https://doi.org/10.1017/S0068113X25100366 Published online by Cambridge University Press

disease or of violence, but without formal burial outside the *pomerium*, to become disarticulated through the urban processes of pit, ditch, well and foundation digging. Nevertheless, we cannot overlook the two historically documented events in the first century, the Roman invasion of A.D. 43 and the ensuing conquest of southern Britain, and the Boudican rebellion of A.D. 60/61 and its subsequent suppression. The majority of our 'early' group could be associated with either or both of these events, but perhaps the more likely context is the first years after the initial Roman invasion of A.D. 43 when Suetonius tells us that the future emperor Vespasian, operating with *legio ii Augusta* in the south of Britain, reduced to submission two powerful tribes and 20 *oppida*.[88] Given its association with Caratacus, *Calleva* (Silchester) is likely to have been one of the latter.[89] Conversely, *Calleva* is not listed among the towns destroyed in the Boudican rebellion nor has evidence of a destructive phase of that date.

Given the death toll alleged by ancient historians in the three towns and cities destroyed by the Boudican revolt, Colchester, London and St Albans (*Verulamium*), one might have expected a corresponding spread of articulated and disarticulated human remains from within their settlements, yet this so far appears not to be the case at Colchester and *Verulamium*, despite the numerous modern excavations which have taken place in them. London, however, is different. As we have seen above, and setting aside the debatable context of remains found in the Walbrook, there are several finds and findspots of disarticulated human bone from London which have been associated with the Boudican rebellion. On the other hand, apart from the recent case of several pieces of disarticulated bone from Boudican contexts from the Fenwick excavation and the adjacent, but earlier, Telephone Exchange excavation, there are no other published records from Colchester,[90] and there is nothing yet from *Verulamium*. There are several possible explanations for this apparent lack of evidence, not least a relative lack of analysed and published faunal assemblages, the most likely source of disarticulated human bone (see above).[91] In this context we should be very cautious about the apparent absence of finds from *Verulamium* since all the published twentieth-century intramural excavations took place before animal bone was systematically retained. We should also acknowledge the (considerable) exaggeration of numbers on the part of the ancient writers and/or the possibility of the recovery and formal burial of victims outside the town after the disaster. For now, then, the finds potentially attributable to the Boudican destruction of London represent the closest parallel to what we envisage in terms of the number and spread of pieces of disarticulated bone as a conquest-period event at Silchester (our 'early' group). However, we do not have a methodology for converting these finds into the actual numbers of the dead and it would certainly not be appropriate to leave the reader thinking the numbers of dead at Silchester related in any way to the potential numbers killed in the Boudican assault on London.

With its concentration at the gates through the town wall (Table 1, nos 13–21), the group of 'late' dates presents a very different picture to that of the 'early' group. Unlike the latter with its wide distribution across the town, the focus at the gates suggests deliberate positioning, presumably by decision of the governing *ordo* of the town. The postulated involvement of an urban authority in the placing of crania at the gates suggests the likelihood that their owners were victims of justice, the placing of their heads at the gates to be a visible deterrent to others. The radiocarbon dates give a potential spread from the beginning of the third century, by which time the first, earthen defences and gates had been

[88] Suetonius, *De Vita Caesarum*, Divus Vespasianus 4.1.

[89] Boon 1974, 42; Fulford 2021, 51–4.

[90] Curl forthcoming.

