Roman Rural Settlement in Wales and the Marches

Thesis submitted for the degree of
Doctor of Philosophy (Archaeology)
2018

Leah Reynolds

Cardiff University
Department of Archaeology and Conservation
School of History, Archaeology and Religion

DECLARATION

This work has not been submitted in substance for any other degree or award at this or any other university or place of learning, nor is being submitted concurrently in candidature for any degree or other award.

Signed ………………………………………… (candidate)   Date ……………………….………

STATEMENT 1

This thesis is being submitted in partial fulfillment of the requirements for the degree of ………(insert MCh, MD, MPhil, PhD etc, as appropriate)

Signed ………………………………………… (candidate)   Date ……………………….………

STATEMENT 2

This thesis is the result of my own independent work/investigation, except where otherwise stated, and the thesis has not been edited by a third party beyond what is permitted by Cardiff University's Policy on the Use of Third Party Editors by Research Degree Students. Other sources are acknowledged by explicit references. The views expressed are my own.

Signed ………………………………………… (candidate)   Date ……………………….………

STATEMENT 3

I hereby give consent for my thesis, if accepted, to be available online in the University's Open Access repository and for inter-library loan, and for the title and summary to be made available to outside organisations.

Signed ………………………………………… (candidate)   Date ……………………….………

STATEMENT 4: PREVIOUSLY APPROVED BAR ON ACCESS

I hereby give consent for my thesis, if accepted, to be available online in the University's Open Access repository and for inter-library loans **after expiry of a bar on access previously approved by the Academic Standards and Quality Committee.**

Signed ………………………………………… (candidate)   Date ……………………….………

Abstract

This thesis comprises an analysis and reinterpretation of rural settlements in Wales and the Marches during the Roman period. While the rural settlements of this region have often used as a backdrop to the study of the military, this thesis seeks to refocus and move beyond a simplistic Roman/native opposition in order to present a more nuanced understanding of the nature and development of rural settlement during this period.

Data from the Rural Settlement of Roman Britain Project is used to explore the distribution of settlements and material culture to analyse the regional diversity, economic basis, and social practice of rural settlements. A methodology for the analysis of regional ceramic assemblages is also presented to supplement the Rural Settlement of Roman Britain Project data and offers a new perspective on the distribution of and engagement with ceramics at rural sites.

Patterns of settlement and engagement with material culture are highly regional and are influenced by multiple factors, including geography, military intervention, and personal agency. The evidence presented within this thesis shows a diversity of rural responses and demonstrates that, far from being a homogenous region peripheral to the materially richer areas to the east, the situation in Wales and the Marches was far more diverse and dynamic than previous work has suggested.

Acknowledgements

Table of Contents

Note: Supplementary information is presented on USB with this thesis

Figures

Tables

1. Introduction

This thesis comprises an analysis and reinterpretation of the distribution and material culture of rural settlements in Wales and the Marches during the Roman period. Its focus is the region of modern Wales and the Marches, incorporating parts of Gloucestershire, Herefordshire, Shropshire, and Cheshire. By incorporating areas which span the modern border between England and Wales this thesis aims to break down the conceptual boundaries which have often led to the marginalisation of Wales within the wider field of Romano-British studies.

Though there is a long tradition of work on the Roman period in this region it has often been biased towards military archaeology and narratives. Large-scale syntheses such as *Roman Frontiers in Wales and the Marches* (Burnham and Davies 2011), while providing a valuable overview of evidence within this region, have to some extent perpetuated this bias. Where consideration has been given to the rural settlements of this region and their material culture it has often been in terms of their interaction with the Roman occupation (Davies 2004), or as a backdrop to military activity. Though the broad pattern of rural settlement in this region has received limited attention, the increasing availability of data and recent discoveries which challenge the traditional views of rural settlements in this region – such as the villa site of Abermagwr, far to the west of the 'villa zone' (Davies and Driver 2011) - show that Wales and the Marches are fertile ground for re-examination.

An opportunity for a re-examination of the rural settlement of Wales and the Marches is also provided by the completion of the Rural Settlement of Roman Britain Project (Allen et al 2015). This project sits within a growing body of 'Big Data' projects which compile datasets covering a large geographical and chronological span. The RSRB compiled settlement and material information from excavated rural settlements in Britain, bringing together traditional publication and grey literature to form a publicly-available database. This thesis represents one of the first doctoral projects to make use of this data and represents an important contribution to understanding the ongoing utility and value of such datasets for secondary research.

1.1 Aims

The aim of this thesis is to investigate three major study areas and associated research questions, as outlined below:

- Regionality

How are settlements distributed throughout the study region and does this change throughout the Roman period? What factors are involved in the distribution of these settlements? To what extent can chronological change be observed?

- Economy

What is the economic basis of rural settlements in the study region? How can production, distribution, and consumption be explored through the use of material culture?

- Personal Identities and Socio-Cultural Practice

How are personal identities expressed through the use of material culture during this period, and does this change? Can interaction between the rural and military/urban be identified?

These questions will be explored using the data made available by the Rural Settlement of Roman Britain Project. The distribution of settlement and material culture will be mapped using Geographic Information Systems, supplementary data will also be provided through a ceramic methodology which has been devised for this thesis to allow for the collection and analysis of the pottery data from a wide range of sites. This methodology seeks to counter issues of standardisation in order to provide a fresh perspective on the regional ceramic pattern.

1.2 Study Structure

Chapters Two and Three will give an overview of current knowledge and literature regarding the archaeology of the Iron Age and Roman periods in this region. Both chapters will summarise recent work which has been conducted in Wales and the Marches and cover some of the theoretical debates which have structured the discipline in recent decades. Chapter Four will introduce the Roman Rural Settlement Project in greater detail and provide an overview of the dataset which

forms the basis of this thesis. It will also outline the ceramic methodology which has been devised for this thesis in order to incorporate inter-site analysis of ceramic assemblages for the whole region. This is the first such analysis to be conducted within the study region.

Chapter Five will provide a broad overview of the data from the Roman Rural Settlement Project and the ceramic methodology. It will provide definitions for the settlement types and give a high-level overview of distribution patterns of both settlement and material culture which will form the basis of the subsequent analysis. This data is then examined in detail in Chapters Six, Seven, and Eight. Each of these chapters is structured by one of the research areas outlined above and will explore evidence of settlement patterns and material culture with reference to landscape use, economic basis, and the construction and presentation of identities and social practice. Chapter Nine will bring these themes together in a final discussion and give recommendations for future work.

2. Literature Review and Previous Work I: The Iron Age

This chapter will give an overview of the development of the archaeology of the Iron Age. It will explore the academic literature and the various theoretical paradigms which have emerged, and how these have been reflected in scholarly approaches to the study region in the Iron Age and Roman periods. It will then provide an overview of the work which has been carried out within the study region and the current state of knowledge in this region.

2.1 Iron Age Studies

2.1.1 ABC Models

Traditional models for the Iron Age were largely developed from the archaeology of Wessex. The region's abundant, comparatively well-preserved archaeology was the focus of attention for many of the leading archaeologists of the early 20th century – such as Wheeler's excavations at Maiden Castle (1943) - and allowed for detailed narratives of the development of the British Iron Age to be formulated.

The ABC model was developed by Hawkes (1931) to describe the distinctive cultures he saw as arising from waves of invasion and migration. Though A, B and C were intended to define cultural groups, the sequential nature of the naming meant that a chronology was also implied. It therefore became both a chronological and a culture-historical model, based on the identification of groups through material categories such as hillfort construction, pottery forms, and burial rites (Hawkes 1931, 64). Iron Age A was based in the south-east and described an indigenous culture influenced by Continental La Tene developments, while Iron Age B and C were 'immigrant cultures' (Hawkes 1931, 64).

YEARS B.C. (&A.D)	PERIOD	PHASE	WESTERN PROVINCE								S.-W PROVINCE					FRANCE (EAST & NORTH)
			27	26	25	24	23	22	21	20	19	18	17	16	15	Hallstatt
550																I
500	1	1a														Hallstatt II
450											SOUTH -	BODRIFTY	-WESTERN			
400		1b		CASTELL ODO			—WESTERN FIRST A				F I R S T A					La a b
350													KESTOR			Tène
300	2	2a	—WES T- CERRIG-Y-DRUIDION BOWL -ERN			SECOND A					S. - W.		DAINTON			I c
250		2b i ii							BOX BROOCH		S E C O N D A		S. - W. FIRST			La
200			U N I V A L L -		-A T E						S. - W. SECOND	S E CAST-	& C O N D BLACK-			Tène
150		2c	H I L L -		F O R T S		WESTERN									II
100	3	3a					SECOND LYDNEY				MEARE & GLAS-	B	ILE DORE	B-BURY		La Tène III
		3b	M U L T I -		PEN DINAS		WESTERN SUTTON BRE-			B KINGS-	-TON- -BURY	S. - W.	GURN- -ARD'S	ST. HEM-		
50					-V A L L -		THIRD-DON WALLS		Do- -DOWN		LAKE	T H I R D	-IN-	S.-W. -BUR-		
15		3c i ii iii		-A T E	H I	L	L B	BAG- bunn- HILL -EN THIRD -DON	WESTERN		VILL- -AGES	B	D u m n o	PYD- -ER	-Y- THIRD C i	Roman
A.D.10 43		3d	Cornovii Degeangli F	O R	Ordovic- Demetae	-es	Silures S		R o m a n C CAMP		R o	m a	n			

Figure 2.1. Hawkes' scheme for the Western and South-Western Provinces (Hawkes 1959, 178).

Though the model was developed from the chronology of south-east England it became applied to Britain as a whole and formed the basis of Iron Age studies for decades, becoming increasingly complex as scholars working in different regions adapted it to local evidence and further excavations increased the available dataset (Figure 2.1; Hawkes 1959). Its influence on the archaeology of the Iron Age in Wales and the Marches can be seen in works such as Grimes' *The Prehistory of Wales* (1951) and in Hogg's chapter on the early Iron Age in *Prehistoric Wales* (Foster and Daniel 1965), which sought to fit Wales specifically into the expanded ABC framework (Hawkes 1959). Wales and the Marches belonged to the Western Province, itself further subdivided into seven regions based on geographic features, each representing 'an Iron Age archaeological entity' (Hawkes 1959, 174)

Hogg's chapter stated that the ABC system would require little further modification (1965, 109), yet in expanding to accommodate the divergent developments of regional archaeologies it became complex and unwieldy and was quickly superseded by the processual developments of the 1960s. Subsequent frameworks included those such as Hodson's (1964), a simpler system which divided the Iron Age into an Early Pre-Roman and a Late Pre-Roman phase (Hodson

1964, 100) and, reflecting the shift away from invasion/migration narratives, characterised both as 'essentially indigenous' (Hodson 1964, 105). This model instead argued for the continuity from the Bronze Age as the foundation of later settlement patterns and viewed the Hallstatt artefacts which had formed the basis of the earlier migration theories as implying 'cultural archaism' rather than the presence of immigrant, culturally Halstatt populations (*ibid*).

2.1.2 Iron Age Communities in Britain

Hodson's central thesis formed the chronological backdrop for Cunliffe's *Iron Age Communities in Britain* (1974), which in four editions has largely provided the synoptic backbone for Iron Age studies since its first publication. Cunliffe further divides the Iron Age into Early, Middle, and Late periods (providing further divisions for the extreme ends of the chronology with Earliest and Latest phases) (Cunliffe 2004, 27). Though Cunliffe's work encompasses the whole of Iron Age Britain, its model for Iron Age society is still fundamentally based on the archaeology of the Wessex region and its guiding tenet is the core/periphery model in which the 'core' south-eastern region underwent a period of significant socio-economic change in the late pre-Roman Iron Age expressed in developments such as the centralization of social organisation with the emergence of *oppida* settlements and the adoption of coinage. These developments were catalysed by external pressures (which could be environmental, such as the climatic deterioration of the Middle Iron Age, or proceed from external cultural influence (Giles 2012, 25), and their effects spread outward to the peripheral regions which either developed along this trajectory at a slightly later date, or failed to do so (Cunliffe 2004, 118). Within this framework Wales and much of the south-west of England are viewed as a single socio-economic system characterised by the lack of coin production (Driver 2013, 7), with the coin-producing tribes of Western Britain (the Dobunni, Corieltauvi, and Durotriges) forming a 'buffer zone' between the 'developed and underdeveloped parts of the island' (Cunliffe 2004, 178). This developed/underdeveloped dichotomy has implications for the study of the Iron Age in Wales and the Marches: models which draw heavily on the archaeology of 'type' regions generally position the development of such regions as a yardstick which inevitably imposes a success/failure paradigm on the rest of Iron Age Britain.

The Cunliffe model marked a shift from the discussion of cultures to that of societies, influenced by social-evolutionary anthropological theories of the development through a band-tribe-chiefdom-state progression (Giles 2012, 25). Within this context the emergence of hillfort settlement and a more centralised administration was evidence of the emergence of an elite class focused on 'central places' such as the hillfort (and subsequently the oppidum) as loci of tribute and redistribution.

Hillforts had traditionally been understood as defensive structures due to the instances of multivallation and complex entrance works seemingly designed to frustrate access, and other apparently defensive features (Armit 2007, 26). The proliferation of hillforts in the Late Iron Age – particularly in Wessex and the Welsh Marches - was viewed as a response to increasing stress in Iron Age society and emblematic of an increase in warfare caused either by the threats posed by invaders or the disturbance caused by processes of social change (Bowden and McOmish 1987, 77). This view was supported by evidence such as Wheeler's 'Belgic war cemetery' at Maiden Castle consisting of burials displaying skeletal evidence of trauma injuries (Morant and Goodman 1943), from which Wheeler devised a vivid picture of Iron Age warfare (Wheeler 1943, 61-62). However, it was increasingly noted that some hillfort earthworks (including the ramparts of Maiden Castle itself) were not well-designed for defensive purposes, and re-examination of the 'war cemetery' called Wheeler's interpretations of the chronology and of the deposits as evidence of warfare into question (Sharples 1991, 82).

Alternative understandings of hillforts were therefore sought. Cunliffe focused on the internal features of hillforts, such as storage pits and four-post structures commonly understood as raised grain storage, to argue that hillforts served as central places and redistributive centres to the communities which lay within their territories (Cunliffe 2005, 354). The storage pits were evidence of the link between status and the power to command surplus (Cunliffe 1992, 81). It was therefore their economic centrality as much as their physical centrality that made them places of elite power.

2.1.3 Regional narratives and a 'Different Iron Age'

The Wessex-dominated models were challenged by post-processual theoretical developments which began to move in the direction of a 'different Iron Age', promoting the fragmentation of such overarching models as Hawkes, Hodson, and Cunliffe had devised in favour of a more granular focus on regional archaeologies (Hill and Cumberpatch 1995; Sinclair et al 1997; Bevan 1999). While previous work had envisioned the culture of the British Iron Age as largely unified, the move towards regional archaeologies emphasised the differences which emerged from an increasing evidence base, including funerary practices and material culture. An increasing consciousness developed that Iron Age is a label which may not be applied to all parts of Britain equally: chronologies which hold for Wessex may not for Wales.

The model of Iron Age society which underpinned Cunliffe's model was also criticised, both for its processual, social-evolutionary perspective and its reliance on medieval Irish and Welsh texts as sources for a model of a tribal and highly socially-stratified 'Celtic' society (Hill 1995b, 46, 51).

An increasing emphasis was placed on the heterogeneity of hillfort sites and the need for a contextual approach which considered sites within their immediate landscape context (Hill 1995b, 50; Sharples 2010, 61). Maiden Castle was densely populated yet situated within a sparsely-populated landscape, while at Danebury the situation was reversed (Hill 1995, 50). Cunliffe's 'central place' interpretation of hillforts was also challenged, and reinterpretation of the Danebury excavations argued that the number of pits was insufficient to support their interpretation as evidence for a redistributive centre, and that the temporary, stake-built nature of the houses suggested seasonal rather than permanent occupation (Hill 1995b, 49).

With a shift in focus from warfare and elite status the symbolic importance of hillforts instead gained prominence (Bowden and McOmish 1987). In this interpretation the massive earthworks served a symbolic rather than actively defensive purpose. This explained the incongruities of some hillfort defences, such as those overlooked by higher ground (Bowden and McOmish 1987, 78). Hillfort defences need not be entirely functional if they appeared so enough in order to deter attack (Collis 1996, 87-89).

The ditch and rampart constructions may also have served a social purpose. Sharples suggests that the construction of the earthworks was carried out by communal labour and that the site therefore became embedded in exchange relationships within the community (Sharples 2010, 116). The group effort of construction and maintenance tied the inhabitants of the hillfort to the communities which lay around it through the gift of their labour and the rituals surrounding the process (such as feasting – a potential explanation for the four-post structures and storage pits which are present at many hillforts [Sharples 2010,122]). These interpretations of hillforts as ritual, non-defensive structures - as 'metaphors for social cohesion' (Lock 2011, 359) or 'ongoing sociopolitical projects' (Driver 2013, 139), or as examples of increasing monumentality (Mytum 1996) – have themselves been subject to debate, with some arguing that to minimise conflict as a social force artificially simplifies Iron Age society, and that the 'pacification' of Iron Age history has more to do with modern distaste for violence than the archaeological evidence (James 2007; Armit 2007). Modern archaeologists may be hesitant to view war as a primary force in Iron Age society in order to distance the discipline from the invasion/migration models of the early C20[th].

The importance of symbolism and the rejection of the processual view of societies as systems encouraged further exploration of the symbolic aspects of various aspects of Iron Age settlement, such as structured deposits (Hill 1995a), roundhouse orientation as evidence of belief systems (Oswald 1997) and the increasing importance of enclosure (Thomas 1997; Hingley 1984, 1990). Although enclosure occurs from the Bronze Age, sites which were enclosed often had ritual or ceremonial functions and the enclosure of domestic settlements appears to have been relatively rare in most regions before the Iron Age (Thomas 1997, 211).

It has been suggested that beyond practical reasons such as the control of livestock or defence, the rise of enclosed settlements may have been an attempt at group self-definition, with the enclosure ditches a barrier which reified the divide between insider/outsider (Hingley 1990, 96). The drive towards enclosure may therefore be characterised as evidence of community self-definition, and of the importance of the household as the primary social unit (Hill 1995, 51). Thomas (1997) uses anthropological exemplar from South Asian societies in which

enclosure derives from an anxiety over agricultural intensification and the resulting need to define ownership and kinship relations through an insider/outsider paradigm to further support the idea that the new settlement forms emerging in the Iron Age were linked with societal change and land tenure (Thomas 1997, 213-215).

The increasing importance of enclosure therefore suggests a changing relationship with the land. Landscape archaeologies which derive from explorations of phenomenology (Tilley 1994) and which stress the social construction of landscape have been influential in Iron Age studies in recent decades (summarised in Ashmore 2008). It is now widely accepted that landscapes are to some extent socially constructed and are created through the experience, engagement, and actions of the people who inhabit them (Taylor 1997, 192), and if landscapes are shaped by people then in turn landscapes enable people to create and maintain their identities. Collis suggests that the act of enclosure may serve as a means of gaining control over an environment (Collis 1996, 87), which is developed further with the suggestion that the rise of enclosure was linked with changing ideas of land tenure and ownership (Thomas 1997, 215).

2.1.4 Criticism

Though the deconstruction of overarching Iron Age models in favour of regional, more contextual approaches have opened up multiple avenues for exploration, as outlined above, the development of regional Iron Age research agendas and an increasingly data-driven approach has led to the marginalisation of those regions which still have relatively limited archaeological evidence, including Wales and parts of the Marches. Davis (2017) argues that the emergence of regional archaeologies may have dismantled the Wessex model as a unifying theme across Britain but retains the focus on regions which display high levels of material culture (such as Atlantic Scotland and Yorkshire) at the expense of those with limited excavated evidence, such as Wales (Davis 2017, 326).

This debate exposes the issue which has complicated much work on Late Iron Age Wales and the Marches: the lack of excavated material, which precludes intensive study. This concern has followed and informed the construction of the Iron Age in this region since the inception of the discipline: Wheeler wrote that 'with the

Roman occupation, Wales emerges into the grey dawn of history' (Wheeler 1925, 217), thus consigning Welsh prehistory to an unknown and unknowable dark age. This view has persisted to some extent into the 21st century, with many regions of Wales categorised as 'black holes' by the Research Agenda for the British Iron Age (Haselgrove et al. 2001). When held to the benchmark of Wessex (or Yorkshire and Atlantic Scotland, as these have also become touchstones for the study of the Iron Age (Davis 2017, 326)) Wales and the Marches appear distinctly impoverished in their settlement evidence and material culture. However, in recent years there has been a significant improvement in the quantities of data available for study, and the character and development of the Iron Age in Wales is now considerably better understood.

2.2 The Late Iron Age in Wales and the Marches

This section will provide an overview of current knowledge regarding the Iron Age in Wales and the Marches. It will explore the literature relating to this period and study region and how far the theoretical developments outlined above have influenced work within the study region, and will particularly focus on the Late Iron Age in order to provide a background to the Roman period which is explored in greater detail in the rest of this thesis.

2.2.1 The Hillfort Zone

Wales and much of the Marches belongs to a region of Britain which is identified in some works as the hillfort zone (Darvill 2010). Hillforts are the most visible markers of the Iron Age within this region and as such they have often been the focus of archaeological attention. Multiple general surveys of hillfort evidence have been compiled over the course of the 20th century, many with particular reference to those of the Marches (see Hogg 1972, 1975; Alcock 1976; Savory 1976; Avery 1993; Brown 2009). Recently the Atlas of Hillforts of Britain and Ireland has been made available online (Lock and Ralston 2017) and further enables study of these sites.

Hillfort studies have also been useful in bridging the conceptual gap between English and Welsh archaeologies thanks to the density of hillforts in the region spanning the Wales-England border. Several general surveys of hillforts and other

settlements in this region have been undertaken (Varley 1948; Stanford 1972; Jackson 1999; Wigley 2007; Britnell and Silvester 2018). The most recent survey finds that large hillforts over 6ha cluster in the Clwydian Range and the English border counties, with medium hillforts of over 1.2ha and small hillforts of under 1.2ha more widely spread across both English and Welsh counties (Britnell and Silvester 2018). This suggests strong regional diversity in hillfort construction and social organisation.

Recent publication of a project by the four Welsh Archaeological Trusts to survey the hillforts, promontory forts, defended enclosures and enclosed farms of Wales has provided an updated summary of information (Britnell and Silvester 2018; Murphy 2018). Driver uses the information to align understanding of the hillforts of Wales with the broader debates in Iron Age archaeology as explored above (Driver 2018, 3), and builds on his previous work on the hillforts of Ceredigion (Driver 2013). In much recent work the diversity of hillforts is strongly emphasised and explanations beyond the defensive are sought: Pollard, in the excavation of the Lodge Hill hillfort in Gwent, suggests that hillforts were 'fluid spaces' which served a variety of functions that changed over time with the needs of the community (Pollard et al. 2006, 57).

As noted above, while the identity of the region as a 'hillfort zone' has long been emphasised, the hillforts themselves are an enormously diverse group. Some were constructed in the Bronze Age, but the main period of construction was from the Middle to Late Iron Age (Driver 2018), and there is also significant variation between hillforts within different regions. Driver's work on the hillforts of north Ceredigion develops and emphasises the importance of regional (even micro-regional) variation in hillfort construction (Driver 2013, 53).