[91] As this paper was in revision the analysis of the animal bones from the recent bath house excavation at Silchester produced four more disarticulated human bones (identified by Mary Lewis as fragments of a radius, a humerus and femoral shafts (2)) from the latest Roman contexts.

https://doi.org/10.1017/S0068113X25100366 Published online by Cambridge University Press

constructed — the succeeding masonry wall and gates dating from the late third century — through to *c*. 500, or 465, the modelled date.[92] However, five of the nine late (modelled) dates lie between the early fourth century and 410 (Table 2). Only one cranial fragment (no. 19) (and, possibly, a second, antiquarian find, no. 20) is from a well-stratified context dating to the beginning of the fifth century from a re-cut of the town ditch at the North Gate. No. 19 is also the latest dated piece of the group. As we have seen, the majority are cranial fragments, which were perhaps originally displayed above the gates for all to see entering or leaving the town, before reaching their final point of deposition in the wall ditch below the gate or elsewhere close by. While London offers a locational parallel with groups of crania deposited on the northern margins of the settled area in the early Roman period, both Caistor-by-Norwich and Wroxeter offer parallels for deposits or, more likely, re-deposits within the town of late Roman groups of disarticulated human bone dominated by cranial fragments, in the former in a house on the northern edge of the town, in the latter in the basilica attached to the public bath house. We have seen above that other towns, notably Cirencester, Leicester, Lincoln and Winchester, have produced isolated finds from modern excavations of near-complete skulls or fragments of skulls which were stratified in late or sub-Roman contexts in a variety of locations within the town walls and with no emphasis on the gates. Moreover, it is clear from the record of the above four towns that disarticulated pieces of post-cranial bone as well as complete or near-complete skeletons were as, or more, common than crania or fragments of crania. Colchester and London stand out for the number of late Roman inhumations within the walls. We do see post-cranial bone at Silchester at the North Gate and at the bath house, but the evidence from the four towns cited above suggests that we might expect to find a more extensive distribution at Silchester in the future.

Concluding discussion

Modelling of 21 radiocarbon-dated disarticulated human bones points to two chronologically discrete groups at Silchester, one early, the other late Roman, with mutually exclusive distributions within and on the margin of the town. We have set these results against the context of finds of similar material from several of the other major towns of Roman Britain and noted the very variable quality of the evidence. This ranges from towns like Caerwent, where antiquarian discoveries lack the reporting of associated dating evidence but point to an interesting, potentially late and/or sub-Roman pattern of deposition, to those like *Verulamium*, where there appears to be a complete absence of evidence but, when set in the context of finds-retention practice of the twentieth-century excavations, a negative which cannot be taken literally. The situation improves markedly with excavations undertaken from the 1970s onwards, as we have seen with the records of stratified finds from Cirencester, Colchester, Leicester, Lincoln, London, Silchester and Wroxeter. There is also a clear correlation between the systematic retention and analysis of faunal assemblages and the identification of isolated finds of disarticulated human bone. Notwithstanding much better contextualisation there is, as our case study has shown, a need for the independent dating of finds to address issues of residuality and of contexts and periods where there is a lack of datable material culture. Given our dependence on Roman coins, this is a particular issue for the period after new coin ceased to be brought regularly into Britain at the beginning of the fifth century. As we have seen, radiocarbon dating has proved to be effective in resolving the dating of finds at the 'top' of the Roman sequence.

In interpreting the results from Silchester, we note that, with the exception of London, no other town in Britain has a comparable incidence and spread of early Roman finds.

[92] Fulford 1984.

https://doi.org/10.1017/S0068113X25100366 Published online by Cambridge University Press

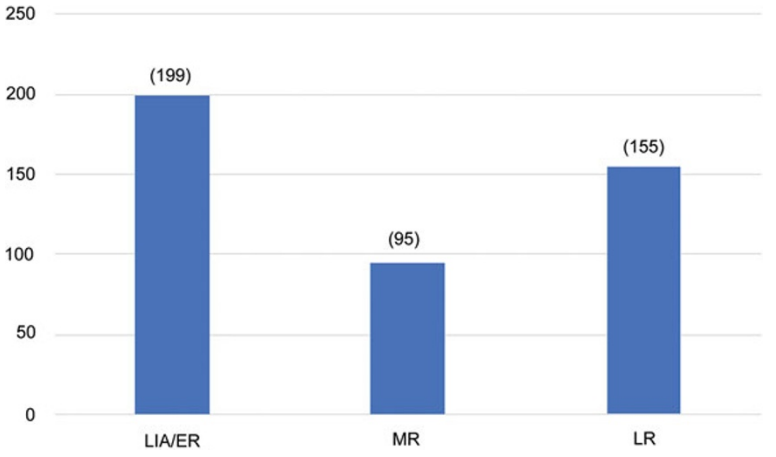

Fig. 7. The chronological distribution of disarticulated human remains from the countryside of Roman Britain (data from Allen *et al.* 2015).

Besides noting the late Iron Age background at Silchester, we have suggested a possible connection with the conquest of the south of Britain following the Roman invasion of A.D. 43. In terms of disarticulated remains, London stands out for the number of crania for the early Roman period, particularly from second-century contexts on the northern edge of the town, for which a number of interpretations have been offered (discussed above). Elsewhere we find deposits containing both post-cranial disarticulated human bone and almost complete crania or fragments of crania at Cirencester from third–fourth-century contexts at Trinity Road and at Leicester from the mid-second/early third century at Causeway Lane. Complete or near complete skeletons have been found in several towns at the interface of latest Roman and earliest medieval, but only at Colchester and London do we seem to have secure evidence of intramural interments in the fourth century. And it is in similar stratigraphic contexts that we find disarticulated post-cranial and cranial bone at other towns such as Cirencester, Lincoln, London and Wroxeter. The radiocarbon dates from Silchester of fragments from both stratified and unstratified contexts give ranges between the early third and the early fifth century. Thus, even though many more remains need to be radiocarbon dated, from the sample of evidence that we currently have, it is reasonably clear that the disposal of human remains was taking place within towns, at least intermittently, in the later Roman period (and at the same time that regular burials were taking place in extramural cemeteries). No longer can such remains be seen to be synonymous with the period after the breakdown of Roman authority at the beginning of the fifth century, or attributable to plagues in the fifth or sixth century.[93]

How do we account for this change of behaviour? While there are probably multiple explanations, the incidence of crania, notably at Caistor, Silchester and Wroxeter, and with their disposition at the gates at Silchester, points to changing attitudes to the administration of justice in late Roman Britain. At Silchester, are we looking at judicial executions leading to the display of heads at the town gates? In this context, we should note the frequency of decapitation among late Roman inhumations both in town cemeteries, such as at Lankhills, Winchester[94] or in isolated burials and cemeteries in the countryside,

[93] Cf. Wacher 1995, 322, 412–14; Todd 1977.
[94] Clarke 1979; Booth *et al.* 2010.

https://doi.org/10.1017/S0068113X25100366 Published online by Cambridge University Press

though in these cases the head tends to be buried with the rest of the body.[95] Wiseman *et al.* have recently made the case for judicial executions at Knobb's Farm in late Roman Cambridgeshire.[96] However, more generally, the countryside provides the best parallel for the chronological grouping of the disarticulated human remains at Silchester. With its early and late clustering, Fig. 7 shows the chronological incidence of disarticulated human remains as derived from the Rural Settlement of Roman Britain dataset and dated by context.[97] While this dataset deserves a detailed contextual review associated with a programme of radiocarbon dating, if we take the urban and rural datasets together, we may be seeing, on the one hand, traces of the violent beginnings of the Roman occupation of southern Britain and, on the other, after a relatively quiet middle period within the province, a more violent later Roman Britain. While the governor had responsibility for determining all cases involving capital punishment and non-citizens in the early empire, it would appear that, by the fourth century, authority had been delegated to the *civitates*, or perhaps even to individual landowners, as the Cambridgeshire evidence would suggest.[98]

Acknowledgements. We thank Ross Turle at the Hampshire Cultural Trust and Angela Houghton at Reading Museum for permission to sample the specimens in their respective collections. We are very grateful to Dr Ellen Green, Professor Mary Lewis and Dr Gundula Müldner for identifying the human bone, helping with sampling and, with Professor Hella Eckardt and Dr Alex Smith, very helpfully commenting on this paper. We thank Nicholas Pankhurst for preparing Figs 1 and 5–7.