Yet despite the prominence of hillforts in both the physical and archaeological landscapes of Wales and the Marches, few have been extensively excavated. Some of the major excavations include Breiddin (Musson et al 1991), Dinorben (Gardner and Savory 1964), Old Oswestry (Hughes 1994).
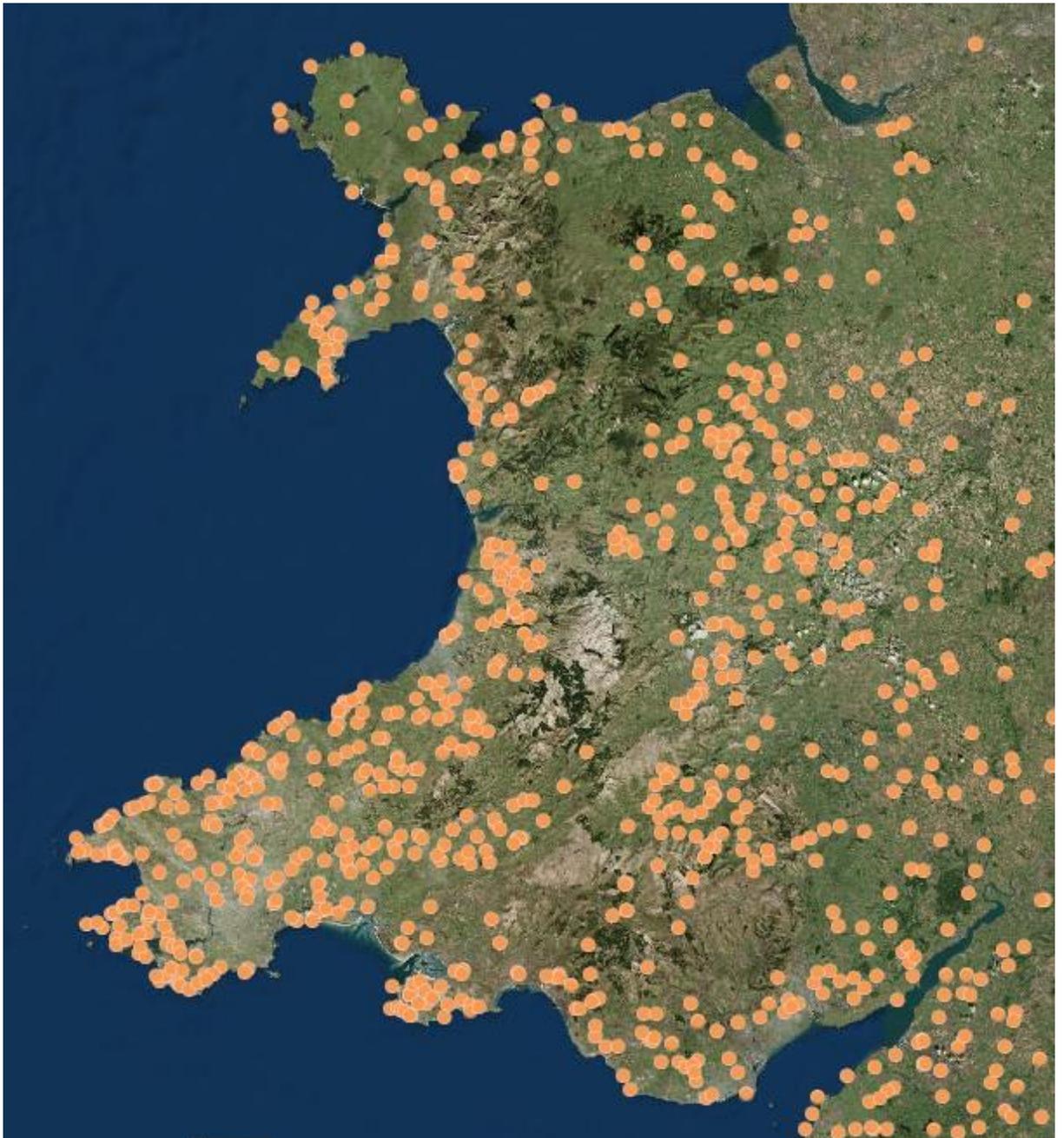
Figure 2.2. Hillforts in England and Wales (from Lock and Ralston 2007, available at: https://hillforts.arch.ac.uk)

Promontory forts are also closely associated with Iron Age Wales (Hogg 1972; Barker and Driver 2011). These are a category of hillfort in which the defences enclose a promontory. They Smay occur inland but are primarily coastal in distribution, occurring widely along the Atlantic coasts of north-west Europe from Brittany to Scotland (Barker and Driver 2011, 65). They are present along much of the Welsh coastline but appear in greatest numbers in Pembrokeshire: 58 out of a total of 106 promontory forts and coastal hillforts along the Welsh coast occur in this county (Murphy 2002, 52). Relatively few have been excavated, both in

Pembrokeshire and elsewhere, though programmes of survey have been undertaken (Murphy 2002).

Figure 2.3. Porth-y-Rhaw promontory fort (RCAHMW 1996)

2.2.2 Non-Hillfort Settlement

While hillfort settlements are distinctive and easily recognisable due to their location and defensive features, non-hillfort settlements are often more difficult to identify. Programmes of aerial reconnaissance have been invaluable in increasing understanding of the prehistoric settlement pattern of Wales and the Marches (Whimster 1989; Griffith 1990), and the parch- and cropmarks surveyed during the heatwave of summer 2018 continue to prove the importance of this form of archaeological survey (RCAHMW 2018a, 2018b; Hayward 2018).

Enclosed settlements in particular survive well in certain regions of Wales and the Marches, particularly in upland zones where little plough agriculture has been practiced. The settlement remains of north-west Wales have been the focus of numerous attempts at survey and classification due to the stone construction which ensured their survival: around 1000 hut-circles are extant (Smith 1999a, 22). Research has largely focused on categorising the settlements based on morphology (Hemp et al 1953; Smith 1974, 2018; Kelly 1990; Waddington 2013).

However, while a large corpus of site plans are available the weakness of a classificatory approach is that it considers the settlement only in its final form, though a settlement is a 'complex entity' (Smith 1999, 25). Limited excavation means that the development of the settlement type is not well-understood, and they could span the prehistoric to post-Roman periods. The roundhouse groups were locally known in the modern period as 'cytiau'r Gwyddelod', the 'Irishmen's huts', marking a possible link in local tradition between these and the post-Roman Irish settlements (Griffiths 1951, 185; Wmffre 2007), though where sites have been excavated they are commonly found to date to the Roman period (including Hafotty-wern-las [Gwynedd] (Williams 1923a); Coed y Brain (Williams 1923b); Cors-y-Gedol (Griffiths 1958)). However, north-west Wales was largely aceramic during the Late Iron Age and where excavation has taken place chronology may be difficult to establish due to the lack of dating material represented by the few finds, and more are likely Iron Age in origin than has currently been recognised. Radiocarbon dating may prove useful but the dates obtained are often very broad (Waddington 2013, 14).

Enclosed settlements also survive well as earthworks and cropmarks in the south-west and have been the subject of survey and investigation (Williams 1988; Murphy and Murphy 2010; Murphy and Mytum 2011). In this region the settlement pattern is primarily focused on small enclosed settlements, such as those at Llawhaden, Dyfed (Williams et al 1998). Relatively few sites have been excavated and understanding of the settlement pattern is primarily due to survey. As with the north-west classificatory schema have been devised and in some cases distinct subregional forms identified, such as rectangular enclosures (Murphy and Mytum 2011, 264) and the concentric annexe enclosure (James 1990). This diversity suggests that there were zones of settlement patterning perhaps related to different social groups or practices.

A distinction between upland and lowland patterns is also observed in some regions. In south-west Wales the 'small hillfort' type of larger, multivallate enclosures are located in 'naturally defensive' locations such as hilltops or promontories, while smaller, univallate enclosures located in inland, hillslope positions (Williams et al. 1998, 5). Upland/lowland are variation is also identified in north-west Wales, with differences between the altitude of some site types: nucleated and enclosed settlements cluster at 200-300m OD, single huts at 200-

300m OD, and scattered groups at 300-400m OD (Smith 1999, 37). A corresponding diminishment in roundhouse size may also be seen, indicating that settlements at higher altitude may have been occupied seasonally as part of a transhumant agricultural system (Smith 1999, 46). There is also significant variation in settlement density, with the upland/lowland boundaries in the north and the west far more densely settled than the sparsely occupied interior upland zones (Waddington 2013, 85). Such striking variation in settlement pattern should perhaps not be surprising given, as Smith notes, the topographical distinctions which makes some upland and lowland areas of Gwynedd and Caernarvonshire as geographically distinct from each other as northern Scotland and southern England (Smith 1999, 23).

The pattern in south-east Wales is less well-understood due to the lack of excavation (Davis 2017, 326). Few major excavations of Iron Age sites have taken place, and understanding is limited to the evidence from sites such as Whitton (Jarrett and Wrathmell 1981) and Biglis (Parkhouse 1988). The defended enclosures and hillforts have been examined by Lancaster (2014). Recent excavations at Caerau (Davis and Sharples) and Llanmaes (Lodwick and Gwilt 2005; Gwilt et al 2006), while not yet completed, mark the most recent major excavations within the south-east. The lack of evidence in this region is likely due in large part to the expansion of modern settlement and industrialisation in the 19th and 20th centuries before the advent of rescue excavation.

In the Marches, as elsewhere, regional surveys have been undertaken, including the Walton Basin (Wigley 2007) and the Arrow Valley projects (White 2003). Regional surveys have tied the hillfort settlements to the smaller enclosures in networks of exchange and reciprocity, though few of these smaller enclosures have been excavated.

Much of the analysis of settlement in the Late Iron Age has focused on enclosed settlements. Unenclosed settlements are less easily discerned in the archaeological record, though well-preserved Iron Age field systems have been found at Skomer Island (Evans 1990), and Stackpole Warren (Benson et al 1990). Unenclosed settlements are often found thanks to exceptional preservation, as is the case with the settlement and field system at Stackpole Warren, Dyfed, which was preserved due to blown sand (Benson et al 1990) and of the Iron Age

structures linked to seasonal cattle pasturing on the wetland site of Goldcliff in the Gwent Levels (Bell et al 2000, 91-106) Others may be chance discoveries, such as the unenclosed settlement at Pant on the Llŷn Peninsula, which was initially identified as an enclosed settlement whose enclosure later proved to be modern (Ward and Smith 2001, 73).

2.2.3 Social Structure and Practice

Investigations of the social structure of the Late Iron Age have primarily focused on the evidence-rich regions of southern Britain, as explored above, and more limited attention has been paid to the social structure of the communities of western Britain with a more limited material culture. Much of the region has been categorised into Fox's Upland Zone, a region characterised by its cultural conservatism and resistance to change (Fox 1932). This characterisation has persisted even in more recent formulations; for example, Bowden's characterisation of the Atlantic region (comprising Wales, Ireland, Scotland, Cornwall, and Brittany) as the 'Lands of the Continuity of Tradition' (Bowden 1972, 9). However, more recent studies have begun to use the information of settlement and material culture in the west of Britain to explore social structure (see: Moore 2007 for the Severn-Cotswolds, Murphy and Mytum 2012 for south west Wales; Gwilt 2007 for the south east).

Understanding of the tribal structure of the region in the Late Iron Age is primarily based on Roman literary sources (Ptolemy *Geographica*, Tacitus *Annals*, *Agricola*). Current understanding of the disposition of tribal groupings in the Late Iron Age and at the Roman conquest is shown in Figure 2.4. The utility and appropriateness of dividing the Iron Age in this way has been questioned (Moore 2011), but at a practical level, tribal divisions can prove a useful structuring tool for synthetic studies; the label becomes, as Reece terms it, an 'adapter' for the material (Reece and Moore 2001, 18). In south east Wales work on the Iron Age is often structured around the Silures (Howell 2006; Gwilt 2007; Lancaster 2014), though this approach is less commonly pursued in the north or south-west, perhaps due to the more limited material culture or simply to the comparative fame of the Silures as the antagonists in Tacitus' narrative of the Roman campaigns of conquest (*Annals* 12.33). While a *civitas Silurum* is attested in the 3rd century at

Caerwent (Aldhouse-Green 2004, 161; RIB 311) this need not imply a direct continuity of an Iron Age tribal identity so much as its crystallisation under centuries of Roman administration and external definition.

The Cornovii and the Dobunni have similarly provided frameworks for the study of their respective regions (for the Cornovii see Webster 1991, Gaffney et al 2007; for the Dobunni, see Ecclestone 2004; Reece and Moore 2001; Yeates 2008), though there is also a trend towards region-based approaches, particularly with respect to the Severn Estuary and south Gloucestershire (Moore 2007). Much work on the Dobunni has focused on the evidence of Late Iron Age coin issues, both in examining distribution as evidence of territorial extent (Van Arsdell 1994) and the symbolism and development as evidence for social structure (Creighton 1995; Pudney 2017). The Dobunni were the only coin-minting tribe within the study region and though Dobunnic issues are found to the west of their putative territory no group beyond the Wye appears to have used coinage for transactional purposes in the Late Iron Age (Guest and Wells 2008). The presence of oppida in the area traditionally ascribed to the Dobunni (such as Bagendon (Moore 2014)) may also indicate a more centralised social structure.

For the tribes to the west a more fragmented society is usually posited (Murphy and Mytum 2011; Lancaster 2014). Lancaster suggests that the pairing of hillforts in Gwent and Glamorgan suggests a degree of social cohesion, though it should be noted that the hillforts given as evidence of pairing have not been excavated and so cannot definitively be said to have been contemporaries.

Kinship and 'Celtic' social organisation has been a preoccupation of Iron Age studies in other parts of Britain. This is derived in large part from readings of medieval Welsh literature and from later Welsh laws, emphasising the importance of kinship relations in terms of developments such as later Celtic partible inheritance (Karl 2008, 75), which has been suggested as a possible reason for development of the nucleated north-western roundhouse group settlements (Waddington 2013, 15). The persistence of Celtic familial structure has even been projected forward into the Roman period as an explanation for the architecture of certain villas, such as Whitton (Smith 1997, 238), though others have argued against this interpretation. The appropriateness of 'Celticness' in archaeology has been a subject of debate in the last decade, and this is particularly the case for

modern 'Celtic' regions such as Wales, where modern reception of the ancient world can be received through the filter of a persistent Celtic identity (James 1999).
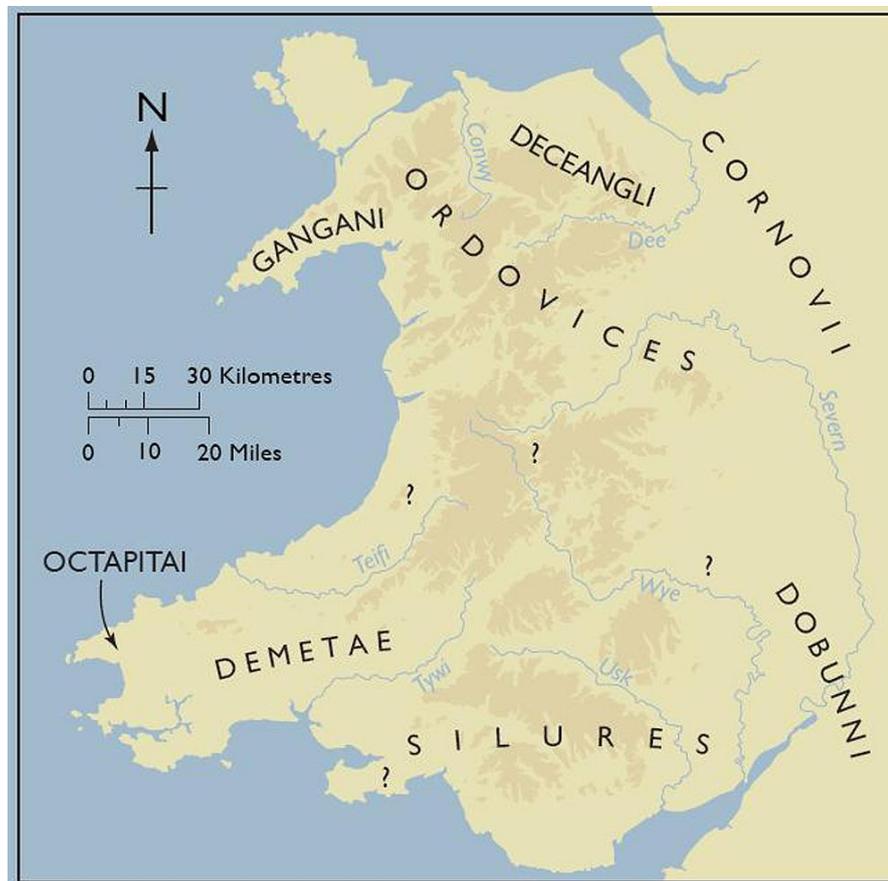
Figure 2.4 The tribes of Wales and the Marches (from Driver 2018 [after Webster 1981], Figure C).

At the end of the Iron Age settlement appears to have moved away from hillforts in favour of smaller enclosed settlements both in the Marches and in the north, perhaps indicating a societal shift away from the large-scale collective towards the individual household (Wigley 2007, 182), as has been posited for elsewhere in Britain during the Iron Age. This may be linked to the proliferation of smaller lowland settlements: 'larger hillfort communities were breaking up and smaller groups were now making their own claims to land resources' (Waddington 2013, 106).

Iron Age burial evidence is scarce in Wales and the Marches due to acidic soils which preclude bone preservation (Pollock 2006, 11). Within the limited burial record both inhumation and cremation are represented, and though inhumation appears to be the dominant rite the poorer preservation and identification of

cremation burials may be a factor in this. Burial of the whole body becomes more common in the Later Iron Age, as throughout the whole of Britain (Pollock 2006, 20). Burials are most commonly recorded in the vicinity of settlements, particularly hillforts, although secondary deposition on earlier prehistoric sites has also been recorded at Plas Gogerddin (Ceredigion) and Devil's Quoit (Pembrokeshire), a practice which likely draws on the continued ritual importance of these sites (Pollock 2006, 18). The reuse of earlier prehistoric ritual sites can also be seen in the siting of some settlements, such as the Bronze Age cairn incorporated within Braich y Dinas hillfort (Waddington 2013, 91). The incorporation and reuse of these sites may have formed part of the continuing process of self-definition.

2.2.4 Material Culture

Material culture in Late Iron Age Wales and the Marches is relatively scarce in comparison to other British regions, such as Yorkshire or Wessex. Pottery was produced in the Malvern Hills from the Middle Iron Age and traded extensively throughout the Marches and the Severn Estuary (Peacock 1968, 1970). Elsewhere, the absence of identifiable Iron Age fabrics suggests that the north and west were largely aceramic during the Iron Age (Murphy and Mytum 2011, 269; Kelly 1990, 102) and within these regions organic vessels were likely used, such as those from waterlogged deposits at the Breiddin hillfort (Musson 1991, 186). However, though pottery does not seem to have been produced in the north-west, Cheshire VCP (Very Coarse Pottery) has been identified at some sites (such as Bryn Eryr [Longley et l 1998, 188]; Fig. 2.5) and indicates that networks of trade extended beyond the immediate local context. Waddington suggests that the lack of 'exotic' objects in this region implies societies 'who were not embedded within the pan-European elite exchange networks of the south' (Waddington 2013, 19).

Figure 2.5. Distribution of mid-late Iron Age VCP (Nevell and Roberts 2005, 114)

Though material culture is fairly limited, high-status metalwork was in circulation and a distinctive feature of the Iron Age is the ritual deposition of metal hoards, often in watery contexts such as the well-known deposit from Llyn Cerrig Bach on Anglesey. Objects within this deposit span the C4th BC to C2nd AD and include c150 bronze and iron objects including horse trappings and chariot fittings, a slave chain, and bronze cauldrons (Waddington 2013, 18-19). Cauldrons, buckets, tankards, and other feasting apparatus were often deposited, such as the Trawsfynydd Tankard (Horn 2015, 332) and objects within the Late Iron Age Seven Sisters hoard (Davis and Gwilt, 148). These suggest a strong link between ritual deposition and the paraphernalia of communal eating and drinking which highlights the social importance of feasting (Horn 2016, 333). An Early Iron Age midden at Llanmaes, Glamorgan, provides further evidence of the importance of feasting (Madgwick and Mullville 2015, 639).

2.3 Summary

The Iron Age in Wales and the Marches demonstrates significant regional variation in both settlement and material culture. While a lack of excavation and subsequent evidence has historically hampered understanding of the Iron Age and led to a general characterisation as conservative and 'backwards' in comparison

to other regions, approaches which integrate excavated material with survey results have demonstrated that significant gains can be made in understanding settlement patterns and social structures when embedded in the theoretical developments of the wider field of Iron Age studies, such as the symbolic importance of enclosure in the establishment of group identities, and the hillfort as a class of monument which can be eloquent not only of its own importance but of its place and meaning within the wider settlement and social context.

As a background to the study of the Roman period this shows that there was significant variation within the region at the time of the Roman conquest, and that varying responses might be expected. Having established the background of the study region in the pre-Conquest period, the following chapter will give an overview of the historical context of the Roman conquest and explore previous work which has been conducted in this region, before setting out the contribution which this thesis will make towards the consideration of this region in the context of modern Romano-British studies.

3. Literature Review and Previous Work II: The Roman Period

This chapter will give an overview of the literature on Romano-British archaeology and the work which has been done on the Roman period in Wales and the Marches. It will outline the theoretical developments which have taken place in the field of Romano-British archaeology, and how these have informed the work which has been conducted in Wales and the Marches.

3.1 Theoretical Developments in Romano-British Studies

This section will explore the development of Romano-British studies and the various theoretical paradigms which have emerged throughout the development of the field. It will then give an overview of the emerging field of 'Big Data' projects and how these may shape the study of the Roman period in general and of rural settlement in particular.

3.1.1 Romanisation and Related Theories

The term Romanisation describes a series of processes by which conquered regions and peoples became integrated into the Roman empire. As a concept 'Romanisation' has a long history, but its use and appropriateness have become increasingly fraught in recent decades. The term was coined by Haverfield (1905) and was heavily influenced by Mommsen's work on republican Italy in the 1880s. It defined the process by which the native population of Britain came to adopt Roman material culture and social forms in their varied incarnations – from the use of samian pottery to urbanisation. In this conception the process was progressive and aspirational and represented a positive, 'civilising' force (Haverfield 1905). The process was understood to be intentional and 'top-down', imposed on native peoples by the Roman state. Its construction as deliberate policy relies heavily on an oft-quoted passage from Tacitus in which the Britons adopt the material signifiers of Roman culture and thereby come to view their subjugation not as an imposition but a privilege*:

> Hence, too, a liking sprang up for our style of dress, and
> the "toga" became fashionable. Step by step they were led
> to things which dispose to vice, the lounge, the bath, the
> elegant banquet. All this in their ignorance, they called
> civilization, when it was but a part of their servitude
>
> (*Agricola* 21)

The Romanisation paradigm was heavily influenced by contemporary society and politics: Mommsen's work on the unitary model of republican Italy mirrored the struggle to create a united Germany in the late 19th century, and British understanding of the process as a kind of civilising mission was likewise influenced by contemporary British Imperial policy (Hingley 2005, 32). Romanisation was the dominant framework of accounts of Roman Britain, and alternative approaches largely focused on the perceived success or failure of the process, such as Collingwood's understanding of the failure of towns as a fundamental incompatibility of native social structure with Roman urbanism (Collingwood and Myers 1937). It was not until the emergence of 'nativist' approaches in the 1970s that significant critical engagement with the concept emerged and a serious search for alternative explanations of Roman/British interaction began (Hingley 2000, 41), in much the same way as regional Iron Age studies began to challenge the Wessex hegemony. 'Nativist' approaches stressed the continued existence of native culture within Romano-British society by identifying the continuity of certain forms of material culture, and saw the adoption of Roman culture as a thin veneer across an enduring native society (Reece 1988). These approaches sought to situate the process of Romanisation in its provincial context rather than viewing it as an external force.