Bibliography

Allen, M., Blick, N., Brindle, T., Evans, T., Fulford, M., Holbrook, N., Lodwick, L., Richards, J.D. and Smith, A. 2015: *The Rural Settlement of Roman Britain: An Online resource*, York, https://doi.org/10.5284/1030449 (updated 2018).

Arneborg, J., Heinemeier, J., Lynnerup, N., Nielsen, H.L., Rud, N. and Sveinbjörnsdóttir, Á.E. 1999: 'Change of diet of the Greenland Vikings determined from stable carbon isotope analysis and ^{14}C dating of their bones', *Radiocarbon* 41, 157–68.

Ascough, P.L., Church, M.J., Cook, G.T., Dunbar, E., Gestsdóttir, H., McGovern, T.H., Dugmore, A.J., Friðriksson, A. and Edwards, K.J. 2012: 'Radiocarbon reservoir effects in human bone collagen from northern Iceland', *Journal of Archaeological Science* 39, 2261–71.

Ashby, T. 1905: 'Excavations at Caerwent, Monmouthshire, on the site of the Romano-British City of Venta Silurum in the year 1904', *Archaeologia* 59, 289–310.

Ashby, T. 1906: 'Excavations at Caerwent, Monmouthshire, on the site of the Romano-British City of Venta Silurum in the year 1905', *Archaeologia* 60, 111–30.

Ashby, T., Hudd, A.E. and King, F. 1910: 'Excavations at Caerwent, Monmouthshire, on the site of the Romano-British City of Venta Silurum in the year 1908', *Archaeologia* 62, 1–20.

Ashby, T., Hudd, A.E. and King, F. 1911: 'Excavations at Caerwent, Monmouthshire, on the site of the Romano-British City of Venta Silurum in the years 1909 and 1910', *Archaeologia* 62, 405–48.

Ashby, T., Hudd, A.E. and Martin, A.T. 1902: 'Excavations at Caerwent, Monmouthshire, on the site of the Romano-British City of Venta Silurum in 1901', *Archaeologia* 58, 19–152.

Ashby, T. and Martin, A.T. 1904: 'Excavations at Caerwent, Monmouthshire, on the site of the Romano-British City of Venta Silurum in the years 1901–1903', *Archaeologia* 59, 87–134.

Atkinson, D. 1942: *Report on Excavations at Wroxeter (the Roman city of Viroconium) in the County of Salop 1923–1927*, Oxford.

Barker, P., White, R., Pretty, K., Bird, H. and Corbishley, M. 1997: *The Baths Basilica Wroxeter. Excavations 1966–90*, English Heritage Archaeological Report 8, London.

Bocherens, H. and Drucker, D. 2003: 'Trophic level isotopic enrichment of carbon and nitrogen in bone collagen: case studies from recent and ancient terrestrial ecosystems', *International Journal of Osteoarchaeology* 13, 46–53.

Boon, G.C. 1969: 'Belgic and Roman Silchester: the excavations of 1954–8 with an excursus on the early history of Calleva', *Archaeologia* 102, 1–81.

[95] Smith 2018a, 226–9; cf Tucker 2015, 46–103.

[96] Wiseman *et al.* 2021, 155-63.

[97] Allen *et al.* 2015.

[98] Cf. Frere 1999, 186–7.

https://doi.org/10.1017/S0068113X25100366 Published online by Cambridge University Press

Boon, G.C. 1974: *Silchester. The Roman Town of Calleva*, Newton Abbot.
Boon, G.C. 1976: 'The Shrine of the Head, Caerwent', in G.C. Boon and J.M. Lewis (eds), *Welsh Antiquity*, Cardiff, 163–75.
Booth, P., Simmonds, A., Boyle, A., Clough, S., Cool, H.E.M. and Poore, D. 2010: *The Late Roman Cemetery at Lankhills, Winchester. Excavations 2000–2005*, Oxford Archaeology Monograph 10, Oxford.
Bradley, R. and Gordon, K. 1988: 'Human skulls from the River Thames, their dating and significance', *Antiquity* 62, 503–9.
Brigham, T. and Watson, B. 2024: *Early Roman Waterfront Development. Excavations at Regis House, City of London, 1994–6*, MoLAS Monograph 75, London.
Brock, F., Higham, T., Ditchfield, P. and Bronk Ramsey, C. 2010: 'Current pretreatment methods for AMS radiocarbon dating at the Oxford Radiocarbon Accelerator Unit (ORAU)', *Radiocarbon* 52, 103–12.
Bronk Ramsey, C. 2009: 'Bayesian analysis of radiocarbon dates', *Radiocarbon* 51, 337–60.
Buck, C.E., Cavanagh, W.G. and Litton, C.D. 1996: *Bayesian Approach to Interpreting Archaeological Data*, Chichester.
Bushe-Fox, J.P. 1916: *Third Report on the Excavations on the Site of the Roman Town at Wroxeter Shropshire 1914*, Reports of the Research Committee of the Society of Antiquaries of London 4, Oxford.
Carroll, M. 2018: *Infancy and Earliest Childhood in the Roman World: 'A Fragment of Time'*, Oxford.
Clarke, G. 1979: *The Roman Cemetery at Lankhills*, Winchester Studies 3.2, Oxford.
Conheeney, J. 2024: 'Human bone', in Brigham and Watson 2024, 512–15.
Connor, A. and Buckley, R. 1999: *Roman and Medieval Occupation in Causeway Lane, Leicester. Excavations 1980 and 1991*, Leicester Archaeology Monographs 5, Leicester.
Cook, G.T., Ascough, P.L., Bonsall, C., Hamilton, D., Russell, N., Sayle, K.L., Scott, M. and Bownes, J. 2015: 'Best practice methodology for ^{14}C calibration of marine and mixed terrestrial/marine samples', *Quaternary Geochronology* 27, 164–71.
Cotton, J. 1996: 'A miniature chalk head from the Thames at Battersea and the "Cult of the Head" in Roman London', in J. Bird, M. Hassall and H. Sheldon (eds), *Interpreting Roman London: Papers in Memory of Hugh Chapman*, Oxbow Monograph 58, Oxford, 85–96.
Creighton, J. and Fry, R. 2016: *Silchester: Changing Visions of the Roman Town*, Britannia Monograph 28, London.
Crummy, P. 1984: *Excavations at Lion Walk, Balkerne Lane, Middleborough, Colchester, Essex*, Colchester Archaeological Report 3, Colchester.
Crummy, P. 1992: *Excavations at Culver Street, the Gilberd School, and Other Sites in Colchester 1971–85*, Colchester Archaeological Report 6, Colchester.
Cunliffe, B. 2005: *Iron Age Communities in Britain*, 4th edn, Abingdon.
Curl, J. forthcoming: 'The human remains', in A. Wightman, *Excavations at Fenwick, 147–151 High Street, Colchester, 2014*, Colchester Archaeological Report 13, Colchester.
Darling, M.J. 1987: 'The Caistor-by-Norwich "Massacre" reconsidered', *Britannia* 18, 263–72.
Dunbar, E., Cook, G.T., Naysmith, P., Tripney, B.G. and Xu, S. 2016: 'AMS ^{14}C dating at the Scottish Universities Environmental Research Centre (SUERC) Radiocarbon Dating Laboratory', *Radiocarbon* 58, 9–23.
Ellis, P. (ed.) 2000: *The Roman Baths and Macellum at Wroxeter. Excavations by Graham Webster 1955–85*, English Heritage Archaeological Report 9, London.
Fernandes, R., Millard, A.R., Brabec, M., Nadeau, M.-J. and Grootes, P. 2014: 'Food Reconstruction Using Isotopic Transferred Signals (FRUITS): a Bayesian model for diet reconstruction', *PLoS One* 9, e87436.
Firth, J. 2000: 'The human bones', in M. Fulford and J. Timby, *Late Iron Age and Roman Silchester. Excavations on the site of the Forum-Basilica 1977, 1980–86*, Britannia Monograph 15, London, 501–5.
Firth, J. and Fulford, M. 1997: 'The human bone', in M. Fulford, S. Rippon, S. Ford, J. Timby and B. Williams, 'Silchester: excavations at the North Gate, on the North Walls, and in the northern Suburbs 1988 and 1991–3', *Britannia* 28, 129–31.
Fox, G.E. and Hope, W.H.St J. 1890: 'Excavations on the site of the Roman city at Silchester, Hants', *Archaeologia* 52, 733–58.
Frere, S. 1999: *Britannia. A History of Roman Britain*, London.
Fulford, M. 1984: *Silchester Defences 1974-80*, Britannia Monograph 5, London.
Fulford, M. 2000: 'Human remains from the North Gate, Silchester: an "early" and a "late" radiocarbon date from the city', *Britannia* 31, 356–8.
Fulford, M. 2021: *Silchester Revealed. The Iron Age and Roman Town of Calleva*, Oxford.
Fulford, M., Clarke, A., Eaton, J., Fry, R., Lambert-Gates, S., Machin, S., Pankhurst, N. and Wheeler, D. 2019: *Silchester Roman Town. The Baths 2019*, Reading.
Fulford, M. *et al*. forthcoming: *Excavations in Insulas III and XXX*.
Gilmore, T. 2008: 'Human bone', in N. Holbrook (ed.), *Excavations and Observations in Roman Cirencester 1998–2007 (= Cirencester Excavations 6)*, Cirencester, 103.