The Romanisation of Britain (Millett 1990) sought to fundamentally restructure the way the adoption of Roman culture in Britain was conceptualised by emphasising the active role of native elites in adopting Roman cultural signifiers as a means of retaining their pre-Conquest status (Millett 1990, 69). Aspiration also played a role further down the social scale as native Britons emulated their social superiors by adopting 'romanised' material culture and modes of living. Though Millett's work was widely praised as a fresh perspective on Roman Britain – particularly for the way in which the work prioritised archaeology instead of text, as many classic synthetic works such as Frere's *Britannia* (1969) and Salway's

Roman Britain (1981) had previously done (Reece 1993, 993) – it has also attracted criticism. Though it sought to return agency to the native population it was criticised as remaining a 'progressive' theory, based on a view of Roman culture as inherently desirable to non-Roman peoples (Hingley 2005). While the agency within this construction was that of the native elite rather than the Roman, the focus remained on the acquisition of Roman-style material culture as a means of accruing and displaying status, thus inherently positioning Roman culture as aspirational. It was also criticised for continuing the tradition of focusing on the elites as the primary drivers of change, which reached the non-elites through a 'trickle-down' effect and thereby perpetuated the view that those lower down the social hierarchy were focused only on their immediate socio-cultural context and were not actively engaged with the wider Roman world (Gaffney et al. 2007, 279).

As well as an altered understanding of the process, the existence of a 'Roman culture' itself has been problematized by scholars working against the tendency of earlier work within the framework of Romanisation to treat Roman culture as a homogenous entity. The existence of such a thing as 'Roman culture' has been called into question, when cultural objects described as Roman often did not originate in the imperial core (Freeman 1993). Scholars such as Reece have noted that the perceived homogeneity of Roman material culture is illusory, with influences deriving from many of the constituent provinces of the empire rather than the imperial heartlands (Reece 1988, 11). Barret (1997) goes so far as to call into question the nature of the canonical Roman empire itself, arguing that it should be understood as much as a constructed model by which we attempt to understand historical processes, events and outcomes as a tangible historical fact (Barret 1997, 53). Yet inasmuch as the concept of the empire may be a modern construct, so too are the concerns which we have about material culture we perceive as Roman - what matters is not so much where the material came from, but what it signified to those who used it (Woolf 1997, 343).

The debates surrounding Romanisation have endured as alternative paradigms and theories have been proposed. Though in European scholarship the term is still widely used, in British archaeological writing the problem has become terminological as well as conceptual: Romanisation is now so loaded that it has been suggested that it should be discarded altogether, being 'not simply value-

laden so much as crushed beneath the weight of implied judgmentalism' (Gaffney et al. 2007, 27). The search for alternative frameworks has seen the adoption of a number of theories and models from other disciplines, particularly anthropology and the social sciences. Globalisation, identity, discrepant experience, and creolisation are some of the many avenues which have been explored. These will be discussed below.

Post-Colonial Theory

A growing understanding of the colonial context within which Romano-British studies developed has led to an increasing emphasis on Rome as an imperial power, and a subsequent focus on the effects of imperial power on subject peoples. Post-colonial theory attempts to redress the historical imbalance between colonised and coloniser and to explore the impact of power relations on the development of new forms of living (Webster and Cooper 1996). One of the ways in which post-colonial theory is often applied to the Roman archaeological record is through the concept of creolisation (Webster 2001).

Creolisation is primarily a linguistic term used to denote the blending of two separate languages to create a third but is also often used in the body of post-colonial work to understand the social context of areas with colonial history (such as the Americas) to explain the adjustments made when two cultures interact and form a third, hybrid culture (Webster 2001, 217). Its innate connection with colonial processes and the focus on cultural negotiation within an asymmetric power relationship (Webster 2001, 218) make it attractive for scholars seeking to understand the ways in which the dynamics of Roman conqueror and conquered native played out within the provinces. The theory addresses a common criticism of Romanisation and some subsequent models as failing to confront the power dynamic between conquered and conqueror (Mattingly 1997, 10), particularly the use of violence and force (Hanson 1997, 69).

Creolisation has been used to examine the changes in food culture (Hawkes 1999) and Romano-British religion as a product of Roman and Celtic religious syncretisation (Webster 2001). With reference to material culture, Carr (2002) posits the existence of a pidgin culture in the transitional years of the early conquest - in linguistic contexts a pidgin is a precursor to a creole: a form of

communication which develops between peoples who lack a common tongue, but which itself lacks the stable grammatical structure of a formally new language (Carr 2002, 116). Within archaeology this term has been applied to 'unique' objects dating to the conquest period, such as the medical instruments in early Roman burial of the 'Stanway doctor' to explain them as products of cultural negotiation between Roman and British traditions of medicine (Carr 2002, 121). Both Webster and Carr's use of the terms emphasises the extent to which material culture is charged with meaning which is contextually-dependent, acknowledging that objects may display both identification with and resistance to the dominant culture depending on their context of use (Webster 2001, 219). This injects subtlety into the concept of resistance to imperial rule in a move away from rigid dichotomies of resistance and acceptance and shifts the focus from a narrative historical framework based on textual evidence towards one which is more closely focused on the archaeological evidence.

Critiques of creolisation as applied to Roman archaeology focus on its very derivation from modern, post-colonial academic approaches which apply to the study of modern imperial societies; some have argued that the application of these theories to the Roman world is led not by their utility but by modern post-imperial guilt stemming from the increasing recognition of the late 19th and early 20th century imperial context in which Roman studies developed (James 2001, 193). There has also been criticism of the application of modern constructions of imperialism applied to pre-modern empires such as Rome in which the exploitation of the provinces was neither administered from the centre nor systematic (Webster 2001, 3).

Globalisation

Though generally applied to complex structures in the modern world, globalisation theory seeks to understand the social, political, cultural and economic changes which are brought about by increasing connectivity (Hingley 2005, 118). In this respect it resembles World Systems Theory (Wallerstein 1974), which posits the existence of political or economic structures which unite large populations over great distances (Pitts and Versluys 2015, 8). Though world systems have been sought in the Roman period (Woolf 1990), the theory is based on a Marxist reading of the emergence of modern capitalism and inherently contains a structural

opposition between an extractive core (Rome) and an exploited periphery (the province) (Pitts and Versluys 2015, 8), whose applicability to the ancient world is uncertain.

Though it can be argued that globalisation does not apply to pre-modern societies whose reach was not truly global and there are significant differences between modern world systems and the Roman empire in terms of scale and complexity, the processes by which globalisation effects change – increasing connectivity in particular – were at work during the Roman period. Scholars who attempt to understand the changes in the Roman empire through the framework of globalisation argue that it offers a 'culturally neutral interpretative framework', emphasises the importance of connectivity, and offers a more complex view of the processes of change at a fundamental level (Pitts 2008, 494). The use of globalisation as a framework can help to break down simplistic core/periphery models by recognising the complex flows of peoples and material which can be brought about by increasing connectivity (Morley 2015). The impact of the broad changes effected by globalisation within smaller communities has sometimes been termed 'glocalisation' (Pitts 2008, 494): the global mediated through the local.

Globalisation has been viewed as particularly useful to Romanists in understanding the responses of native populations to Roman conquest and the creation of hybrid identities within these contexts which utilised both new and existing material culture in their construction (Gardner 2013,7). Pitts' case-study of Romano-British material culture within a globalisation paradigm uses data related to pottery consumption in south east England to show changes which occur at a local, inter-site level in the wider context of the empire (Pitts 2008, 504).

Identity

The influence of post-colonial theories can also be seen in the development of identity studies, with an increasing emphasis on identity as multiple and contextual (Gardner 2013, 5). Identity has become a significant preoccupation within Roman studies, a development which is highlighted by Pitt's (2007) survey of Anglo-American publications between 1995 and 2005. This study shows a marked increase in the number of papers published relating to these terms (Pitts 2007, 695).

However, studies of identity often fall into the well-worn tracks of Roman/native, and in these cases studies of identity are often essentially Romanisation studies under a new guise (Pitts 2007, 695). Pitts' study finds that significantly fewer studies are based on the articulation of other forms of identity, such as class and status, or age and gender (Pitts 2007, 697).

Some studies have focused on group identities, such as that of the military (James 1998; Gardner 2001). These studies offer interesting case studies into the way that material culture and social and ritual practice could be used to subsume fragmented individual identities into a broader, overarching one through a proscribed set of behaviours which were reinforced by networks of obligation and dependency (James 1998, 16). Such approaches demonstrate how a range of evidence can be brought together to explore identities, particularly material culture.

Material culture is increasingly recognised as a valuable means of exploring how identities were shaped and expressed in the ancient world, stemming from the growing influence of Bourdieu's (1977) concept of *habitus* in Roman archaeology – this describes how social practice is structured by the interaction between people and their environments, including objects (Chadwick 1999, 157-158). These approaches have led to a range of studies which focus on material culture as a means of exploring the creation, or transformation, of identities in the Roman period, such as through the use of objects associated with the person (Hill 1997; Crummy and Eckardt 2003; Eckardt and Crummy 2008) or ceramic studies (Pitts 2005b). As explored above in Webster (2001) and Carr's (2002) work, these studies often focus on periods of transition, particularly the Late Iron Age – Romano-British transitions.

3.1.2 The Material-Cultural Turn

The increased emphasis on the importance of material culture in social processes has also resulted in the recent 'ontological turn' (Hicks 2010) and the focus on materiality and material agency. These forms of material culture studies emerged from post-processual approaches and a growing concern that certain dichotomies – subject/object, nature/culture – are modern in origin and, being based on a

Western humanist world view, inherently privilege one over the other (Webmoor and Witmore 2008, 56). The material cultural 'turn' therefore sought to problematize the study of the socio-cultural and the material in isolation from each other (Hicks 2010).

Material culture approaches in archaeology developed from a concern that objects were not being accorded their full importance in the archaeological record. This was a concern felt not only in archaeology but in a number of disciplines, and a range of influences can be identified in the approach, including anthropology, sociology, philosophy, art history, and literary criticism such as Brown's influential article, 'Thing Theory' (2001) which is commonly cited in summaries of material culture approaches though it is itself primarily concerned with developing this view through the lens of critical theory. The article set out the importance of objects as 'windows' to be viewed through, means by which ideas about history, society, nature and culture can be explored (Brown 2001, 4). Other select foundational works in the development of modern material culture studies include Deetz's *In Small Things Forgotten* (1977), which used the artefacts of daily life – 'forgotten things' – to explore early American historical archaeology, and Arjun Appadurai's *The Social Life of Things* (1986). Deetz's work on 'small things' has been particulary influential in the movement towards the study of small finds in the Roman period.

Appadurai's work in particular emphasises on the role of objects in social and economic systems. However, its focus on objects as a means to explore broader issues is primarily engaged with the value vested within them as objects of exchange – whether as commodities (defined as objects produced for the purpose of exchange (Appadurai 1986, 9)) or gifts (objects embedded in the flow of social, rather than economic, relationships (Appadurai 1986, 11)).

Material culture studies have also led to the formulation of 'social' and 'symmetrical' archaeologies. Social archaeology defines itself as an approach aimed at exploring the ways in which human beings express themselves through things (Preucel and Meskell 2008, 3). Symmetrical archaeology emerges from a critical approach to material culture studies and attempts to do away with the dualisms which have emerged from the Western intellectual tradition (Witmore 2007; Olsen 2007) – its aim is therefore to bring symmetry to the relationship

between humans and objects. One of the criticisms levelled at material culture studies is that they do not go far enough in redressing the balance between humans and things. Webmoor and Witmoor (2001) in a critique of social archaeology argue that though this approach grants agency to objects, it is a secondary form of agency which derives ultimately from the initiative of human beings (Webmoor and Witmore 2001, 59). They argue that the concept of a dialectical relationship between humans and things cannot begin from the mixture of two things in the way that is necessary for the true integration of people and things (Webmoor and Witmore 2001, 59). A 'manifesto' for symmetrical archaeology lays out a number of core concepts e.g. that archaeology should begin with mixtures, not bifurcations; that there are always a variety of agencies, not only human; and that humanity begins with things (Witmore 2007, 549).

Yet even these formulations attract criticism. Ingold (2012) argues that symmetrical approaches still rely on the notion of human exceptionalism, with human beings conceived of as 'ontologically distinct' from all nonhuman entities – in which category Ingold includes not only objects, but organic life-forms and environmental conditions (Ingold 2012, 430). Ingold views the materiality of objects specifically as being composed of two elements: the 'brute materiality' of the object's innate properties, and the 'socially and historically situated agency' of the object which is projected upon it by human beings (Ingold 2012, 432) – a way to counter this is to raise objects to the status of things that, in common with organisms, possess the potential for growth. Ingold's approach builds variously on phenomenology, technological flows, and entanglement to develop the idea of a 'meshwork' in which artefacts are created from a confluence of human action and material flow, acknowledging both as equal partners in the emergence of form (Ingold 2012, 435).

The potential of Actor Network Theory in material culture studies, particularly its potential for the study of object agency, has also recently been explored (Hicks 2010, 76). This approach, derived from social studies of science, situates agency in networks and in 'constellations' of actors and actants, and has been used by Van Oyen in a study of the emergence of terra sigillata as a distinct category which set 'conditions of possibility' and therefore acquired a material agency to shape action (Van Oyen 2015, 74).

Anthropological and ethnographic examples are often used in material culture approaches to demonstrate how the social embeddedness of objects can be enacted. Gosden and Marshall (1999) cite a number of these, particularly Strathern's (1988) influential work on Melanesian social networks in which objects are conceptualised not as inert things but as detached parts of people which are embedded in and move around the social body in complex ways, illustrating the non-Western, non-dichotomic conceptions of the relationship between humans and objects. Such anthropological and ethnographic examples of non-Western perspectives on the relationship between people and things are also important in the development of personhood, which often intersects with material culture studies in its examination of the use of material culture in the construction and enactment of identities (Fowler 2011).

One of the practical applications to have emerged from material culture studies which have been applied within the field of Iron Age and Romano-British studies is object biography. This approach seeks to reconstruct the life of an artefact as a means of illuminating its social connections by assembling and interrogating data (Kopytoff 1986, 66), in other words by establishing the 'ideal' career for an object by assembling a large dataset related to the objects (Joy 2009, 544.)

Life history approaches resemble object biographies, but tend rather to focus on long-term, technological changes (Joy 2009, 542), such as Schiffer's (1972) use of the technique to investigate the taphonomic processes of site formation. However, Holtorf (2002) draws a distinction between what he terms 'long' and 'short' life histories - the distinctions roughly approximating what is more generally understood by life history and object biography. Holtorf uses what he describes as the 'long' life history approach on a pot sherd from an excavation in western Sicily, tracing its post-excavation journey as a means of demonstrating that the life history of objects does not end with deposition, thus breaking down another dichotomy of past and present (2002). This focus on taphonomy and post-excavation processes highlights an aspect of object biography which has otherwise received comparatively little attention from researchers.

A related approach which has had little application in the field of Roman studies is the *chaîne opératoire*, a methodological tool derived from French anthropology which is used to analyse both the technological and social aspects of an artefact's

production and use (Sellet 1999 p. 106). This has been most widely applied to the study of lithics, but has also been influential in the development of the idea of entanglement (Hodder 2012)

Yet it can be argued that these approaches focus on changes to technical or morphological characteristics and do not address the ways in which an object's meaning emerges from social action (Gosden and Marshall 1999, 170). Object biographies focus instead on the connections between humans and objects in social relations. In keeping with the increasingly complex understanding of identity which has developed, Joy (2009) argues that if a person's identity is multiple and relational then their biography can similarly be viewed as comprised of the sum of its social relations, and that if objects are also to be ascribed relational agency then their biographies can also be constituted as the sum of their social relationships (Joy 2009, 544). This allows object biographies to be considered as non-linear and means that an object's biography can be picked up at certain different points in its life course (birth, life, death) without the overall biography lacking (Joy 2009, 545).

Joy applies this formulation of the object biography approach to an Iron Age mirror, using the mirror's affordances (its handle inviting the action of being held, its reflective surface inviting engagement with the self) and its condition (lack of scratches, a brooch hanging from its terminal loop suggesting the presence of a covering) to consider the role of the object in its social context, in this case perhaps a performative or ceremonial one (Joy 2009, 550).

Object biographical approaches are often preoccupied with the object at a moment of exchange, or social performance. Swift (2012) highlights other aspects of the object biography which have received comparatively little attention: curation, and transformation (Swift 2012, 168). These issues are explored through a biographical approach to the reuse of Roman bracelets as finger-rings in the late- and post-Roman periods, seeking to understand the possible social meaning of the action and its resulting artefact – perhaps as markers of continuity or of a more personal attachment to the transformed object (Swift 2012, 93).

3.1.3 Big Data

The advent of rescue archaeology and development-led archaeology in the latter half of the 20th century has meant that the amount of data available for study has grown enormously, and the advent of the internet and subsequently of online archives such as the Archaeology Data Service and the subsequent accessibility of data have made the assembly and comparison of large datasets much easier. This increase has been described as a 'data deluge' (Bevan 2015), which provides both opportunities and challenges for researchers seeking to exploit the extraordinary amount of information which is now available.

In addition to projects incorporating single datasets such as the Portable Antiquities Scheme (https://finds.org.uk/), projects such as the English Landscapes and Identities Project (EngLaID) (Cooper and Green 2017) and the Fields of Britannia (Rippon et al 2015) explore large datasets over a broad chronological span. In the case of EngLaID, a wide variety of datasets were incorporated, including among others the Historic Environment Records (HER), Portable Antiquities Scheme (PAS), the National Mapping Programme (NMP), this ultimately comprised a database of almost one million records (Cooper and Green 2016; Cooper and Green 2017). The Rural Settlement of Roman Britain project also incorporates a wide range of material and collates published and grey literature from excavated settlements in England and Wales. This project forms the foundation of this thesis and will be explored in greater detail in subsequent chapters.

Problems with the incorporation of disparate datasets into a secondary database have been widely explored (Roskams and Whyman 2007; Cooper and Green 2015; Evans 2013), but the most significant issues relate to bias in the initial collection, the duplication of material between databases and the incompatibility of these datasets for comparative work: for example, the datasets archived by services such as the Archaeology Data Service (ADS) are distinct and retain their individual formatting which can be difficult to reconcile (McCoy 2017, 76). It has been suggested that archaeological datasets should themselves be viewed as artefacts which are socially and historically contingent (Cooper and Green 2015, 274).

3.2 Romano-British Studies in Wales and the Marches

3.2.1 Overview

Though this thesis focuses on rural settlement in Wales and the Marches, work on Roman Wales has relied heavily on Classical narratives of the conquest, including the *Roman History* of Cassius Dio, and the *Annals* and the *Agricola* of Tacitus (other campaigns probably form part of the lacuna within the *Histories* (Dudley 1969, 29)), and it will still be valuable to give an overview of the military campaigns and situation over the course of the conquest and occupation.

The chronological framework also structures many modern accounts and much research on the archaeology of this region has therefore followed chronological rather than thematic lines. While the use of the military campaigns as a framework to some extent perpetuates the focus on the military at the expense of the rural in a way this thesis elsewhere attempts to avoid, it provides a useful framework for a broad chronological overview of the study region.

3.2.2 AD50s – AD80s: Conquest and Consolidation

Ancient narratives for the military campaigns within the study region are derived from Tacitus and Cassius Dio. Dio notes that a portion of the 'Bodunni' (identified with the Dobunni) allied themselves with the Romans and allowed troops to be stationed within their territory: forts at Cirencester and military material at Bath indicate troop presence in the Severn-Cotswolds and the first fort at Kingsholm was occupied from around AD48-50 (Todd 2008, 56).

While the construction of the Fosse Way in the late AD40s was once thought to represent an early form of *limes* separating the Roman province from the land to the west, immediate campaigning to the west of this supposed frontier rather indicates that full conquest was intended from the outset (Todd 2008, 50). The impetus for campaigns westwards is given by Tacitus as acts of aggression towards an ally tribe, though neither the aggressor nor the ally are named in the text (*Annals* 12.31). The friendly tribe are usually understood as the Cornovii (Webster 1991, 24), as punitive measures involved the disarming of the Iceni and attacks on the 'Decangi', who are probably identified with the Deceangli of north east Wales

(Manning 2004, 62). Tacitus' portrayal of the campaigns was likely intended to cast them as acts of self-preservation on the behalf of client regions rather than aggressive expansionism.

Whatever the cause or justification, campaigns into the region began in AD47 into the north-west under Ostorius Scapula and continued into AD48 (Burnham and Davies 2010, 255). The general difficulty of dating sites makes assigning military sites to a particular governor or campaigning series tentative and in the absence of direct dating evidence, morphology and proximity to roads or other dated sites have been used to trace the campaigns, for example, the cluster of camps near and 'almost certainly predating' Wroxeter (Burnham and Davies 2010, 38).

The placement of camps and smaller fortresses emphasise the importance of riverine routes for the inland campaigns (Arnold and Davies 2000, 7). Larger installations were placed in river valleys at the interface between upland and lowland and highlight the importance of controlling communications in these areas (Burnham and Davies 2010, 38). The continued influence of the terrain in the siting of communications and installations is demonstrated by Jarrett's (1994) comparison of the similarities between the apparent route of the Roman advance and the 19th century railway system in Wales (Jarrett 1994, 50). Coastal sites in Devon and along both sides of the Bristol Channel (for example, Sea Mills at Avon and Sudbrook, Gwent) also emphasise the importance of sea routes for campaigning and supply (Davies 1979).

Roman fortunes in the campaign were mixed, with setbacks in the early 50s involving attacks on a legionary detachment and a defeat of XX Valeria Victrix (Jarrett 1994, 52). Forts were constructed at Wroxeter and Usk in the mid-AD50s (Arnold and Davies 2000, 10) and may mark a shift towards the incorporation of territory into the province. The fortresses were linked by a road along which lay a chain of smaller forts (such as Abergavenny), which could have served to facilitate a supply chain that enabled the army to retain effective control in difficult terrain (Arnold and Davies 2000, 10).

For these early campaigns anti-Roman sentiment is embodied in the person of Caratacus, the figurehead for Silurian and Ordovician resistance despite his own origins among the Catuvellauni in the south east (Todd 2008, 49). Though the

'complexities of Celtic political and family relationships' have been invoked to explain his ability to command the loyalty of a tribe so geographically unconnected with his own (Brewer 2002, 37), his centrality to the resistance campaign may have been overstated: certainly his eventual defeat and capture did little to stymie native opposition, which continued and even escalated under successive governors (*Annals* 12.39). Caratacus fits well within Tacitus' thematic preoccupation with individual tribal defiance in the face of Roman power, and has parallels in both Vercingetorix and Boudicca as a narrative focus (Dudley 1969, 30; Jones 1990, 57). No individual leaders are named after Caratacus' capture – little is known about the social structure of the Silures or their neighbours, but a decentralised power structure has been suggested in the Late Iron Age (see previous chapter), and it was perhaps this fragmentary social organisation which precluded the re-emergence of another figurehead leader.

According to the Tacitean narrative, the Silures made gains in the early 50s which were followed by a period of apparent inertia on the part of the Romans under the governorships of Gallus and Veranius, though this characterisation was likely intended to stress the importance of the later Agricolan campaigns (Burnham and Davies 2010, 37). Suetonius Paullinus' successful campaigns culminated in the famous attack on Mona (Anglesey) (Burnham and Davies 2010, 37; *Annals* 14.30). The attack on Anglesey as the putative centre of the religio-political Druid resistance may have been intended to strike a psychological as much as strategic blow, though the island's agricultural potential was likely of greater long-term value (Arnold and Davies 2000, 3). However, the disruption caused by the Boudiccan revolt and its aftermath meant that active gains had to be abandoned in favour of a policy of containment (Arnold and Davies 2000, 5). Legio XIV Gemina, previously based at Usk, moved to Wroxeter to create a more balanced distribution of legionary troops (Arnold and Davies 2000, 12).