Hamilton, W.D. and Sayle, K.L. 2019: 'Stable isotopes, chronology and Bayesian models for the Viking archaeology of north-east Iceland', *Journal of Island and Coastal Archaeology* 14, 71–81.
Heaton, T.H.E., Köhler, P., Butzin, M., Bard, E., Reimer, R.W., Austin, W., Bronk Ramsey, C., Grootes, P., Hughen, K.A., Kromer, B., Reimer, P., Adkins, J., Burke, A., Cook, M., Olsen, J. and Skinner, L. 2020: 'Marine20 – the marine radiocarbon age calibration curve (0–55,000 cal BP)', *Radiocarbon* 62, 779–820.
Hingley, R. 2018: *Londinium: A Biography. Roman London from its Origins to the Fifth Century*, London.
Holbrook, N. (ed.) 1998: *Cirencester: The Roman Town Defences, Public Buildings and Shops*, Cirencester Excavations 5, Cirencester.
Hope, W.H.St J. and Fox, G.E. 1900: 'Excavations on the site of the Roman city at Silchester, Hants, in 1899', *Archaeologia* 57, 87–112.
Hope, W.H.St J. 1906: 'Excavations on the site of the Roman city at Silchester, Hants, in 1905', *Archaeologia* 60, 149–68.
Hope, W.H.St J. 1908: 'Excavations on the site of the Roman City at Silchester, Hants, in 1907', *Archaeologia* 61, 199–218.
Hope, W.H.St J. and Stephenson, M. 1910: 'Excavations about the site of the Roman city at Silchester, Hants, in 1909', *Archaeologia* 62, 317-32.
Hudd, A.E. 1901: 'Notes on the animal and other remains found during the excavations at Caerwent, 1899–1900', in A.T. Martin and T. Ashby, 'Excavations at Caerwent, Monmouthshire on the site of the Roman city of Venta Silurum in 1899 and 1900', *Archaeologia* 57, 311–16.
Kramis, S. 2020: *Tote in der Stadt. Anthropologische Untersuchungen von menschlichen Überresten aus dem Siedlungsareal der römischen Koloniestadt Augusta Raurica*, Forschungen in Augusta Raurica 53, Augst.
Lennon, J.J. 2014: *Pollution and Religion in Ancient Rome*. Cambridge.
Lewis, M.E. 2011: 'The human remains', in M. Fulford and A. Clarke, *Silchester: City in Transition. The Mid-Roman Occupation of Insula IX c. A.D. 125–250/300. A Report on Excavations Undertaken since 1997*, Britannia Monograph 25, London, 241–3.
Lewis, M.E. 2020: 'The human remains', in M. Fulford, A. Clarke, E. Durham and N. Pankhurst, *Silchester Insula IX: The Claudio-Neronian Occupation of the Iron Age Oppidum. The Early Roman Occupation at Silchester Insula IX*, Britannia Monograph 33, London, 439–42.
Lewis, M.E. 2024: 'The human remains', in M. Fulford, A. Clarke and N. Pankhurst, *Silchester Insula IX.* Oppidum *to City, c. A.D. 85–125/50. Final Report on the Excavations 1997–2014*, Britannia Monograph 37, London, 363–8.