With the resumption of campaigning in the late 60s and early 70s, the full subjugation of the province was finally achieved under the governorship of Julius Frontinus and Agricola. This period is characterised by heavy concentrations of troops within Wales and the Marches, and the reorganisation of pre-Flavian military into a permanent garrison structure. In the early 70s Legions II Augusta and XX Valeria Victrix moved to their respective long-term bases at Caerleon and Chester, placing large concentrations of troops at strategic points.

Dendrochronology indicates that wood was being felled for construction at Caerleon by AD73/4 (Burnham and Davies 2010, 48). Both sites could be easily supplied by sea and river as well as by road, facilitating long-term supply. Though sea-routes may have been easier and quicker, an all-weather road system was essential for the supply of the inland forts, and at least 1100kms of road were constructed to extend the existing strategic network to facilitate supply through the difficult terrain (Burnham and Davies 2010, 48) and potentially controlling civilian access. In addition to aiding troop movement, roads were also a physical representation of Roman power, rewriting previously familiar landscapes and imposing a psychological reminder of control (Petts 1998, 87).

By the early AD80s two legions and some forty auxiliary regiments were distributed across the region (Burnham and Davies 2010, 47). The population increase which this represented must have caused significant disruption to the local economy, though the extent to which a force would have supplied itself locally or via long-distance trade networks is widely debated (Manning 2004, 108-9; Adams 2001; Bishop 1999; Stallibrass and Thomas 2008).

3.2.3 1st to 3rd Centuries

Despite the significant commitment of manpower and resources involved in the conquest, by the end of the 1st century AD a process of withdrawal was already underway (Arnold and Davies 2000 p.23). Some forts were abandoned (including Neath and Loughor (Owen-John 1990, 46)) and others were reduced in size to accommodate smaller garrisons (Davies 1979, 264). Pressure on the Roman military elsewhere in the empire may have hastened the process of garrison reduction, not least the escalation of hostilities in northern Britain (Arnold and Davies 2000, 24). However, the move should also be viewed within the context of the evolving relationship between the native population and the military administration. In the 2nd century an increase in native communities gaining *civitas* status and self-governance corresponded with the rise of urbanism. The former legionary fortress of Wroxeter became the *civitas* capital of the Cornovii, and by the mid-2nd century had become the fourth-largest urban settlement in Britain (Gaffney et al. 2007, 281).

Troop withdrawal continued throughout the 2nd century as external pressures such as the northern campaigns continued to demand the movement of troops away from Wales and the Marches. Epigraphic evidence from milecastles, distance markers, and forts along the frontier show that both II Augusta legion at Caerleon and the XX Valeria Victrix at Chester were heavily involved with the construction of both the Hadrianic and Antonine Walls. The retention of both fortresses has been attributed to various causes, including 'sheer inertia' (Breeze 1989, 81), though the capability of mobilising significant concentrations of troops into the sites likely also represented a significant military advantage and a deterrent to potential future resistance in hard-won regions (Davies 1989, 103).

The continued occupation of certain forts in the upland interior signifies a continued desire or need for military control in these regions. The position of such forts at important river crossings and in positions to control access to upland routes may indicate the need to counter a threat, perceived or real, or to control a resistant population (Davies 2004, 102). However, it has also been suggested that the remaining forts were primarily intended to fulfil an administrative function in regions which lacked the centralised civilian organisations of the lowland zones, or that the forts facilitated involvement in taxation and the *annona militaris* (Burnham and Davies 2010, 57).

The distribution of forts across the region has been understood to correspond to the relative compliance of different tribal areas with Roman authority, with areas of high concentration indicating the threat of resistance and a low concentration in others denoting those tribes which had peacefully acquiesced to Roman control, such as the lack of forts in the south-west in the territory of the Demetae (Burnham and Davies 2010, 46) However, this view has been challenged by the identification of military features in areas where none had been previously known, such as the identification of a road running west from Carmarthen, and the recently-discovered Roman fort at Wiston, Pembrokeshire (James 2003, 15; Meek 2015). Though the chronology of this fort is not yet well understood, its presence in a region in which military occupation was previously unknown has challenged long-held views.

The impact which continued military presence exerted on the region around it may be demonstrated by their vicus settlements. An increasing amount of work

has been conducted on vicus settlements in the past few decades, marking a shift in focus towards a broader understanding of how military installations interacted with their immediate contexts. This work includes a Cadw-funded project which broadened the scope of research out into the landscape by instituting a programme of geophysical surveys across known fort sites to investigate the extent of vicus settlement (Hopewell et al. 2005). Almost every auxiliary fort included in the survey had an accompanying vicus settlement. The surveys further suggest that layout and building construction in the civilian settlements is strikingly dissimilar to settlement in the rural landscape, with streets aligned to road systems and strip-building construction predominant throughout (Sommer 2006, 123). In the upland zones the life of these settlements seems to have been symbiotic with the military and none developed into small towns after the occupying garrison's removal (Sommer 2006, 132).

The basis of such settlements seems therefore to have been exploitation of the market offered by the troops – the widening of roads at certain points in some vici (including Caerhun, Cefn Caer, Caer Gai) to form a 'piazza-like structure', possibly indicates their use as market centres (Sommer 2006, 117). The interface provided by the vicus between the military, their camp-followers, and the rural population was likely multi-directional and these settlements were sites of interaction and diffusion of Roman material culture (Burnham and Davies 2010, 120). However, there is also some evidence for small-scale agricultural production within vici and canabae in the form of variations in settlement density and find frequency which may indicate areas of manuring, and suggests that the distinction between the rural population and that of the vici was not absolute (Burnham and Davies 2010, 120)

The development of urban settlement also dates to this period. Urban development is limited in the west of the study region, though a series of small towns developed in the Marches along the line of the road linking Caerleon, Wroxeter, and Chester including Kenchester (Magnis) and Leintwardine (Bravonium) (Burnham and Wacher 1990). Nucleated settlement was concentrated in the east of the study region. Of the urban developments, understanding of the development of Caerwent is hampered by the excavation technique of its early excavators and so far there is no evidence that it was founded on a military site (Brewer 2004, 219). Caerwent's development has often been attributed to

Hadrianic stimulus as indicated by the dating of the forum-basilica (Wacher 1995, 381). By AD220 the tribe was certainly self-governing and administered by an *ordo*, as attested on an inscription set up by a former legate of II Augusta (Aldhouse-Green 2004, 161; RIB 311).

3.2.4 The 3rd Century Onwards

The threat of Irish raiders in the late 3rd century brought another military reorganisation, with the construction of new forts and the reoccupation of some others which had been reduced or abandoned, such as Neath and Loughor (Owen-John 1990, 46). The military disposition during this period seems to have been characterised by the prioritisation of security in key areas, such as a new fort at Cardiff which resembled the Saxon Shore forts of the English coast and may have served as a naval base, perhaps forming part of a more extensive coastal defence system now lost to erosion which protected the rich agricultural land of the Vale of Glamorgan (Burnham and Davies 2010, 60). Similarly, the mineral wealth and extractive industries of the north west were protected by continued occupation of the fort at Caernarvon (Segontium). The existence here too of an integrated coastal defence is suggested by the small installation and watchtower at Holyhead and the recently-discovered fortlet on the north coast of Anglesey (Hopewell 2018). The 3rd century upheavals including the Carausian and Allectan usurpations forced further reorganisation as troops were drawn into the conflicts. The closure of Caerleon may date to this period – there is extensive debate over the military/civilian character of the late 3rd century occupation at the site. At Chester, however, the defences were rebuilt in the early 4th century and Valentinianic and later coinage indicates that occupation of some form extended further into the 4th century (Casey 2010, 62).

The end of Roman military involvement in Wales is difficult to accurately identify. Late military artefacts such as military-style belt buckles at Caerwent has been used to suggest a military presence there in the 4th century (Hawkes 1961, 32), yet the objects need not belong to members of the army but may instead point to a civilian defensive organisation raised to fill the gap left by the withdrawal of Roman troops (Casey 2010, 65), or to changing styles of personal presentation which drew on military models in a civilian context (Swift 2004). The *Notitia Dignitatum* omits any mention of units stationed in Wales and this may indicate

the withdrawal of *limitanei* (Davies 1989, 56), though whether this can be taken as a firm indication of their absence is debatable given the problems of transmission associated with this text (Casey 2010, 63). Caernarvon may lay claim to be the last occupied Roman military installation in Wales, as suggested by coin evidence to AD394 (Davies 1989, 56).

3.3 Work in Wales and the Marches

This section will give an overview on previous work which has been conducted in the region of Wales and the Marches and the way in which it has related to the wider discipline.

Early 20th century work on Wales conformed to the dominant paradigm of the time. Wheeler believed that there was little interaction between the Roman and native in Wales: 'the native population was for the most part only incidentally touched by the Roman invader' (Wheeler 1925, 217). In his work he divides the occupation of Wales into three distinct groups: military, civil occupation and native inhabitants, noting of this last that they were 'remotely in touch with [the other] groups, but very little influenced by them' (Wheeler 1925, 219). A view of the native population as less 'civilized', with all the cultural baggage inherent in that term, permeates the work of this period, from Wheeler's description of native culture as 'fundamentally undisciplined and barbaric' (Wheeler 1925, 250) to the Welsh historian J. E. Lloyd's assertion that by the end of the Roman period the native population 'had scarcely attained the level of culture of the Britons of the south-east at the time of the Roman conquest' (Lloyd 1930, 89). The imperialist origins of this attitude are evident in the literature of this period, whether explicit – such as Wheeler's direct comparisons between the Roman occupation in the northern frontier zone of India (Wheeler 1925, 290) – or latent.

Though Lloyd's work was the first academic study of Welsh history, he was by his own admission no archaeologist and his Roman material is heavily influenced by the work of Haverfield. Lloyd notes in subsequent printings of his book that he relied upon it for corrections and additional information (Lloyd 1939, 59), and his absorption of Haverfield's ideas about the separation of military and civilian zones in Britain is clear.

The first edition of *Roman Frontiers in Wales* (Nash-Williams 1954*)*, demonstrates the preoccupation with military archaeology which has characterised much work in the region. The work went through two further editions (Nash-Williams 1969; Burnham and Davies 2010) each taking advantage of increasing knowledge and data, though remaining focused on the military archaeology. The most recent edition does explore the interaction between the military and the civilian population, including sections on vicus settlement and general cultural exchange between the two (Burnham and Davies 2010, 104). However, the work retains a focus on the military experience, and demonstrates a continued focus for large-scale publications on military archaeology. This is supplemented by the publication of *Roman Camps in Wales and the Marches* (Davies and Jones 2006), focusing on the smaller forts and temporary camps of Wales. Interaction between the military and rural society is an important aspect of Romano-British society, but within Welsh archaeology the focus has remained primarily on the military side of the equation. A chapter on interaction between soldiers and civilians in the *Companion to Roman Britain* (Davies 2004) is heavy on the soldier and somewhat lighter on the civilian, but does represent a growing interest in the relationship between the two populations.

The bias towards the military has derived for much of the 20th century from a lack of evidence regarding the rural settlements of the region. Hogg's *Native Settlement in Wales* (1966) demonstrates this problem well, with an illustration denoting the broad regional characteristics of native settlement featuring a large blank area of 'no known settlement' in west and central Wales (Hogg 1966 p.29 [Fig. 1]). Its call for further excavation is one which is repeated down to the present day.

Military sites were easily recognisable, both physically within the landscape and morphologically. By contrast, rural settlements are often far more ephemeral. Those which were recognised and investigated tended to be high-status villa settlements, which are largely stone-built and rectilinear in form, thus further biasing the literature towards higher status settlements. The exception which nonetheless proves the rule is the settlement pattern of north-west Wales, characterised by stone-built hut circle groups which survive well and have been

extensively researched though little-excavated, and the research has largely been conducted on morphological grounds (e.g. Smith 1974; Smith 1999; Kelly 1990).

For much of the 20th century there was therefore a bias in the study of rural settlement towards the excavation of villa sites, and a number of these were subject to antiquarian excavation. The resulting focus on villa settlement is again a result of the general lack of available data, and particular sites have to some extent defined non-villa settlement. The well-defined development from Iron Age farm to Romano-British villa at the Glamorgan site of Whitton (Jarrett and Wrathmell 1981) has been much-cited, and though such examples are valuable there is a danger in allowing a single site to stand as an avatar for rural development in the Romano-British period. Bryn Eryr, a roundhouse settlement on Anglesey noted for its high-status pottery, is also often used as a 'type site' in this way (Longley 1998). Such sites to some extent represent the twin poles of the spectrum of rural settlement development.

For civilian and particularly rural settlements there are few broad synthetic works to rival the scope of *The Roman Frontier in Wales and the Marches*. The most recent dedicated to rural settlement is *Society and Settlement in Wales and the Marches 500BC to AD 1100* (Jones 1984). The broad chronological and geographical span allows it to counter the tendency in research to focus on a particular site or region, or a narrow period of time, and it engages with rural settlement to a much greater extent than previous work. More recently, a chapter on rural settlement appears in the introductory volume *Roman and Early Medieval Wales* (Arnold and Davies 2000), synthesising available evidence into a largely descriptive exploration of rural settlement which is divided regionally and by settlement type. Though this work provides a valuable synthesis of broad trends and recent evidence it operates within a framework of Romanisation, and tends to conflate 'romanised' settlement forms and material culture with prosperity in terms of value, creating a success/failure paradigm for regional development (Arnold and Davies 2000, 76).

The need to prioritise rural settlement within Wales and the Marches has been noted in several regional frameworks for archaeology (Wales: Briggs 2004; Midlands: Watt 2011). Work which is focused in particular on rural settlements tends to be regional in scope and primarily concerned with small select areas.

The Llawhaden project in Dyfed surveyed a series of Late Pre-Roman Iron Age/Romano-Brish small enclosures within a region in order to consider the settlement pattern of a diverse regional landscape together (Williams et al. 1998). Similarly, excavations at Cefn Graeanog, Gwynedd also considered the relationship of settlements close to one another in an attempt to understand the social and economic development of a settled landscape (Fasham et al. 1998) In north Wales, the rural settlement pattern of the north-west has been extensively researched, but largely along morphological lines; Waddington's *Settlements of North-West Wales* (Waddington 2013) engages more closely with a broader range of evidence to track developments in settlement patterns over long periods.

Larger-scale landscape surveys combining field survey and excavation have also been conducted in the Marches, and projects such as the Walton Basin Project (Gibson 1999) and the Lugg Valley project (Herefordshire Archaeology 2007) help to characterise a particular landscape beyond the narrow confine of a particular period to show change and continuity over a broad timescale. The Wroxeter Hinterland Project (Gaffney et al. 2007) further demonstrated the importance of placing sites in the broader context of the landscape and is a warning against seeing urban and rural contexts in isolation from each other. Through a programme of field survey and targeted excavation, the project explored the relationship between the town and its hinterland and found striking differences in the ceramic assemblages of sites within certain radii of the town that indicated distinct local responses to urbanism (Gaffney et al 2007, 271). The town is described as a settlement 'existing in complete contrast to its hinterland' (2007, 282), and while there are echoes of Wheeler's parallel cultures here the emphasis is on the active choices made by the population of the hinterland and the social organisation which influenced those choices.

The study of rural settlement on the English side of the border has also benefited from the publication of *An Atlas of Roman Rural Settlement in England* (Taylor 2007). This project has helped to characterise the nature of rural settlement in this region and illuminate broad trends in morphology and chronology. The project sits within an growing body of projects which utilise the large datasets amassed since the introduction of developer-funded archaeology, including the English Landscapes and Identities Project (EngLaID) (Cooper and Green 2016), the Fields

of Britannia project (Rippon et al 2016), and the Rural Settlement of Roman Britain (Allen et al 2017; Smith et al 2016). The Rural Settlement of Roman Britain Project dataset (Allen et al 2015) forms the basis of this thesis and will be explored in greater detail in the following chapters.

In general the introduction of developer-funded archaeology, while representing a significant increase in the overall evidence base, has meant that data has become increasingly fragmented and difficult to synthesise. Much work remains unpublished as grey literature. In recent years there has been an increasing drive to take advantage of the opportunities afforded by the internet, with sites such as OASIS and the Archaeology Data Service making efforts to make grey literature widely available.

Historic Landscape Characterization projects have been and continue to be carried out throughout Wales and the Marches, though the information from only a few areas is currently available online through the Trusts' individual websites. More results are available for English authorities through the ADS (http://archaeologydataservice.ac.uk/archives/view/HLC/), though within the study region of this thesis Herefordshire and Gloucestershire are not available through this medium. The results from other projects such as the Defended Settlements project and Arfordir (GGAT's exploration of the coastal archaeology of Gwent and Glamorgan), are also available through the Trusts' websites. For the Welsh side of the border information is also available through Archwilio, a joint, searchable database containing records for the Welsh Archaeological Trusts (http://www.cofiadurcahcymru.org.uk/arch/). Coflein serves a similar function for data held by the RCAHMW (http://www.coflein.gov.uk/).

3.5 Summary

This chapter has provided an overview of both the development of the wider discipline of Romano-British archaeology and the way in which this has been expressed through work on Wales and the Marches. It has provided a literature review of work which has been conducted on rural settlement in Wales and the Marches and noted the traditional focus on military settlement which has characterised much of the work previously conducted on this region. This thesis will seek to redress this balance.

While the 'Big Data' approaches offer new opportunities to refocus on the archaeology of rural settlements, no such work has previously been conducted within the study region. Work in this field has focused primarily on England, and while the published volumes of the Rural Settlement of Roman Britain project make strides towards a renewed focus on the rural, the breadth of its scope and the size of the database means that the focus remains on regions which are rich in both settlements and material culture.

Having explored the gaps in the literature, the following chapter will introduce the Rural Settlement of Roman Britain database and the ceramic methodology which will form the basis of this thesis and its attempt to fill these gaps.

4. Methodology

This chapter will outline the parameters of the thesis. The first part of the chapter will describe the geographical and chronological outline of the study region and cover the sources of the data, how this has been collated and presented, and the benefits and drawbacks of using and adapting this data. The second part of the chapter will then introduce and discuss the ceramic methodology which was devised for this thesis.

4.1 Defining the Study Region

To provide structure and limit the potential number of sites for study, a region was defined which encompasses the modern principality of Wales and parts of the English counties which have historically formed the Welsh Marches.

Burnham and Davies (2011) in their study of the Roman frontier in Wales and the Marches, and Davies and Jones' related study of Roman marching camps (2006), defined the limits of their study area by drawing a line from Chester in the north through Shrewsbury and Hereford to Gloucester in the south, including everything to the west of that line (Burnham and Davies 2011, 19). Following this example, the termini of my own study area are the inner Severn Estuary to the south and the inner Dee Estuary to the north, joined by a line upwards from the Severn Estuary west of Gloucester through the Malvern Hills, Shrewsbury, and the Shropshire Hills. Everything west of this line is included in the study.

It was considered important to include areas of both Wales and England within the study region to avoid imposing false divisions which did not exist in the ancient world. While boundaries are important for defining the scope of study, Wales and England are modern geopolitical constructions and though each has deep historical roots their continued use to structure academic work can have the

effect of projecting divisions back into the Roman period and the Late Iron Age where no distinction existed. This, it is argued, can serve to perpetuate the marginalisation of Wales within the broader field of Romano-British archaeology, which this thesis in part aims to redress.

The study region comprises an area of roughly 29,000 km^2 and contains a wide variety of topographic and geological environments, comprising at each extreme both coastal lowlands and a series of significant upland ranges: the Black Mountains, Brecon Beacons, Cambrian Mountains, Snowdonia, Clwydian Range, and parts of the Malvern Hills and the Shropshire Hills all fall within the study region. The wide variety in geography also produces soil and climatic variation, with Snowdonia receiving an average rainfall exceeding 3000mm per year while the lowland areas closer to the English border receive under 1000mm per year (Met Office). The soils include both good-quality agricultural soils in the lowland regions, particularly Gloucestershire and the Vale of Glamorgan, and thinner upland soils. This naturally produces an effect on the archaeology of the region. The impact of the topography of the region on the settlement patterns will be explored more fully in the following chapter.

4.2 Site Data

The primary source of data for this thesis is the Rural Settlement of Roman Britain Project (Smith et al 2016), supported by supplementary research from both published and unpublished excavation reports and secondary reading. This thesis represents one of the first doctoral works to make use of the data which has been made available through this project and as such provides an interesting test case for the secondary use of the results of Big Data projects.

4.2.1 Rural Settlement of Roman Britain Project Overview

Background and Objectives

The Rural Settlement of Roman Britain Project (RSRB) sits in a current trend of so-called 'Big Data' projects, such as the Fields of Britannia (Rippon 2015) and the English Landscapes and Identities Project (EngLaID) (Cooper and Green 2016).

These all collate and analyse very large datasets covering broad geographical and/or chronological spans.

The initial aim of the project was to evaluate the contribution of developer-funded archaeology to the study of rural settlement in the Roman period since the introduction of Planning Policy Guidance 16 (PPG 16) in 1990 (in England; PPG 16 was introduced in Wales in 1991 and followed by other Wales-specific planning policies as devolution progressed). The context for the introduction of a planning policy was the rapid increase of both urban development and mineral extraction from the 1960s onwards (Smith 2016, 1), and consequently of the necessity for 'rescue' excavation in response to the risks posed to the archaeological record. PPG 16 made the evaluation of development sites for archaeological potential and the preservation or excavation and recording of any archaeological deposits necessary by law, with the cost of any potential work to be borne by the developer.

The introduction of PPG 16 resulted in an enormous increase in the amount of archaeological work undertaken in the UK, to the extent that developer-funded excavation came to account for 89% of all archaeological intervention in England in the decade following its introduction (Fulford and Holbrook 2011, 323). This resulted in a corresponding increase in archaeological data, particularly relating to non-villa rural settlements – sites which have not always been a research priority, particularly in comparison with villa or military and urban sites. Yet though developer-funded archaeology resulted in an increase in data, this was not always readily available for study. Increased data led to increased fragmentation: only 60% of developer-funded work to 2015 reached traditional publication (Smith et al 2016, 4); unpublished reports are sometimes written up in county journals but are otherwise more often deposited as grey literature with local Historic Environment Records. The RSRB grew out of pilot projects undertaken by Cotswold Archaeology to assess the contribution that the untapped potential of grey literature could make to our understanding of the Roman period (Holbrook and Morton 2011).

Though initially focused on post-1990 archaeology conducted as a result of PPG 16, it transitioned to a greater consideration of all excavated evidence for the rural settlement of Roman Britain where the excavated evidence could contribute

to the research agenda of exploring settlement morphology, field systems, architecture, industry, people, ritual and systems (Smith et al 2016, 4). The project used both traditionally published and grey literature to create a comprehensive picture of the nature of rural settlement during the Roman period in Britain. While initially intended to cover England, the project was extended to cover Wales in 2015. The settlement evidence was entered into a database, now made available as an online resource through the Archaeological Data Service (Allen et al 2016). The database is current to December 2014 in England and March 2015 in Wales; it will not be updated continuously.

The completed database comprises c3600 records of rural sites with excavated evidence for the whole of Roman Britain, 46% of which include information derived from grey literature (Smith et al 2016, 9), though only reports with sufficient data (such as plan, chronology, and quantified finds data) to contribute to at least one of the project's research questions were included (Smith et al 2016, 10). A total of 2575 grey literature reports were collected and digitised for preservation on the ADS (*idem*). 35% of sites within the dataset are represented solely by grey literature (*idem)*.