Luff, R. 1984: 'The human remains from the legionary ditch', in Crummy 1984, 97–8.
Marsh, G. and West, B. 1981: 'Skullduggery in Roman London?', *Transactions of the London and Middlesex Archaeological Society* 32, 86–102.
McGovern, P., Zhang, J., Tang, J., Zhang, Z., Hall, G.R., Moreau, R.A., Nuñez, A., Butrym, E.D., Richards, M.P., Wang, C.S., Cheng, G., Zhao, Z. and Wang, C. 2004: 'Fermented beverages of pre- and proto-historic China', *Proceedings of the National Academy of Sciences* 101, 17593–8.
Millett, M. and Gowland, R. 2015: 'Infant and child burial rites in Roman Britain: a study from East Yorkshire', *Britannia* 46, 171–89.
Morgan, M. 1980: 'Human bone', in D.M. Jones, *Excavations at Billingsgate Buildings 'Triangle', Lower Thames Street, 1974*, London and Middlesex Archaeological Society Special Paper 4, 164.
Morris, F.M. and Biddle, M. 2023: Venta Belgarum: *Prehistoric, Roman and Post-Roman Winchester. Vol. 1: Excavations*, Winchester Studies 3.1, Oxford.
Perring, D. 2017: 'London's Hadrianic war', *Britannia* 48, 37–76.
Perring, D. 2022: *London in the Roman World*, Oxford.
Philpott, R. 1991: *Burial Practices in Roman Britain. A survey of grave treatment and furnishing A.D. 43–410*, BAR British Series 219, Oxford.
Powers, N. 2015: 'The effect of fluvial erosion on the burials', in C. Harward, N. Powers and S. Watson, *The Upper Walbrook Cemetery of Roman London: Excavations at Finsbury Circus, City of London, 1987–2007*, MoLAS Archaeology Studies 32, London, 127–32.
Ranieri, S. and Telfer, A. 2017: *Outside Roman London: Roadside Burials in the Walbrook Stream*, MOLA Crossrail Archaeology Series 9, London.
RCHM(E) 1928: *An Inventory of the Historical Monuments in London 3, Roman London*, London.
Redfern, R. and Bonney, H. 2014: 'Headhunting and amphitheatre combat in Roman London, England: new evidence from the Walbrook Valley', *Journal of Archaeological Science* 43, 214–26.
Reimer, P.J., Austin, W.E.N., Bard, E., Bayliss, A., Blackwell, P.G., Ramsey, C.B., Butzin, M., Cheng, H., Edwards, R.L., Friedrich, M., Grootes, P.M., Guilderson, T.P., Hajdas, I., Heaton, T.J., Hogg, A.G., Hughen, K.A., Kromer, B., Manning, S.W., Muscheler, R., Palmer, J.G., Pearson, C., Plicht, J.v.d., Reimer, R.W., Richards, D.A., Scott, E.M., Southon, J.R., Turney, C.S.M., Wacker, L., Adolphi, F., Büntgen, U., Capano, M., Fahrni, S.M., Fogtmann-Schulz, A., Friedrich, R., Köhler, P., Kudsk, S., Miyake, F., Olsen, J., Reinig, F., Sakamoto, M., Sookdeo, A. and Talamo, S.