Structure

Although modern counties were used to facilitate data collection their use can create a fragmented and artificial view of the ancient settlement pattern (Smith et al 2016, 15). Instead eight new regions were devised (Fig. 4.1). This is an approach similar to that adopted by the Fields of Britannia project which also organised its study area into nine regions based on both natural and cultural characteristics (Rippon, Smart and Pears 2015, 47). Such divisions are intended to represent a compromise between enabling the sensible assembly of data for comparative purposes and recognising and respecting the distinctive character of particular areas and landscapes (Smith et al 2016, 4).

The regions vary widely in area and in number of records (Table 4.1). The density of records in the various regions seem in part to confirm historical biases in archaeology: over 40% of all records come from the Central Belt and a further 25% from the South, while only 4% come from the North, and 3% from Upland Wales and the Marches. This is likely not solely a reflection of the true settlement

density in these areas, but a function of the basic requirement that all excavated sites contain enough evidence to further the project's research aims. This unavoidably introduces bias into the database due to the unequal rate of development and subsequently of developer-funded excavation. Areas of Wales and north and south-west England which have seen a slower rate of development and fewer large-scale infrastructure projects are therefore almost certainly underrepresented in the database. This is highlighted by the presence of sites excavated in the course of infrastructure projects such as the Brecon to Tirley pipeline (Cruse 2009) or the A55 Anglesey Road scheme (Cuttler et al 2015).

RSRB Region	Modern counties	Area	Records
Central Belt	Full: South Glamorgan, Gloucestershire, Oxfordshire, Bedfordshire, Cambridgeshire, Rutland, Leicestershire; Partial: Mid Glamorgan, West Glamorgan, Gwent, Herefordshire, Worcestershire, Warwickshire, Staffordshire, Derbyshire, Nottinghamshire, Lincolnshire, Norfolk, Hertfordshire, Buckinghamshire, Berkshire, Wiltshire, Somerset.	$32,459km^2$	1509
Central West	Full: Greater Manchester, Herefordshire; Partial: Warwickshire, West Midlands, Shropshire, Staffordshire, Derbyshire, South Yorkshire, West Yorkshire, Merseyside, Cheshire, Flintshire, Wrexham	$18,364km^2$	200
Upland Wales and the Marches	Full: Gwynedd, Dyfed, Powys; Partial: West Glamorgan, Mid Glamorgan, Gwent, Herefordshire, Shropshire	$20,466km^2$	121
Total		$71,289km^2$	1830

Table 4.1. RSRB regions relevant to the study region of this thesis (after Smith et al 2016)

Areas where excavation has been limited may be better represented by cropmark evidence, a view reinforced by Taylor's *Atlas of Roman rural settlement in England* (2007). This project similarly sought to investigate rural settlement by making use of the enormous increase in available data in the latter part of the C20th, but its inclusion criteria also allowed for earthwork, crop/soilmark, and survey (including aerial photography, artefact scatter etc.) evidence (Taylor 2007, 11). Despite covering only England, the final project incorporated c28,000

probable and definite rural settlements (Taylor 2007, 23), significantly higher than RSRB's dataset. However, earthwork and other such sites cannot be securely dated to the Roman period. Inclusion criteria in any project working with large datasets must therefore find a balance between the completeness of the record and the utility of the final dataset for the research questions established at the project's outset.
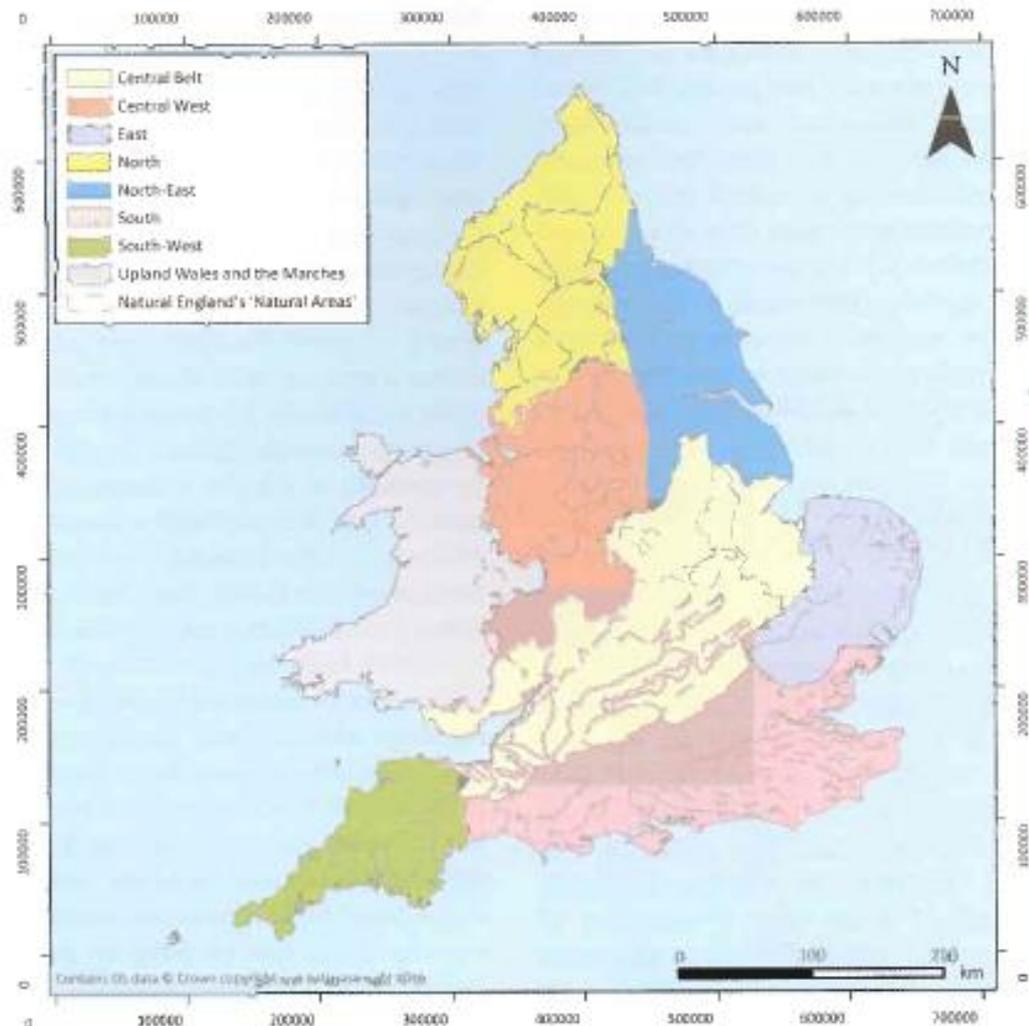
Figure 4.1. RSRB regions (Smith et al 2016, 16)

Data

In the course of the Rural Settlement of Roman Britain Project the data collected was input into a Microsoft Access database, with an entry created for each settlement. For each settlement record there were a possible c500 individual fields ranging from settlement type and morphology, to pottery, finds, and zooarchaeological data. Significant categories are explored in more detail below.

The database was made publicly available through the Archaeology Data Service (Allen et al 2015) (Fig. 4.2).

The RSRB online database allows users to download the full datasets which make up the project database. These can then be used individually in Microsoft Excel or structured in Microsoft Access as a full database. Results gained through the site's query function can be downloaded as .csv files which can be opened in Microsoft Excel.

Figure 4.2. The Rural Settlement of Roman Britain Project (Allen et al 2015)

To conduct the analysis for this thesis the full complement of RSRB datasheets were downloaded as .csv files. These were converted into .xlxs files and a core database was created in Microsoft Excel using the Site Data sheet for those sites which fall within the geographical remit of this thesis. This master sheet was then used to draw information from other sheets using VLOOKUP formulas. Core and supplementary site data were also extracted, and all data regarding material culture. However, as the focus of this thesis is on material culture, the zooarchaeological and bioarchaeological data were not incorporated into the thesis database. The distribution maps used throughout this thesis were created in ArcGIS using a basemap made available by Edina Digimap.

4.2.2 Defining the Dataset

Number of Sites

A total of 276 sites are included in the study area of this thesis in the RSRB database (Fig. 4.3). The study area incorporates records from three RSRB regions with varying characteristics (Table 4.2). The Central Belt region represents nearly 40% of the total number of records despite covering a relatively low proportion of the overall study area. This is consistent with the broader pattern across Britain as described above.

Regions	Number of Sites
Central Belt	105
Central West	50
Upland Wales and the Marches	121
Total	276

Table 4.2. All sites in study region

However, not all sites within this population are defined solely as rural settlements. The RSRB uses two levels of site categorisation, Major (such as Rural Settlement, Nucleated Settlement) and Minor (such as farm, villa). Any sites which did not fall under the Major Site Type category of Rural settlement or Rural landscape categories were excluded from analysis.

183 sites were considered appropriate for inclusion within the study group (Table 4.4), and while the distribution to a certain extent follows the broader patterns of

total site distribution the removal of non-rural sites makes the distributions somewhat more evenly weighted with a significant minority (43%) of sites now coming from the Upland Wales and the Marches region and 36% from the Central Belt region (Fig. 4.4).
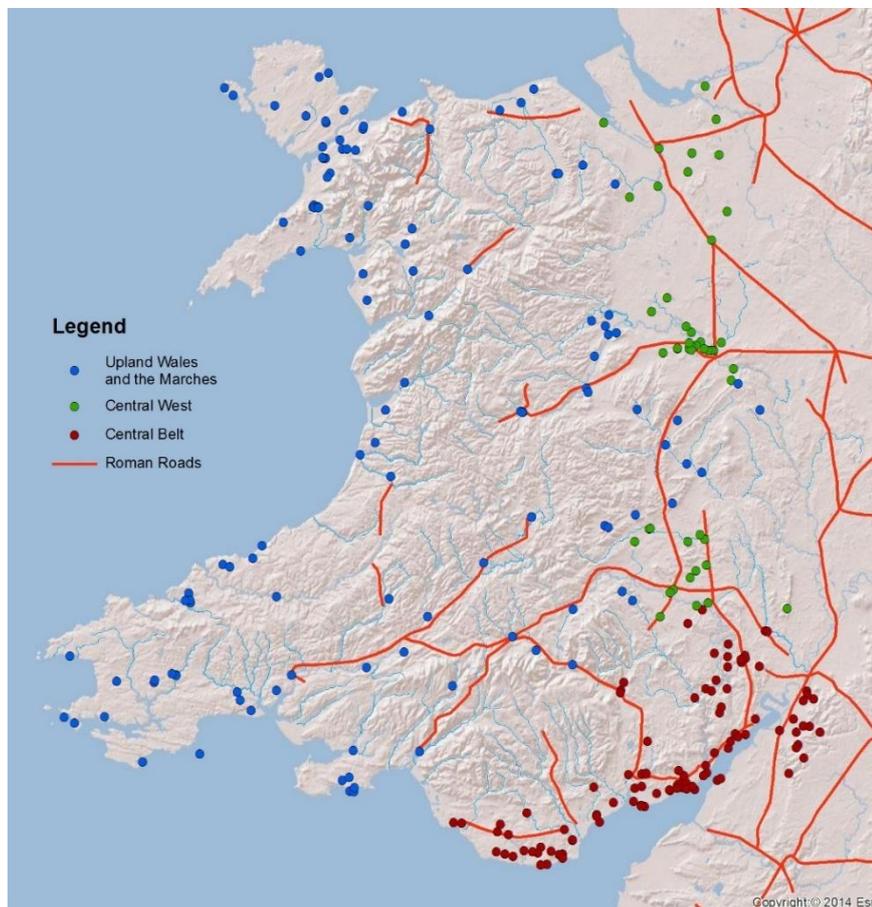
Figure 4.3. Distribution of all settlements in the study region

Major Site Type	Number of Sites
Communications	4
Industry	46
Military	29
Nucleated settlement	46
Religious ritual and funerary	35
Rural landscape	21
Rural settlement	175
Total	356

Table 4.3. Sites by Major Site Type[1]

---

[1] Numbers may appear distorted as sites can be included under multiple categories
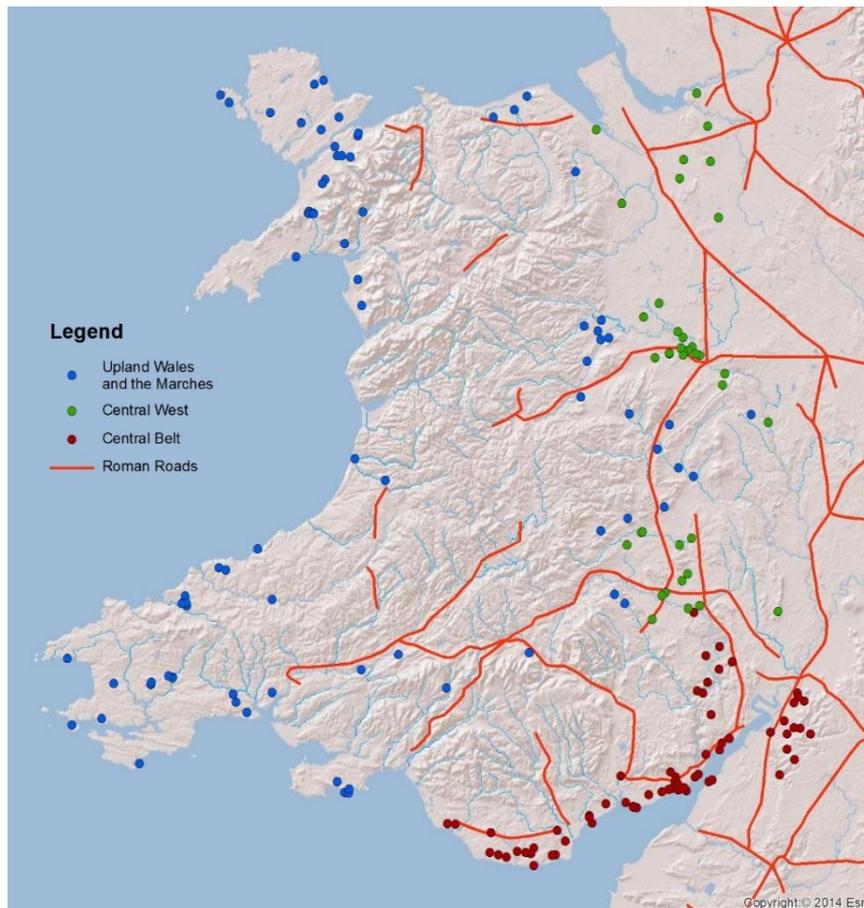
Figure 4.4. Distribution of all settlements included within the thesis analysis

Row Labels	Number of Sites
Central Belt	65
Central West	38
Upland Wales and the Marches	80
Total	183

Table 4.4. Number of sites by region

Other Data Sources

Datasets from other projects have been used to supplement the analysis of the RSRB in certain chapters, including the Welsh Roundhouse Project (Ghey and Johnston 2007) and the Iron Age and Roman Coins in Wales dataset (Guest and Wells 2007). The data for both projects is also available for download at the ADS. Data from the Portable Antiquities Scheme has also been used for comparative distributions in Chapters Six and Eight.

For sites in Wales, information has also been used from the RCAHMW's online resource Coflein, and from the online database Archwilio, which makes available the HER records from the Welsh Archaeological Trusts.

4.3 Ceramic Methodology

4.3.1 Introduction

Pottery is one of the most abundant forms of evidence available to archaeologists. It is found on almost all sites and indeed is sometimes the only form of material culture present on a site, and this is particularly true for sites and regions which are generally materially poor. Pottery assemblages therefore present a rich source of material for analysis. The quantification of pottery assemblages provides numerical data which allow the proportions of different wares and forms within an assemblage to be analysed. Through the quantification and analysis of assemblages, wider research questions can be explored. Form and fabric analysis can help to explore what activities took place at a site, or the extent to which sites were integrated into the wider local, region, and national networks of exchange. At the level of the individual site this is valuable information, and when sites can be compared to each other a ceramic profile can be established which allows for the exploration of such issues on a much broader scale.

This section will therefore explore the process of devising a methodology suitable for conducting such inter-site analysis on the ceramic assemblages from Wales and the Marches. It will examine some of the methodological problems encountered with ceramic analysis and present the methodology designed for this study.

4.3.2 Ceramics and the Rural Settlement of Roman Britain Project

Though the RSRB database does include information on pottery, it does so in a limited way. Due to the issues associated with the collection of data for intersite analysis, data is not available for all sites and has only been collected for a limited range of fabrics. For quantification, the RSRB relies on sherd numbers and assemblage weight. Within the dataset used for this thesis, data for sherd count is available for 61% of the total number of sites, and assemblage weight for 22% (Table 4.5).

Quant Type	Row Labels	Number of Sites	%
Sherd Number	Central Belt	38	58
	Central West	24	63
	Upland Wales and the Marches	50	63
	Total	112	61
Assemblage Weight	Central Belt	17	26
	Central West	14	37
	Upland Wales and the Marches	9	11
	Total	40	22

Table 4.5. Number of sites for which pottery data is available within the RSRB database

Where the information has been made available, the sherd count for amphora, mortaria, and samian wares have also been provided. The remainder of the fields in the database record categories of presence and absence, including samian, mortaria, or amphorae, and additionally of religious vessels (such as paterae) and pottery wasters (indicating the production of pottery at the site). Though the RSRB comprises an invaluable data source, the lack of detail with regards to fabrics apart from samian ware, or forms apart from amphorae and mortaria means that the potential for analysis is limited. A methodology for inter-site comparison which can capture information about both form and fabric and incorporate chronological data from a disparate set of sites was therefore required.

4.3.3 Inter-Site Comparison and Previous Methodologies

Conducting inter-site comparison at a regional level demands a methodology that can be applied to assemblages of varying size and quality from a range of different site types excavated under different conditions. Unsurprisingly, there are significant obstacles to conducting such comparisons, of which perhaps the most complex to overcome is the lack of standardisation across pottery reports. The lack of standardisation in pottery reports is a long-standing issue. In an analysis of the market models of the Roman economy in Northamptonshire Griffiths (1989) notes the difficulties encountered in locating suitable assemblages for comparison and expresses surprise that 'exhaustive enquiries revealed that nowhere on the continent nor in Britain could all these criteria be satisfied'

(Griffiths 1989, 67). It is likely that were the same research to be conducted at the present time the same problems would be encountered.

The problems of standardisation in quantified pottery assemblages seem particularly pronounced when considering rural assemblages and for this reason much previous work has marginalised or largely omitted rural sites. The difficulties encountered by the Rural Settlement of Roman Britain Project in their efforts to incorporate pottery into the project's database are outlined in a recent paper (Timby 2016) presented at a workshop marking the project's completion, and serves as a summary of the various difficulties encountered by those attempting to work with ceramic assemblages. A range of issues are identified, of which those listed below have been of particular importance for the development of the methodology within this study:

- Failure to use the National Roman Fabric Reference Collection or other reference collections to create consistency
- No overall form classification series
- Varying standards and types of quantification within and between reports
- Finewares (e.g. samian) or other specialist products not quantified alongside other wares

(Timby 2016, 2)

These issues are explored in detail below.

Form and Fabric

The lack of consistency in the identification of fabrics is due to a range of factors, such as the region in which the site lies and even the experience of the pottery specialist undertaking analysis. Many regions have their own regional ceramic fabric series, making the issue administrative as well as academic. In addition, the development of the discipline over the course of the 20th century has led to the codification of an increasing number of fabric series. Black Burnished Ware, for example, was described by Gillam in the 1970s (Gillam 1976). In earlier reports the fabric is known by a range of names, such as 'coarse fumed ware' or Durotrigan Ware, simply by its fabric description. A similar process occurs in South East Wales with the recognition of Caerleon Ware (previously termed 'Legionary

Ware' [Webster 1992, 114]). Earlier assemblages therefore need to be re-examined before they can be productively compared to others.

Attempts to provide a standard framework for the identification of fabrics have been undertaken. The production of a National Roman Fabric Reference (Tomber and Dore 1998) and the availability of this resource as an online resource provides a framework into which fabrics from sites can be incorporated, and many recent excavations do make use of this in describing fabrics. The Study Group for Roman Pottery has also produced a *Standard for Pottery Studies in Archaeology* (2016) in order to provide a framework for standard practice in recording and analysis of ceramics.

However, other reports still refer to fabrics in terms of regional or even site-specific series and though these attempts at standardisation may have an effect in the future, older sites will still require some level of re-examination in order to fit their assemblages into the framework. Sometimes this is possible from the fabric descriptions provided in the site reports. However, for many sites the only means of correctly identifying fabrics would be re-examination of the archival material itself – a process which both time-consuming and requiring the input of a pottery specialist.

Similar problems affect the identification of the various forms. While type series have been produced for some of the most widely-known and well-understood fabrics (such as Gillam 1976 for Black Burnished Ware), other fabrics lack the same level of detail.

Quantification

There are also a wide range of methods of quantification used between site reports. These may include sherd count, sherd weight, Estimated Vessel Equivalent (EVE), or Minimum Number of Vessels (MNV). It is therefore difficult to conduct inter-site comparison between methods.

Site Formation and Recovery Processes

Further complications arise from the varying degrees of detail with which sites are both investigated and subsequently published. Many of the sites under

consideration have not been fully published and pottery information is only available in brief form in journal articles or evaluation reports. Though many grey literature reports have been uploaded to the Archaeology Data Service (ADS) and are linked with the Rural Settlement of Roman Britain Project (RSRB) archive, the brevity of many interim or unpublished reports mean that pottery data is limited.

However, more fundamentally, the importance of both natural and cultural formation processes in the construction of site assemblages must be recognised (Schiffer 1983, 676). The processes which act upon ceramics are increasingly emphasised in the construction of a ceramic assemblage (Pena 2007). It should therefore be recognised that the excavated assemblage does not fully reflect the life assemblage of a site, and that it is itself a complex body of evidence which is altered and acted upon at every stage of its composition, from initial use to post-excavation processes.

4.3.4 Developing a Methodology

Some of the deficiencies of the published data could be overcome by re-examining the site archive. The specialist ceramic report is usually deposited within the archive and contains the full ceramic profile of the site, including sherd count, sherd weight, rim count etc. This can then be used to create a standardised method of quantification, even if the method in the published report is unsuitable.

However, with 183 sites included within the study group and pottery comprising only one of the artefact categories under consideration it was not feasible to consult the site archives for each site within the time constraints of PhD work. A different method of quantification therefore had to be developed which could utilise the information that was publicly available. It was hoped that the method devised could be carried forward and be made widely applicable for other researchers working in areas where the format of site reports means that inter-site comparison is difficult, and that the method would therefore be able to save time and resources.

4.3.5 Aims and Objectives

For any research project, the collection of data and the construction of a methodology is dependent on the research questions with which it hopes to engage. For the purposes of this thesis the ceramic evidence will primarily be used to explore the economy of the region and the social practices of rural settlements. The method should therefore seek to record:

- The range of fabrics used at rural settlements
    - In order to understand the extent of trade within the region
- The range of forms used at rural settlements
    - In order to understand the ways in which pottery was used at sites
- The quantities of pottery used at rural settlements
    - As a proxy for the extent of trade throughout the region

These research questions defined the parameters of the methodology, which therefore had to accommodate fabric and form data and information about the quantity of pottery at rural sites.