2020: 'The IntCal20 Northern Hemisphere Radiocarbon Age Calibration Curve (0–55 cal kBP)', *Radiocarbon* 62, 725–57.
Sayle, K.L., Hamilton, W.D., Cook, G.T., Ascough, P.L., Gestsdóttir, H. and McGovern, T.H. 2016: 'Deciphering diet and monitoring movement: multiple stable isotope analysis of the Viking Age settlement at Hofstaðir, Lake Mývatn, Iceland', *American Journal of Physical Anthropology* 160, 126–36.
Schulting, R.J. and Bradley, R. 2013: '"Of human remains and weapons in the neighbourhood of London": new AMS C^{14} dates on Thames "River Skulls" and their European context', *Archaeological Journal* 170, 30–77.
Smith, A. 2018a: 'Alternative inhumation burial', in Smith, Allen, Brindle, Fulford, Lodwick and Rohnbogner 2018, 226–31.
Smith, A. 2018b: 'The unburied dead', in Smith, Allen, Brindle, Fulford, Lodwick and Rohnbogner 2018, 275–7.
Smith, A., Allen, M., Brindle, T., Fulford, M., Lodwick, L. and Rohnbogner, A. 2018: *Life and Death in the Countryside of Roman Britain*, Britannia Monograph 31, London.
Steane, K., Darling, M.J., Jones, M.J., Mann, J., Vince, A. and Young, J. 2016: *The Archaeology of the Lower City and Adjacent Suburbs*, Lincoln Archaeological Studies 4, Oxford.
Stuiver, M. and Polach, H.A. 1977: 'Reporting of ^{14}C data', *Radiocarbon* 19, 355–63.
Todd, M. 1977: '"Famosa Pestis" and fifth century Britain', *Britannia* 8, 319–26.
Tucker, K. 2015: *An Archaeological Study of Human Decapitation Burials*, Barnsley.
Wacher, J. 1995: *The Towns of Roman Britain*, 2nd edn, London.
Wakely, J. 1999: 'The human bone', in Connor and Buckley 1999, 365.
Watson, S. 2006: *Development on London's Western Hill: Excavations at Paternoster Square, City of London*, MoLAS Monograph 32, London.
White, R. and Barker, P. 1998: *Wroxeter. The Life and Death of a Roman City*, Stroud.
Wilkinson, L. and Barker, P.A. 1997: 'Human skulls fragments', in Barker, White, Pretty, Bird and Corbishley 1997, 368–70.
Wilmott, T. 1982: 'Excavations at Queen Street, City of London, 1953 and 1960, and Roman timber-lined wells in London', *Transactions of the London and Middlesex Archaeological Society* 33, 1–78.
Wiseman, R., Benjamin, N. and Mazzilli, F. 2021: 'Extreme justice: decapitations and prone burials in three late Roman Cemeteries at Knobb's Farm, Cambridgeshire', *Britannia* 52, 119–73.

Cite this article: Fulford, M. and Hamilton, D. Intramural Human Remains from Roman Towns in Britain: A Case Study from Late Iron Age and Roman Silchester. *Britannia* 2025, 1–26. https://doi.org/10.1017/S0068113X25100366