As explored above, sites were identified from the Rural Settlement of Roman Britain Project database, archived at the Archaeology Data Service (Allen *et al* 2015). 183 rural sites met the criteria for inclusion within this study and upon examination of the available publications it quickly became apparent that there was a significant variation in both the quantity and quality of the data available for study. The scale and circumstances of the excavations varied widely, many comprising rescue or developer-led excavations in which the excavated area was small and the pottery assemblage correspondingly limited. Some sites had been excavated but were either unpublished or published only in short form in bulletins such as *Britannia* or *Archaeology in Wales*. Grey literature reports were often superior to these shorter publications in providing basic quantification. Sites which had been excavated earlier in the 20th century often provided full pottery reports but did not provide sherd or weight count, and it is further likely that many of these sites were subject to selective recording and retention of both diagnostic sherds and certain wares, especially samian ware.

A methodology therefore had to be developed that could incorporate the maximum number of sites to create a broad base of information and which could be derived from the published data which was already available. The most

pressing of these concerns was to determine a method of quantification that could be meaningfully applied to a wide range of secondary assemblages.

4.3.6 Methods of Quantification

A wide variety of methods of quantification can be applied to ceramic assemblages. Sherd count, sherd weight, Estimated Vessel Equivalent and Minimum Numbers of Vessels are all commonly used in pottery reports, yet the use of such a disparate array of methods means that it is difficult to meaningfully compare one assemblage to another.

Sherd count and sherd weight are used at some sites, but rarely unite form and fabric data in a way that makes the information suitable for the research questions outlined as part of this thesis.

Estimated Vessel Equivalent (EVE) is widely used in modern ceramic reports. EVEs are calculated using a part of the vessel which can be measured as a fraction of the whole, such as rims or bases. In order to determine the EVE for inter-site comparison the rim-count and the percentage of the whole vessel which this represents are needed, but many publications do not provide this information and it is therefore not possible to calculate the EVE without returning to the archival material. Furthermore, the method may be unsuitable for very small assemblages, or for vessels which do not fit into a well-defined type series.

Minimum Number of Vessels (MNV) counts describe the minimum number of original items which can be represented by the sherds present in the archaeological record. Voss and Allen (2010) describe two different methods by which a MNV count can be obtained: quantitative and qualitative. Quantitative MNV counts are based on measurements of diagnostic elements such as rim counts, bases, or handles – in a similar fashion to EVE counts. Such counts are replicable and, the authors note, particularly useful for quantification of mass-produced ceramics where the characteristics of vessels are standardized and well known. By contrast, qualitative MNV counts are subjective and based on an assessment of sherds which are likely to represent a single vessel. The subjectivity of this approach is both its strength and its weakness: while the method is more

malleable in application, it is less replicable across ceramic groups and is dependent on the analyst who undertakes the grouping (Voss and Allen 2010, 1).

4.3.7 Defining the Methodology

The latter form of MNV was therefore chosen as the method which could fruitfully incorporate the greatest number of sites from this study region into the analysis from the available data. The MNV for each assemblage has been calculated from an adaptation of the method established by Sian Thomas in her work on Roman Devon and Cornwall (pers comm), following the guidelines further outlined by Voss and Allen (2010).

The excavation reports for the sites have been examined in detail and the information has been extracted and input into a database using Microsoft Excel. Unique sherds have been allocated a Minimum Vessel Number (MNV) of 1. Illustrated sherds have also been allocated an MNV of 1 as these are also unique vessels, though it should be noted that the use of illustrated vessels does privilege unusual forms. In some cases no quantification was given within the excavation report, but where the presence of a vessel was indicated (for example, as part of a context description), the information has been recorded and the appropriate MNV assigned (e.g. 1, 2). Where the excavation report indicated the presence of more than one vessel the figure given has been input or, if no figure was provided, an MNV of 2 has been preferred – so, for example, where a simple description of 'vessels' or 'bowls' is given this has been input as a vessel with MNV of 2. The data from the excavation reports has been allocated to 29 main categories. These are outlined below:

	Heading	Description
1	SITE	e.g. Whitton
2	Modern County	e.g. Glamorgan
3	ADS Number	The number assigned by the RSRB database
4	RSRB Region	The RSRB region in which the site falls e.g. Central Belt
5	x_ref_map	Northing
6	y_ref_map	Easting
7	NO IN VOL	Catalogue/ilustration number where appropriate
8	AREA	Area of the site from which the pottery comes
9	CONTEXT	Numerical/descriptive as given.

Table 4.6. Headings from database regarding the site, location and contextual data

1 – 6. This information is used to tie the site and the pottery data back to the Rural Settlement of Roman Britain Project database to ensure consistency between its database and my own. The inclusion of coordinates allows the data to be plotted spatially across the region.

7 – 9. The documentary categories retain information from the excavation report and enable closer analysis where possible, though this information is not available for all sites.

	Heading	Description
10	BASIC FORM	e.g. Jar
11	SUBFORM	e.g. Wide-mouthed jar
12	UNCERTAIN	Functional category: Y/N
13	LIQUID HOLDERS	Functional category: Y/N
14	DRINKING VESSELS	Functional category: Y/N
15	TABLEWARE	Functional category: Y/N
16	UTILITARIAN	Functional category: Y/N
17	RITUAL	Functional category: Y/N

Table 4.7 Headings from database recording form data and function

10. The form descriptions have been simplified to allow for the greatest possible number of vessels to be incorporated into the analysis. Where identification of vessels is uncertain the description has been preserved in the database with a marker (e.g. Beaker/Jar) but will not be included in the final analysis except as part of one of the broad functional categories which will be outlined below. The broad form categories which have been used are as follows:

Basic Form		
Amphora	Dish and shallow bowl	Plate
Beaker	Flagon	Platter
Bowl	Incense cup	Pot
Colander	Jar	Storage Jar
Cooking Pot	Lid	Strainer
Counter	Mortarium	Tankard
Cup	Mug	Tazza
Dish	Nozzle	Unidentified

Table 4.8 Basic form attributions as applied within the database

The forms have been preserved from the excavation report as given, although there is some overlap between forms (e.g. Jar / Storage Jar). Additionally, certain forms are specific to fabric types e.g. dish/shallow bowl is a designation applied to certain classifications of samian ware, particularly Dragendorff 18/31.

The only instance where the original designation has been changed is where vessels are referred to as 'olla'. This is a term which was used in the early 20th century to refer to cooking pots and jars and derives from the Latin term for a cooking pot (Varro 5.108). However, it is now obsolete outside Mediterranean archaeology. Any vessels described as ollae have been input into the database as Cooking Pot / Jar, though 'Olla' has been preserved in the subform field, as below.

11. Subforms have been preserved where provided within the report, for example, 'Wide-mouth jar', 'Carinated bowl'. However, these distinctions have not been used for analysis.

12 - 17. In order to incorporate those vessels whose form is ambiguous, the vessels have also been allocated into functional categories. These have been adapted from the methodology used for the coarse pottery at Usk (Manning 1993) and modified using Pena's (2007) definitions to allow for the greatest number of vessels to be incorporated into the analysis.

Category	Description
Liquid Holders	Flagons
Drinking Vessels[2]	Cups, beakers, and tankards
Tableware	Plates, platters, dishes, and bowls in fine and coarse fabrics
Kitchen/Storage[3]	All jars, cooking pots, storage vessels, colanders and mortaria.
Ritual	Tazzas, incense holders.
Uncertain	Any entry where the vessel form is uncertain (e.g. those listed as jar/bowl etc) or has not been identified in the excavation report.

Table 4.9. Functional categories applied within the ceramic database (after Manning 1993)

---

[2] Greene (1993) includes small, bead-rim jars in this category but due to the simplification of categories for the purposes of this study all jars have been categorised under Kitchen/Storage

[3] These categories were separate in Greene's analysis but have been amalgamated here to encompass some of the limitations of the ceramic methodology used within this study, such as the classification of all forms of jar including storage jars as 'Jar'.

Amphorae have been excluded from this analysis as they are more closely associated with the transport of materials rather than storage in place.

Heading		Description
18	COARSE/FINE	Categorisation by broad fabric type. Amphorae/Mortarium also captured under this heading
19	FULL FABRIC DESCRIPTION	Fabric description as provided by the pottery report
20	FABRIC	Short description e.g. Grey
21	FABRIC - SUB	Further description if possible e.g. Grey - South Wales Greyware
22	TYPOLOGY	If applicable e.g. Dragendorff 31
23	DECORATED/PLAIN	For Samian ware

Table 4.10. Headings from ceramic database for fabric data

19 - 20. The original fabric description as given within the excavation report has been preserved in the category 19. The fabrics in use have then been simplified to allow broad analysis incorporating the largest possible number of vessels. The fabrics have been defined as follows:

Coarse Wares	
Black Burnished Ware	Other
Grey	Savernake Ware
Late Roman Shelly Ware	Severn Valley Ware
Malvernian	South West White Slipped Ware
Mancetter-Hartshill	Verulamium Ware
Fine Wares	
Caerleon	Other
Continental Imported Fineware	Oxfordshire
Nene Valley Ware	Samian
New Forest Ware	

Table 4.11. Coarse and fine fabrics categories used within the database

21. For both coarse and fine wares outlined above further distinctions have been retained for more detailed analysis, for example:

Grey - Subcategory	
Grey - Caldicot	Grey - Local
Grey - Llanedeyrn	Grey - South Wales Grey Ware

Table 4.12. Subfabrics of Grey wares

In this case, South Wales Grey Ware is a fairly recent designation for the locally produced pottery and identifying South Wales Grey Ware as a distinct entry in the database is therefore more likely to track changes in specialist practice than any true trend in the fabric use. However, given the broad nature of Grey wares as a classification it seemed prudent to preserve these distinctions.

Closer distinctions have also been preserved for finewares. These are particularly useful for samian wares and allow for closer analysis of the source of the material where given (Table 4.13).

Samian - Subcategory	
Samian - South Gaul	Samian - Central Gaul - Les Martres de Veyres
Samian - South Gaul - La Graufesenque	Samian - East Gaul
Samian - Central Gaul	Samian - Aldgate-Pulborough
Samian - Central Gaul - Lezoux	Samian - No Further Detail

Table 4.13. Samian fabric categories

Preserving these distinctions also helps to refine the chronological analysis for this fabric.

22 - 23. These headings primarily apply to samian wares, but where the form type is given for any vessel it is recorded here.

Heading		Description
24	DATE	Date as provided by the pottery report
25	FABRIC DATE	Simplified date e.g. C2 - C3
26	EARLY 75-150	Y/N
27	MIDDLE 150-300	Y/N
28	LATE 300+	Y/N
29	QUANT	Unit of quantification e.g. 1

Table 4.14. Headings for date and quantification

24 - 25. These dates correspond to those provided by the excavation reports and by the general fabric type where provided. The fabric dates have primarily been taken from Tyers (1996).

26 – 28. Vessels have been assigned to these categories based on fabric and typology. The categories correspond to those used for the settlement data and to

allow for comparison. Where no description has been given the full date range of the fabric has been assigned, though in some cases – particularly in the case of grey wares - this has meant assigning the full date range of the Roman occupation. Unidentified fabrics have not been assigned a date range as the reports do not specify whether the date given is of the fabric or its context. Similarly, calcite-gritted and grog-tempered fabrics which are known from both extremes of the study period in the LIA and early post-Roman periods, have not been assigned a date except where further clarification has been given in the excavation report.

The date ranges have been used elsewhere with regards to settlement evidence, and the same categories are used here in order to standardise the approach across all evidence types.

29. The unit of quantification in the case of this method is the vessel, as explored above. A numerical value is given as appropriate.

4.3.8 Strengths and Weaknesses

The strength of this method is that it allows for the inclusion of a broad range of material from excavations of widely differing age and quality. However, there are inevitable issues with processing secondary data in this way. The primary concern is that the method tends to underestimate the number of vessels at a site. However, it is less misleading to underestimate the number of vessels than to overestimate them.

The method is also stronger at producing patterns of distribution than densities. This is due to the factors explored above, such as taphonomy and site formation, and excavation and post-excavation processes which affect the ceramic record. However, in a region where so little comparative work has been attempted on rural settlements and rural ceramic assemblages, this study represents a new approach to the study of economic and social practice in the region.

4.4 Summary

The ceramic methodology used within this study is based on MNV and is designed to incorporate the largest number of sites possible. No such analysis has previously been attempted for Wales and the Marches and therefore, despite the acknowledged weaknesses associated with the method, the methodology outlined above demonstrates that there is valuable information to be gained from inter-site analysis of ceramic assemblages in the region.

With the database and methodology in place, this approach can be extended over the whole region of Wales and the Marches. The incorporation of more data will allow for the identification of more trends and the building of a ceramic profile for the region, and subsequent chapters will expand the approach outlined in the pilot study to explore questions of economic integration and social practice at rural sites within the study area. The distribution of different wares and forms will be plotted using GIS.

5. Data Overview

This chapter will provide an overview of the core data used in all further analysis within this thesis. It will provide definitions for and give a broad introduction to the major site types and finds within the Rural Settlement of Roman Britain Project and their distribution throughout the region in order to provide a high-level view of the overall pattern of settlement and material culture. This will form the basis of closer study and analysis in subsequent chapters.

The chapter will be split into three sections derived broadly from the research questions outlined at the start of this thesis, and will explore:

- Landscape
- Economy
- Personal Identities and Socio-Cultural Practices

The first section will cover categories of settlement within the RSRB database. It will provide definitions for each of the settlement types and give an overview of settlement patterns including form, size, and topography, noting regional differences in distribution.

The second section will introduce the categories of evidence which will be used in subsequent chapters to analyse the economic basis of settlements in the region. It will give a broad overview of the distribution patterns of coins and pottery, and of a selection of structures at rural settlements relating to their economies including corndriers and evidence of metalworking.

The third section will introduce evidence from small finds and is structured by the Crummy categorisations of small finds (Crummy 1995). It will introduce and provide broad distribution patterns for the categories of small find which will be used in Chapter Nine to explore in greater depth questions of personal identity and social practices within the study region.

This main function of this chapter will be to introduce the dataset and describe the patterns observed through high-level analysis of the RSRB data. Case studies of individual sites will be used to illustrate key points and concepts with reference

to the research questions outlined above, and the general patterns identified will provide a background for a closer analysis. The research questions outlined as part of this chapter will provide the structure for the following three chapters

5.1 Settlement Types

The terminology used to describe morphology of rural settlements across the UK is highly variable (Allen and Smith 2017, 17), especially in older reports and regional surveys describing architecture or morphology particular to certain parts of Roman Britain (e.g. rounds in Cornwall). To simplify the presentation and analysis of the data this study has adopted the definitions provided by the RSRB.

This section will define the types of settlement which have been included within this thesis, and also explore the patterns of settlement which occur within each category. Case studies will be used to elaborate on some of the definitions involved and the issues with assigning settlements into categories.

5.1.1 Excluded Settlement Types

The removal of non-rural settlements demonstrates that a significant portion of the sites from Upland Wales and the Marches are vici. These have been included in the RSRB database primarily to fill in gaps in the settlement record in the North and Upland Wales and the Marches regions where other excavated settlements are sparse (Fig. 5.1). However, the purpose of this thesis is to examine rural settlements and, though civilian in nature, vici are nevertheless intrinsically associated with the military - perhaps particularly so in this region where vicus settlements rarely survived the removal of the fort itself, indicating that the primary driver of nucleation was the military. Classing such settlements with other, self-sufficient domestic sites therefore obscures the patterns of rural settlement.

Other nucleated settlements including small unwalled towns (such as Cowbridge [Glamorgan-Gwent]) have also been excluded, as have sites whose primary function is religious (such as Uley [Gloucestershire]) or funerary (such as Liswerry [Glamorgan-Gwent]).

Site function is not always clear, particularly at sites which have been the subject of limited intervention and which are subsequently only written up as grey literature. This is particularly true of sites where the form or function changed over time. Such ambiguities are difficult to capture, particularly so in a study which relies on the simplification of classificatory categories in order to capture a broad base of data.
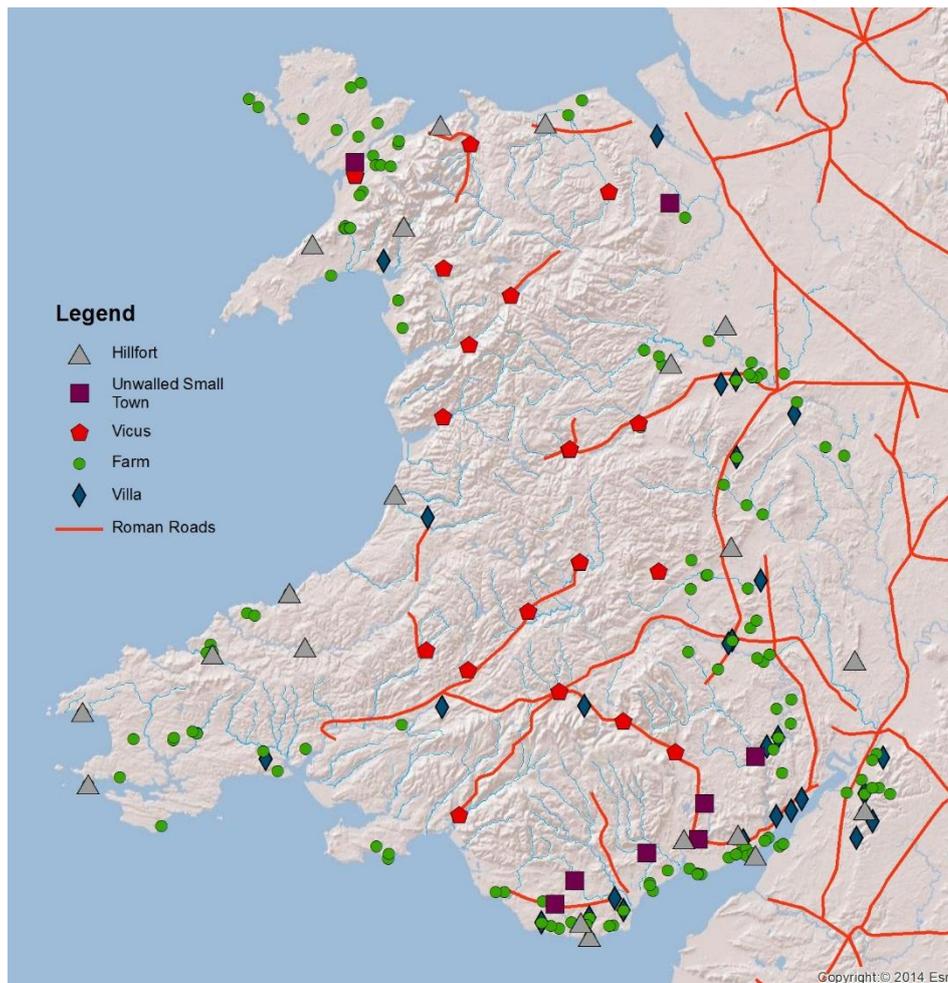
Figure 5.1. Distribution of site types in the study region

5.1.2 Farms

Farms are defined in the database as a single-unit domestic settlement (Smith et al 2016, 20) whose function is primarily agricultural, though evidence which suggests other activities is not unusual (such as metalworking). 137 farms are present within the dataset, with the majority located in the Upland Wales and the Marches.

Region	Number of Sites
Central Belt	48
Central West	27
Upland Wales and the Marches	62
Total	137

Table 5.1. Number of farms by region

Farms are the predominant settlement form within the study region, and their distribution accordingly reflects the general pattern of distribution (Fig. 5.1). Their topographical distribution favours plains/plateaux (34%) or river valleys (31%), a preference likely linked to favourable soil and other conditions for the agricultural exploitation which formed the basis of these sites' economies. This could also, however, reflect a modern preference for these locations leading to a bias in the level of development and developer-led excavation.
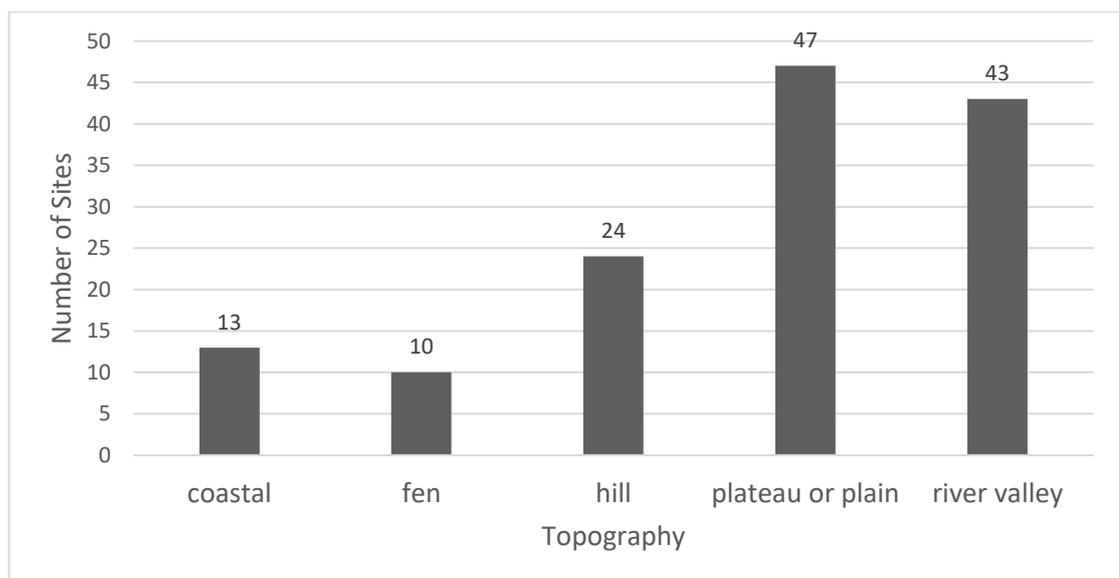
Figure 5.2. Topography of farm sites

Size

Settlement size could be ascertained for 71% of farm sites, and then only with limited precision. Of these the majority (67%) were under 3 ha. Only a single site over 9 ha is present (Uley Bury (Gloucestershire); c. 13ha total) but this is later reoccupation of a large Iron Age hillfort site and the extent of the Romano-British occupation is not fully known (Evans 2005, 10) (Fig. 5.2). The numbers generally

are too small to discern distinct patterns of distribution, but the medium sites are (with a single exception) located towards the south-east.

Settlement Size	Number of Sites
large (9+ ha)	1
medium (4 - 8 ha)	4
small (<1 - 3 ha)	92
uncertain	40
Total	137

Table 5.2. Number of farms by size
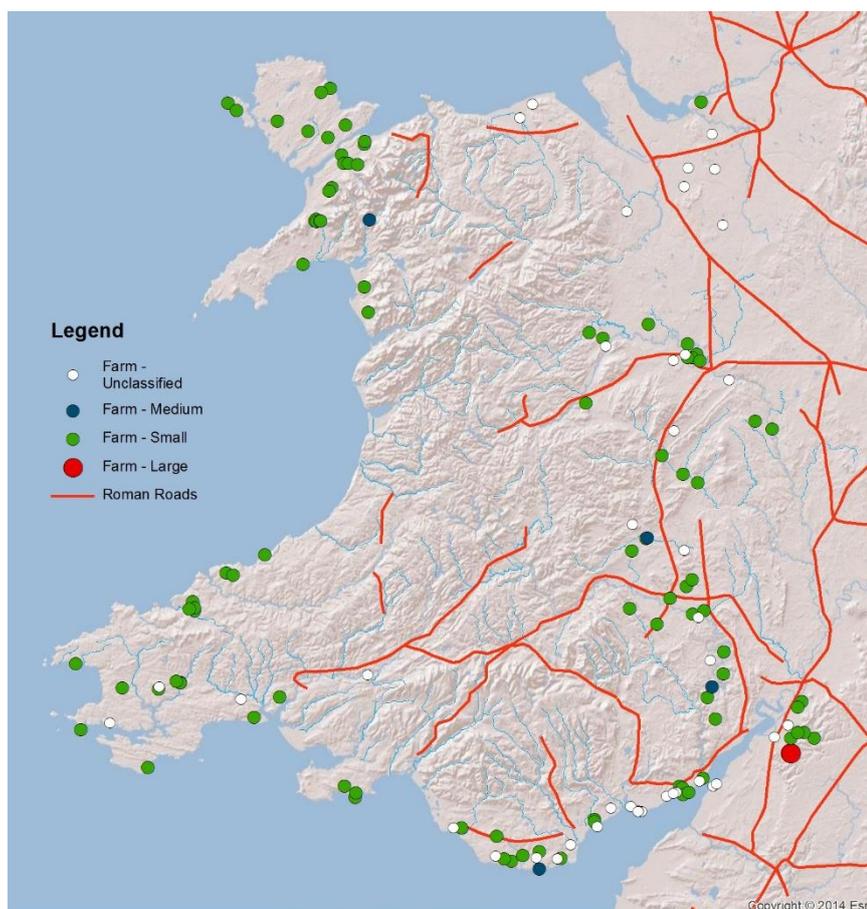
Fig 5.2. Distribution of farms by size

Form

To further standardise the language associated with settlement morphology, the RSRB also categorises rural settlements by an internally-defined system of complex, enclosed, and unenclosed sites. The categories and their distribution within the region are explored below (Fig. 5.3).

Settlement Form	Number of sites
Complex	1
Enclosed	66
Unenclosed	5
Unclassified	64
Total	136

Table 5.3. Settlement form and number of sites

Unenclosed farms

These are defined as farms where there does not appear to be any boundary enclosing the main domestic core (Smith et al 2016, 23). Only five unenclosed sites fall within the study area (Table 5.3). The difficulty in identifying such sites without the more obvious markers associated with enclosed rural settlements (such as earthworks) means that the distribution of these sites tend to focus on regions of unusual preservation such as Stackpole Warren (Dyfed), which lies in an area of blown sand (Benson et al 1990), or Goldcliff West (Glamorgan-Gwent), which lies in an intertidal wetland zone (Bell et al 2000). Unenclosed settlements are also often chance discoveries as a result of infrastructure projects, such as Cefn Cwmwd (Gwynedd) and Melin y Plas (Gwynedd), both of which were discovered during the A55 Anglesey road scheme (Cuttler et al 2012). It is therefore likely that the number of firmly-identified unenclosed settlements significantly underrepresents the true number of such settlements, particularly as unenclosed sites may later become enclosed (see Bush Farm, below). Only 86 unenclosed farms have been identified throughout the whole RSRB representing just 3% of the total number of settlements (see Smith et al 2016, 18, Table 2.1). Four of the open farms are under 3ha; the extent of the fifth (Goldcliff West) could not be determined.

Enclosed farms

These are defined as farms where all or the majority of the domestic and associated activity takes place within one or two enclosures, but where space is not further subdivided to a significant degree (Smith et al 2016, 23). Enclosures may be formed by ditches, walls, palisades or other constructions.
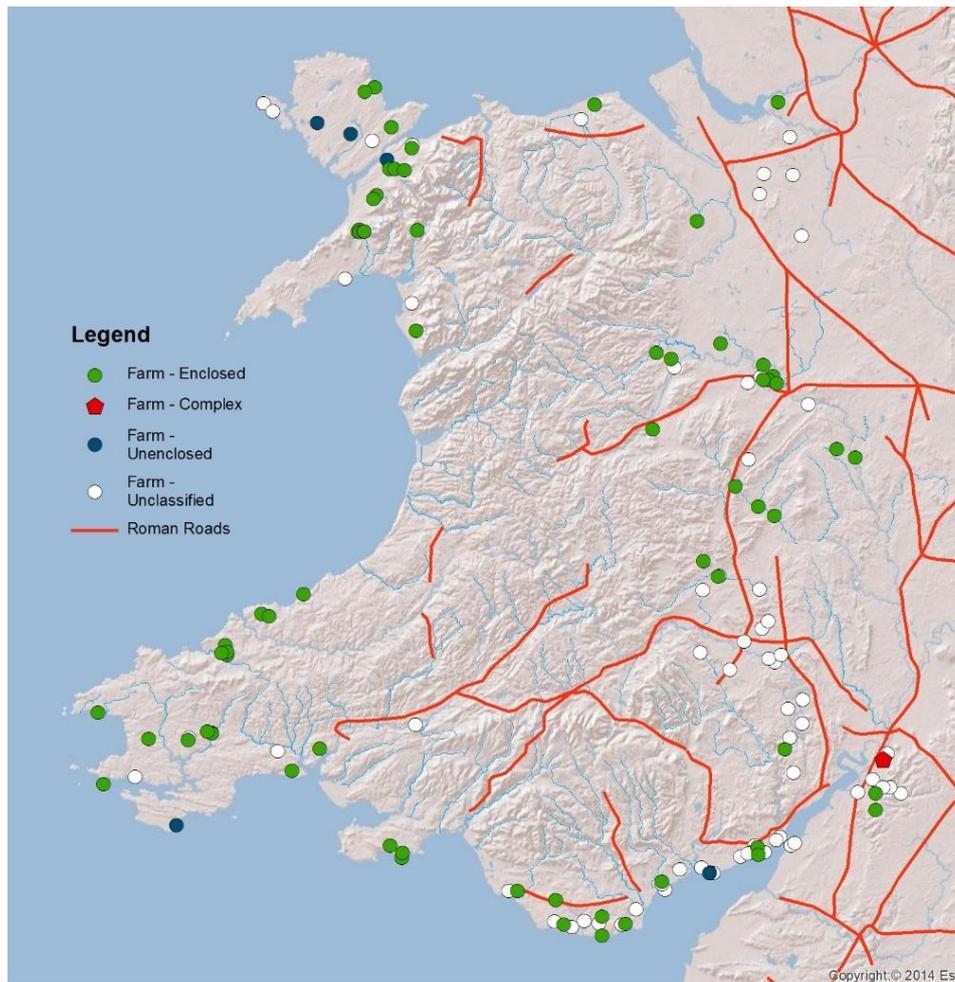
Figure 5.3. Distribution of farms by settlement form

Enclosed farms comprise 48% of all farms, and 92% of all farms whose form could be identified. Their distribution follows the general distribution pattern for the region. Again, the majority of enclosed farms are small (91%) with only two sites between 4-8ha. The problematic nature of the occupation at the single large site (Uley Bury [Gloucestershire]) has been discussed above.

Enclosed sites are defined here as a single category, but considerable variation exists between various forms of enclosure. There are significant morphological distinctions between, for example, Dan-y-Coed (Dyfed) and Cefn Graeanog II (Gwynedd), which are explored below.

- ***Dan-y-Coed, Dyfed***

Dan-y-Coed was excavated as part of the Llawhaden Project, a series of investigations focused on small enclosed settlements in west Wales (Williams and

Mytum 1998). The site comprises an oval defended enclosure (Fig. 5.4) with multiphase occupation spanning the Late Iron Age to C3rd, with at least five roundhouses and associated four-post structures, and a rectangular building date to the 2nd century. Dan-y-Coed also features an embanked approach which may have been used to control the movement of animals. Several other sites in the region are associated with similar outworks, resembling the banjo enclosures of southern England and sometimes called concentric antennae enclosures (James 1990). These may represent a regional subtype.
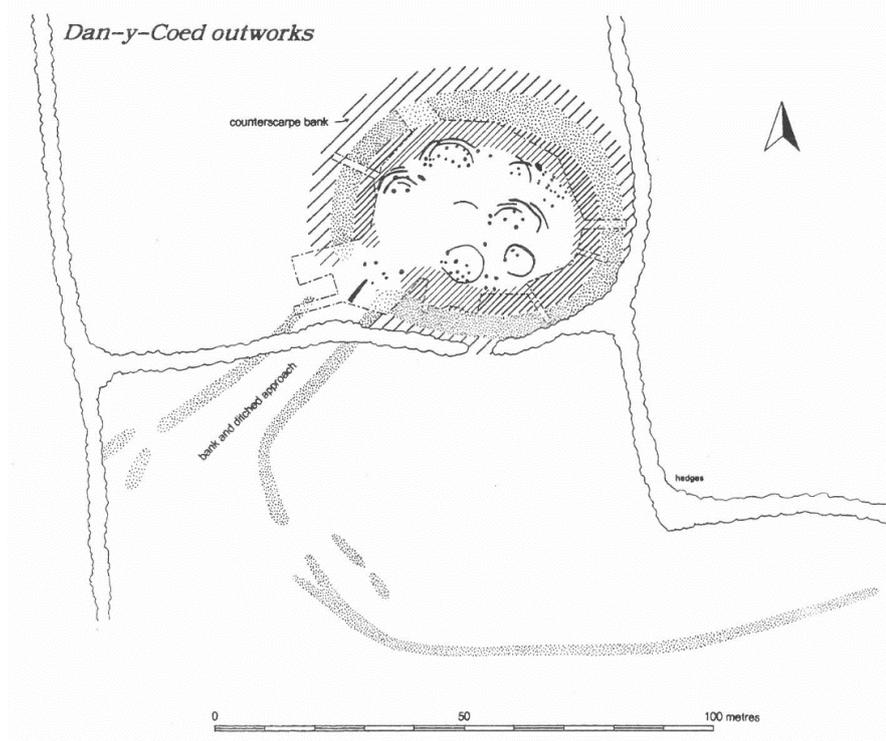
Figure 5.4. Dan-y-Coed (from Williams and Mytum 1998, 31)

- *Cefn Graeanog II*

Cefn Graeanog is a subsquare stone-built enclosure which forms part of a cluster of sites on the Graeanog Ridge (Gwynedd). Occupation at the site spans six phases, but by the mid -2nd century the site was fully enclosed by a stone-built enclosure containing two roundhouses and a large sub-rectangular building in the late 2nd century (Fasham et al 1998, 9). This form of enclosure is also a distinctive regional type of rectilinear enclosure in which the buildings are incorporated into the enclosure, of which other examples include Hafotty-wern-las (Gwynedd) (Williams 1923) and Din Lligwy (Gwynedd) (Baynes 1908).
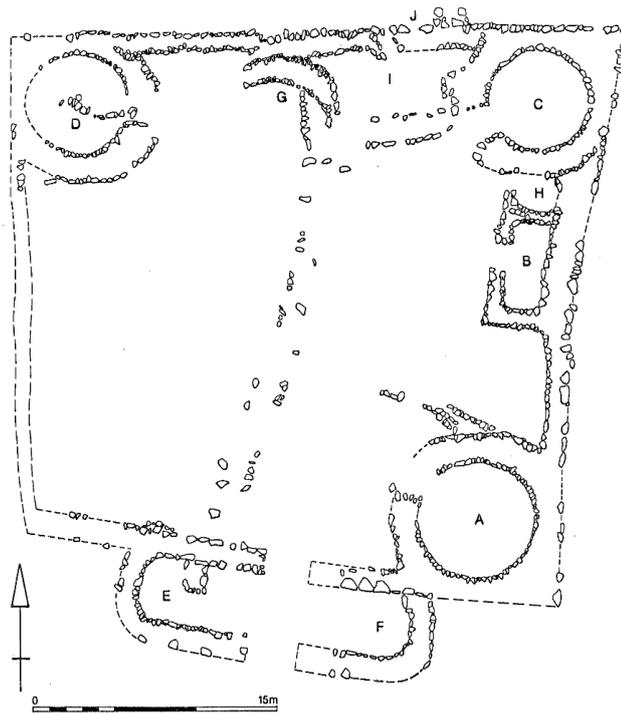
Figure 13 Plan Showing Maximum Extent of the Site

Figure 5.5. Plan of Cefn Graeanog II showing maximum extent of the site(Fasham et al 1998, 21, Figure 13)

Complex farms

Complex farms are a defined as those at which there is a significant differentiation of space, possibly linked to the separation of various activities (Smith et al 2016, 28). It is also suggested that such sites were particularly well-suited to the control of livestock and were therefore associated with pastoral farming practice (Smith et al 2016, 33).

Only a single complex farm (Hunts Grove, Quedgley [Gloucestershire]) falls within the study area. This site lies within the Central Belt (Fig. 5.3) though two further potential complex sites are noted at Nash (Glamorgan-Gwent) and Rumney Great Wharf (Glamorgan-Gwent). Both these sites lie within the area of Romano-British land reclamation on the Gwent Levels and are associated with extensive networks of ditches possibly comprising a land management scheme (Smith et al 2016, 153). Hunts Grove also lies in the Severn Vale and comprises a series of prehistoric and both early and late Roman enclosures, with the enclosures becoming increasingly formalised throughout the Roman period (Braanlund and Wright 2012, 3).

- *Hunts Grove, Gloucestershire*

Hunts Grove is a complex rural settlement identified in a development area to the south of Gloucester (Braanlund and Wright 2012, 5). The site was explored through geophysical work and trial trenching which established two foci of late prehistoric and Roman activity, including a double ditched enclosure and field system in the east with Iron Age and mid/later Roman ditches to the west (Braanlund and Wright 2012, 6; Fig. 5.6). Fieldwork comprising 67 trenches across the 34ha site excavated a 2% sample of the total development area (Braanlund and Wright 2012, 7) and identified a series of prehistoric and early Roman enclosures in the south-west of the site, and later Roman enclosures in the north-east (Braanlund and Wright 2012, 25). Dating was established through the presence of both Iron Age and Romano-British pottery, including Malvernian limestone-tempered pottery whose distribution extends into the early Roman period, and Romano-British wares which comprise primarily local Severn Valley wares and supplementary Black Burnished, with small quantities of continental imports represented by samian and one instance of amphora (Braanlund and Wright 2012, 19, 48). The later Roman ditches are regular and appear to have been superimposed over earlier activity, indicating a move towards increasingly formalised and complex use of space (Braanlund and Wright 2012, 24). No domestic structures were identified, though a possible wall foundation lay in a trench close to the north-western junction of the two trackways (Braanlund and Wright 2012, 25) The Roman enclosures in the north-east of the site extend 60m to the east and are aligned either side of a contemporary trackway (*ibid*), and it is this increasingly formalised division of space which led to the site being classified as a complex farm.

Figure 5.6. Hunts Grove, showing geophysical anomalies interpreted as complex field boundaries (Braanlund and Wright 2012)

Unclassified

Almost half the known farms within the region (47%) remain unclassified. The sites which remain unclassified are primarily small excavations in which the full extent of the site cannot be determined. The identification of sites as belonging to one or another of the typological categories outlined above is heavily dependent on the area of excavation, and so it is not surprising that enclosed and complex settlements tend to have higher areas of excavation, as shown in Table 5.4).

Site Form	Average Area of Excavation
Complex	0.41
Enclosed	0.42
Unclassified	0.24
Unenclosed	0.23
Total	0.33

Table 5.4. Average area of excavation by site type (m²)

5.1.3 Villas

The definition of villa sites has historically been subjective and based on their perceived status within the settlement hierarchy, as indicated by a suite of architectural and material characteristics including rectilinear masonry buildings, hypocausts, tiled roofs, mosaic floors, and wall-plaster.

Villas were preferentially excavated in the 19th and 20th centuries (due to both the antiquarian preference for high status sites and their material culture and the stronger archaeological visibility afforded by the architectural characteristics noted above) and they have consequently dominated discussion of rural settlements through much of the 20th century. Though studies of villa sites have traditionally been focused on their architectural characteristics, this is changing as new approaches are developed, such as Derks and Roymans' (2011) work on a methodology for villa study that integrates morphological and relational characteristics to analyse them both as a distinct material class and as a social phenomenon.

Though finer classifications of villa settlements have been proposed (Percival 1976; Smith 1998) and a wide variety of terms are available for the closer definition of villa sites (such as corridor, winged corridor, courtyard) broader categories are required to accommodate large datasets. Villas are defined within the RSRB database as rural buildings with architectural characteristics associated with high status display, including hypocausts, mosaics, tiled roofs, painted wall plaster etc (Smith et al 2016, 44). While this follows the traditional approach it is further stressed that the defining characteristic of the Romano-British villa is its architectural distinctiveness from the broader context of rural settlement (Smith et al 2016, 71). Though the villas of western Britain bear little resemblance to the elaboration of many Continental villas, the material signifiers of villa status are present on almost all sites within the region (for example, tiled roofs are present at 100% of villa sites within the study region) – though admittedly this argument is circular as villas will traditionally have been identified by the presence of such markers.

There are 29 villa sites in the region. Their distribution is weighted strongly towards the east and particularly the south-east in the Central Belt region (Fig.

5.8). Nearly 50% of all the region's villas occur within the Central Belt, consistent with the broader pattern across Roman Britain, with 48% of the total number of villas in Roman Britain identified within the RSRB falling within the Central Belt.

Region	Number of Sites
Central Belt	14
Central West	9
Upland Wales and the Marches	6
Total	29

Table 5.5. Distribution of villa sites by region.

Topography

The topographical distribution of villa sites exhibits a marked preference for river valleys (55%), with a further 31% located on plateaux or plains. This is likely again to be due to the preference for low-lying, fertile agricultural land better-suited to agriculture.
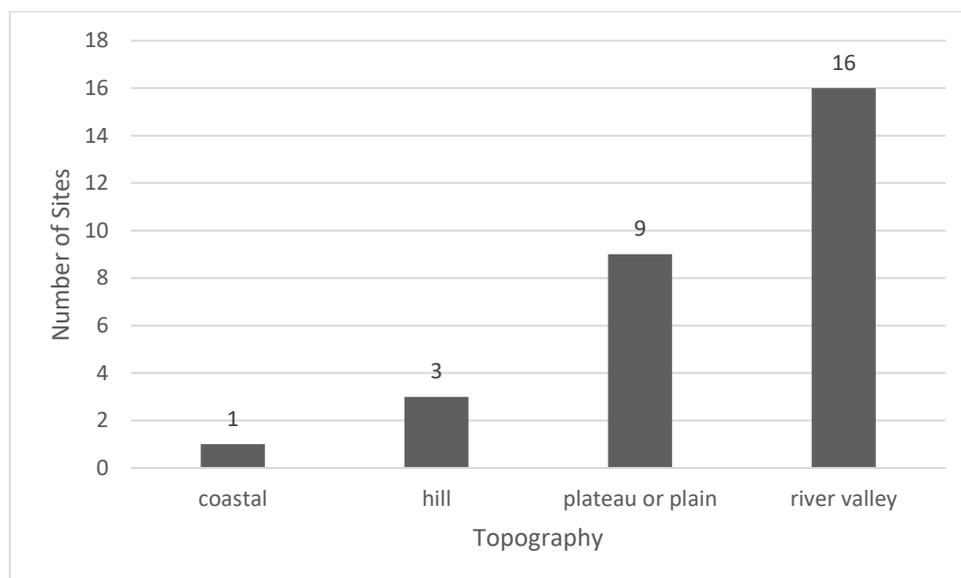
Figure 5.7. Topography of villa sites

Settlement Size

At sites where the size could be identified, 79% are under 3ha. However, the extent of the site could only be identified in 48% of sites (Table 5.6). Similarly, the form of only eight sites could be firmly identified (Table 5.7).

Size	Site	%
large (9+ ha)	1	3
medium (4 - 8 ha)	2	7
small (<1 - 3 ha)	11	38
uncertain	15	52
Total	29	100

Table 5.6. Villa sites by size
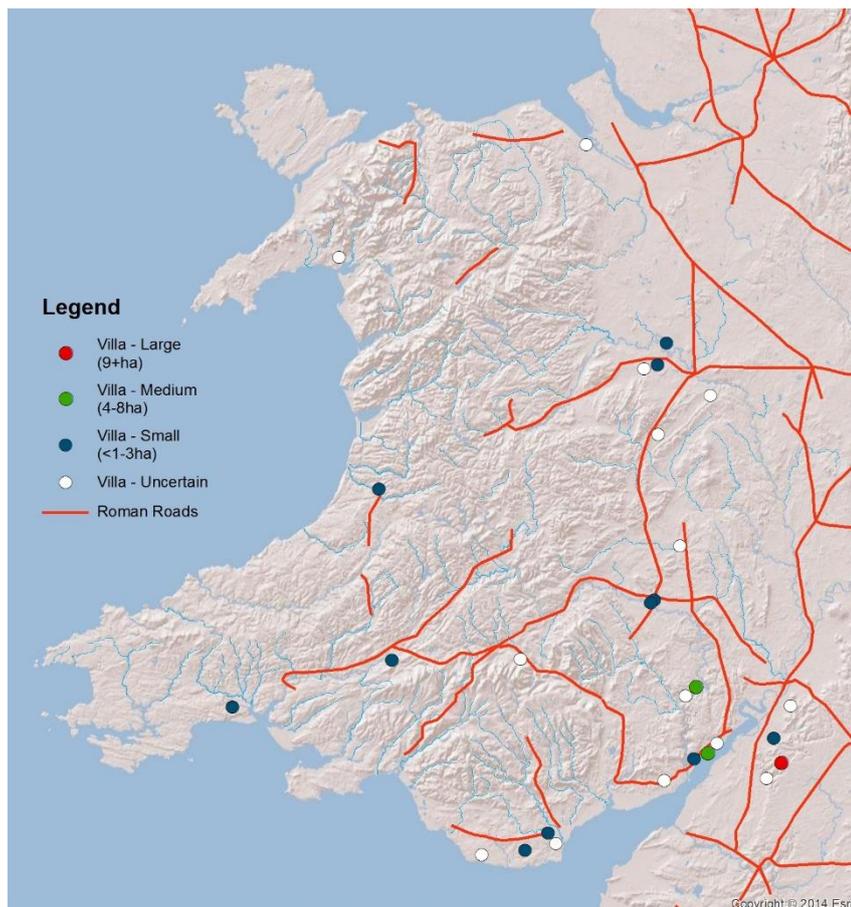
Figure 5.8. Distribution of villas by size

Though the numbers are very small, there does seem to be a preference for larger and increasingly complex villas towards the south-east (Fig. 5.8). The only complex villa lying within the study region, Kingscote (Gloucestershire) (Table 5.7), lies at the edge of a strong concentration of complex sites in the Cotswolds (outside the study area) in the Central Belt (Smith et al 2016, 158).

Settlement Form	Number of Sites
Complex	1
Enclosed	7
Unclassified	21
Total	29

Table 5.7. Villa sites by settlement form

5.1.4 Problems

The organisation of sites into a set typological sequence is not without problems, particularly when the sites are then input into a database such as the RSRB's which forms the base for this thesis. The process does not take into account the tendency of sites to grow or change use, and the various classifications of sites as farms or villas, complex, enclosed, or unenclosed, and even large, medium and small can only capture a snapshot of the site.

Each site can be classified within multiple minor site type categories, and the RSRB database cannot therefore help to unravel the settlement's development. For example, the site of Whitton Lodge (Glamorgan-Gwent) began in the Iron Age as an enclosed roundhouse settlement and developed into a villa settlement in the 2nd century (a trajectory potentially shared by many villa sites though the early excavation of many villas precludes the identification of these often-ephemeral earlier phases) and is accordingly classified as both a villa and an enclosed farm (Jarret and Wrathmell 1981); however, the database cannot distinguish chronologically between the two phases, nor therefore to which phase of settlement the finds and other information belongs. It takes an individual site biography approach to assign detailed information to each phase and this level of detail is not feasible with big data projects.

5.1.5 Other settlement forms

Other, minor forms are also included in the analysis of rural settlement but form a marginal proportion of the total site population. Such sites primarily include hillfort and cave settlements (Fig. 5.1).

There are only three cave sites within the region which contain evidence of domestic occupation, and, as well as forming a minor proportion of the total

number of settlements in the region, the nature of occupation within cave sites themselves also seems marginal. For example, all three occupied sites are also associated with burials, and the evidence of domestic occupation e.g. pottery could instead be associated with funerary, perhaps ritual activity (Pollock 2006, 88).

Hillforts also form a minority of rural settlements. There are significantly more hillforts in the study region than those included in the database and analysis, but of these only a handful have been excavated. The hillforts included in this analysis are those which show evidence of the continuity of occupation from the Iron Age to the Roman period, or which show evidence of re-use and re-occupation in the Roman period. Eighteen hillfort sites show evidence of reoccupation during the Roman period, though reoccupation is often inferred from the presence of Romano-British material e.g. pottery, coins etc., and its nature is rarely well-understood.

5.2   Structural Information

Other information about the morphological and architectural characteristics of the settlements is also captured in the database Some features are captured numerically, including the number of circular and rectangular buildings on the site (Table 5.8). Others are captured through presence/absence e.g. masonry buildings, multi-roomed buildings.

5.2.1 Circular Buildings

The presence of circular buildings is weighted towards the Upland Wales and the Marches (Table 5.8), though this is due in part to the prevalence of stone construction in this region leading to better preservation. Circular buildings in other regions are more often of timber construction and are therefore less likely to survive. The majority of sites at which circular buildings are present are farm sites, and within this category enclosed farms form the majority (Table 5.9).

Region	Number of Sites	Number of Buildings
Central Belt	15	48
Central West	4	6
Upland Wales and the Marches	41	116
Total	60	170

Table 5.8. Number of settlements with circular buildings present by region
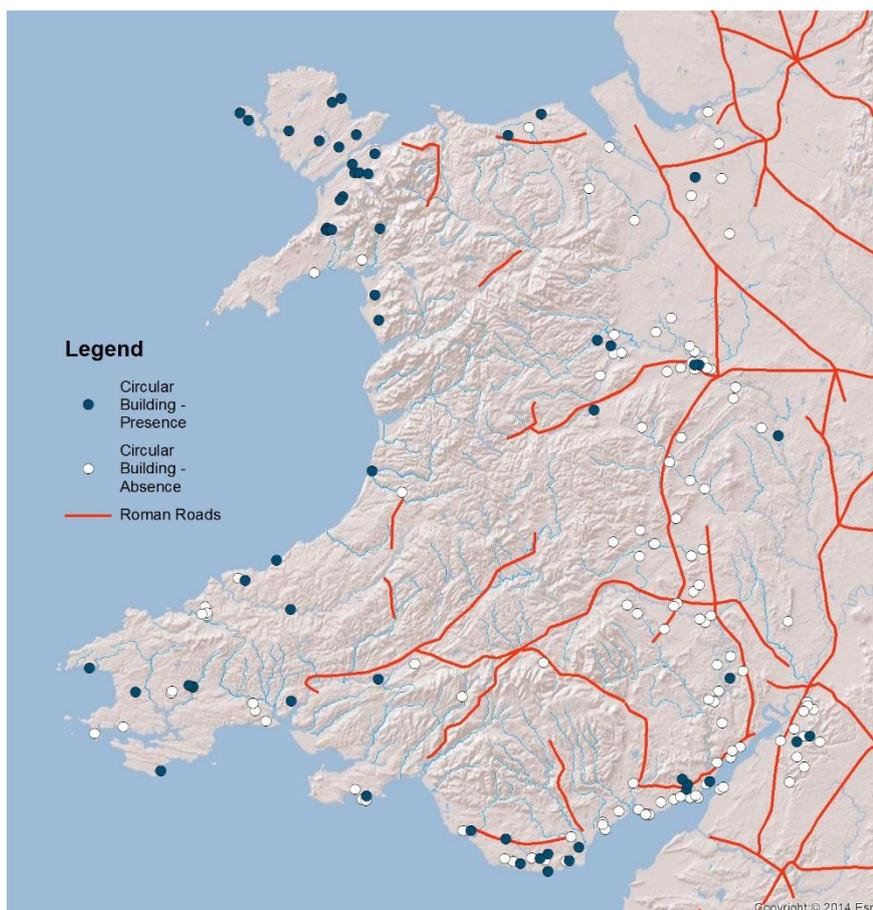
Figure 5.9. Distribution of sites with circular buildings

Circular buildings are present on four villa sites; however, at three sites these buildings belong to earlier, often Iron Age phases (Frocester Court [Gloucestershire], Whitton Lodge [Glamorgan-Gwent], and Llandough [Glamorgan-Gwent]). The inclusion of these sites is an illustration of the problems outlined above regarding the difficulty in assigning features to particular phases of site development. The fourth site, Castle Tump, Caerwent (Glam-Gwent), is something of an anomaly; though a circular building is listed in the RSRB database, the excavation report makes no reference to any circular structure (GGAT). However, an octagonal structure (described as a possible bathhouse,

dining room, or shrine) was identified in a 2012 geophysical survey and may be the source of the 'circular' structure counted in the database (Current Archaeology 2013), though a building of such unusual shape may have closer parallels with religious sites than domestic architecture.

Site Type	Number of Sites
Enclosed	38
Unenclosed	4
Unclassified	12
Total	54

Table 5.9. Number of farms with circular buildings present by form

5.2.2 Rectilinear buildings

Seventy-two sites within the study region have rectilinear buildings present, and the greatest number of sites and buildings falls within the Central Belt (Table 5.10).

Region	Number of Sites	Number of Buildings
Central Belt	32	93
Central West	15	33
Upland Wales and the Marches	25	52
Total	72	178

Table 5.10. Number of sites at which rectilinear buildings are present.

There are 23 farm sites in the region with rectilinear buildings present. Some of these records encounter the same difficulty as the villa sites, with the rectilinear structures belonging not to the farm proper but to later, sometimes villa phases of the site (e.g. Frocester, Whitton). The transition from farm to villa phase is often distinguished by the transition from curvilinear to rectilinear construction, though the association should not be applied simplistically or prescriptively.

Site Type	Number of Sites
Enclosed	19
Unenclosed	1
Unclassified	3
Total	23

Table 5.11. Number of farms with rectilinear buildings by form

The distribution of the farms with rectilinear buildings is weighted towards the Upland Wales and the Marches (Table 5.12), though again the preference for stone construction in this region lends itself to better preservation of sites, which likely influences the figures. However, an interesting feature of the sites clustered in north-west Wales are the number of sites with both circular and rectilinear buildings present during the same phase of the site such as Hafotty-Wern-Las [Gwynedd] [Williams 1923]).
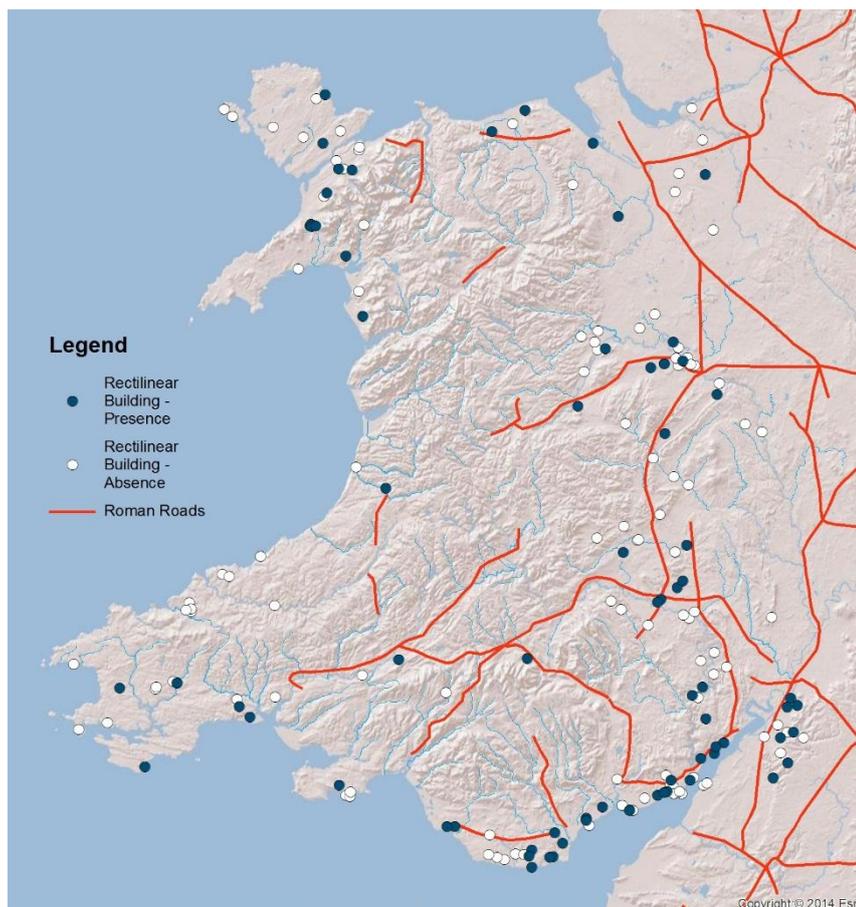
Figure 5.10. Distribution of sites with rectilinear buildings.

Region	Number of Sites
Central Belt	7
Central West	1
Upland Wales and the Marches	15
Total	23

Table 5.12. Number of farms with rectilinear buildings by region

- *Hafotty-Wern-Las*

Hafotty-Wern-Las is a quadrangular stone-built walled enclosure on a ridge in
Rhostryfan, Caernarvonshire, which is the focus point for a number of other
roundhouse settlements. The site comprises a quadrangular enclosure containing
two rectilinear buildings built into the enclosure wall and one roundhouse (Fig.
5.11). The entrance to the enclosure was built through one of the rectilinear
buildings, which likely served as a gatehouse (Waddington 2013, 189); the other
rectilinear structure contained a small slate-lined hearth and large quantities of
slag, charcoal, burnt clay, and iron deposits, indicating that the building was a
focal point for iron-working. This layer also contained Romano-British pottery,
including three fragments of mortaria and two of samian (Williams 1923, 106)
indicating engagement with local trade networks. The roundhouse contained two
hearths and finds included a glass bead and two perforated slate discs, and an
Iron Age decorated bronze plaque or relief near the entrance (Waddington 2013,
189). The contrast between the character of finds in the two structures suggests
distinct patterns of use within each, and a possible association of circular spaces
with domestic and rectilinear spaces with industrial uses.
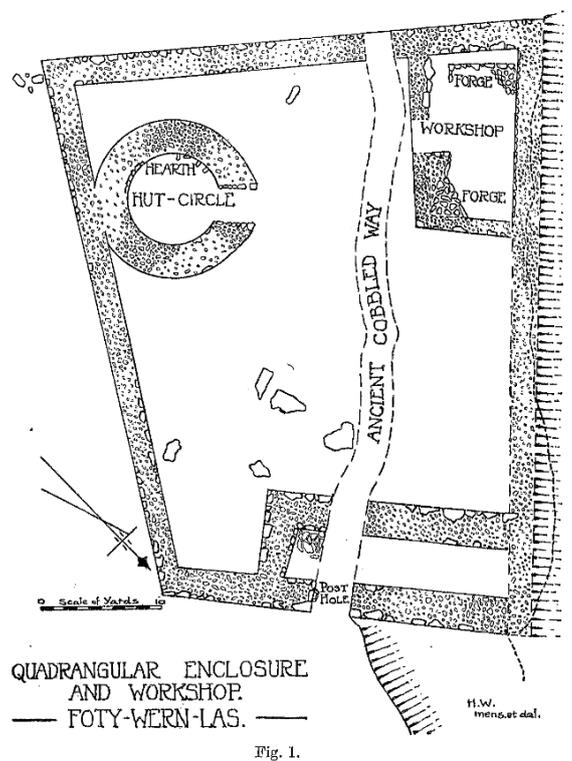
Figure 5.11. Site plan of Hafotty-Wern-Las (Williams 1923)

5.2.3 Masonry buildings

Masonry buildings are present at all villa sites in the region. However, the presence of masonry buildings is often used as a means of defining a villa site, so the argument can become circular. Masonry buildings are also present at 52 farm sites (38%), and most commonly on enclosed sites (Table 5.13).

Site Type	Number of Sites
Complex	1
Enclosed	27
Unenclosed	3
Unclassified	21
Total	52

Table 5.13. Number of sites with masonry buildings present by site type
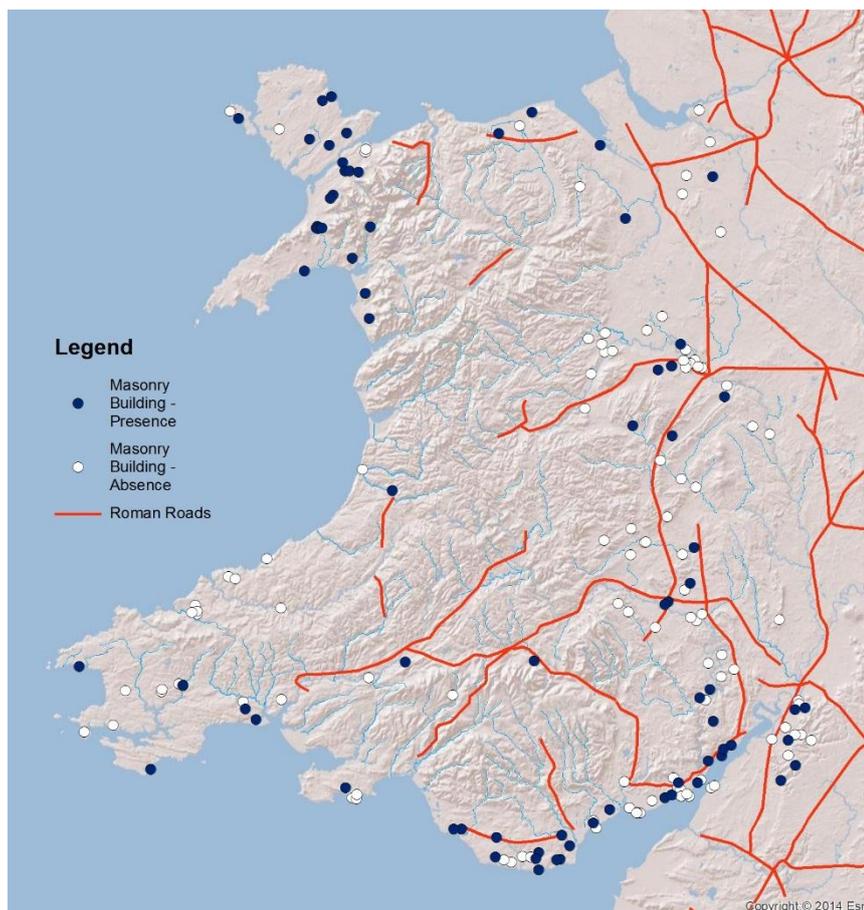
Figure 5.12. Distribution of sites with masonry buildings

Region	Number of Sites
Central Belt	19
Central West	5
Upland Wales and the Marches	28
Total	52

Table 5.14. Number of sites with masonry buildings present by region

Over half (54%) of all masonry buildings on farm sites are located in Upland Wales and the Marches (Table 5.14), and particularly in the north west – as noted elsewhere this is a reflection of the distinctive regional preference for stone construction and the level of preservation that this allows.

5.3 Economy

This section will provide a broad overview of the categories of artefacts within the RSRB associated with the economy, such as coinage and evidence of metalworking, and some of the strengths and weaknesses of the data. This will be supplemented by an overview of the data derived from the ceramic methodology described in the previous chapter.

5.3.1 Coins

Numismatics has sometimes been isolated from other forms of finds analysis, but this is beginning to change with the practice of applied numismatics (Reece 1972, 1995; Casey 1984; Walton 2012), which proposes a direct link between coin loss in archaeological contexts and the supply and use of coinage in the past (Guest 2008, 38) and thereby enables the use of coin studies to explore a range of economic and social questions.

Yet in common with other finds categories, coins are subject to depositional biases and the relationship between use and loss is not straightforward. Not all coin losses are accidental and may not therefore provide a true picture of the pattern of coin use and loss. Coin loss is also proportional to the quantity of each issue minted and to both their denominational and intrinsic value e.g. fewer gold and silver coins are deposited partly because fewer high-value coins were in circulation but also because their higher material value likely meant that greater effort was expended on their recovery after loss (Walton 2012, 27). Coin finds are

also subject to biases of detection, for example, coins are more likely to be recovered from excavations where metal-detecting forms part of the methodology (Gregory and Rogerson 1984, 184) and amateur detectorists are more likely to be active in the vicinity of known archaeological sites (Robbins 2013, 61).

Numismatists have also focused on establishing a background pattern of coin loss in Britain in the Roman period which could be used in comparison with a broader European pattern, and also as a backdrop against which the coin loss of individual sites could be placed. Richard Reece identified a pattern of coin loss known as the British Mean (Reece 1995), which was derived from 140 assemblages using per mill profiles (the total number of coins in each period divided by the total number in each assemblage, multiplied by 1000 [Walton 2012, 24]). This Mean is accepted as representative of the overall pattern of British coin loss, despite criticism directed at the limited geographical distribution of the sites used, the limited range of site types, and the atypical coin profiles of certain sites (e.g. Fishbourne, Richborough) which may affect the overall total (Walton 2012, 32). Variations on this Mean have been proposed, such as Walton's Mean (2012) which was devised using a greater number and range of sites. However, for most studies Reece's British Mean remains the standard.

The British Mean outlines a pattern distinct from that of the continent, characterised by low coin loss during the Claudian period to the late 3rd century, high coin loss from 260-294, a dip in the period 294-330, and generally high coin loss in the 4th century (Reece 1995, 179). This pattern is supported by Walton's British Mean (Walton 2012, 36).

Data

The RSRB database provides basic information regarding coinage at each site. Coin totals are broken down into 24 Numismatic Issue Periods corresponding to the periods outlined by Reece (1973, 228), with additional categories for Late Iron Age and Unidentified 1st/2nd and 3rd/4th century coins. A summary of the coin data is given for each site and numerical quantification for each period and site totals, but further quantification – for example, by denomination - has not been attempted. For the purposes of this thesis supplementary analysis has been

conducted using the data from the Iron Age and Roman Coins from Wales (Guest and Wells 2007), downloaded from the ADS.

The RSRB dataset includes a total of 9707 coins. Using the coin totals provided, it seems that the majority come from the Upland Wales and the Marches region; however the figures are skewed significantly by the Jamesford Coin Hoard of 4854 coins (Jones et al. 2012) - excluding this hoard the total for Upland Wales and the Marches drops to 844 coins. Hoards are not included in the individual period breakdowns and therefore for this analysis the total number of coins for each site has been derived from the sum of coins which can be assigned a period, and not from the site total column. This reduces the total number of coins in the region from 9707 to 4228 (Table 5.15).

Region	Coins (excl. hoards)	%	Coins (inc. hoards)	%
Central Belt	3713	88	3879	40
Central West	91	2	130	1
Upland Wales and the Marches	424	10	5698	59
Total	4228	100	9707	100

Table. 5.15. Coin totals from each region (RSRB data)

The IARCW dataset comprises 52,813 coins from 1172 separate finds including excavations, hoards, and single finds, and includes up to 15 descriptive fields for each coin entry including denomination, metal, and mint among others. However, of this dataset only 183 coins derive from 22 rural settlement excavations. The sites included in this study largely overlap with the RSRB, though the different inclusion criteria for each project means that some are not common to both datasets.

Distribution

While coins are present at sites throughout the region, the number of coins produced at different sites and the distribution of these sites indicates that the extent to which rural sites were engaged in using coinage differed widely. The Central Belt produces 88% of all coins found on rural sites (see Table 5.15) and sites in this region tend to produce more coins. The IARCW data supports this trend, with a combined 85% of the total number of coin finds located in the South

or South-East, a region roughly approximating the Gwent-Glamorgan portion of the RSRB's Central Belt.

Site Type	No of Coins	%
Excavation - hillfort	345	0.7
Excavation - industrial site	39	0.1
Excavation - military + later	57	0.1
Excavation - military site	3742	7.1
Excavation - 'other' site	48	0.1
Excavation - rural settlement	183	0.3
Excavation - town / urban site	2260	4.3
Excavation - uncertain site	20	0.0
Excavation - vicus / canabae	835	1.6
Group	9984	18.9
Hoard	34753	65.8
Single Find	547	1.0
Total	52813	100

Table 5.16. Number of coins broken down by site type (data from Guest and Wells 2007)

The lack of coinage in the mountainous interior suggests limited engagement with a monetised economy (or limited settlement). The coins which are known from the uplands are predominantly from military or vicus sites, or hoards (Fig. 5.16).

Region	Number	%
Central/East Wales	12	7
North Wales	10	5
South Wales	98	54
South-East Wales	56	31
South-West Wales	7	4
Total	183	100

Table 5.17. IARCW number of coins from rural settlements by region (data from Guest and Wells 2007)

Farms

Farms produce the majority of coins within the study region, though this is primarily because more settlements fall into this category. The only complex farm site in the region produced only a single barbarous radiate though the excavation focused on field boundaries and the domestic core of the settlement was not investigated and this likely contributes to the low number. 86% of known coins come from enclosed sites, though again this may be partly due to post-depositional and investigatory factors e.g. the greater proportion of enclosed sites

generally (particularly in comparison to unenclosed sites), or the tendency for sites to remain unclassified due to smaller interventions which may produce fewer artefacts generally.
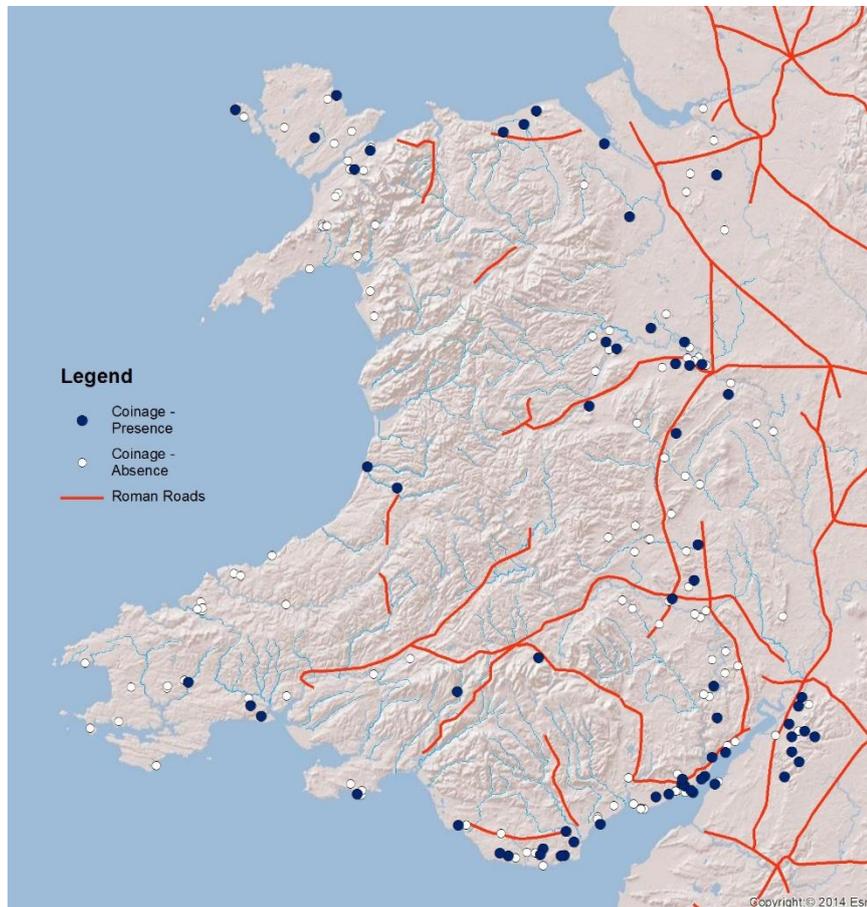
Figure 5.13. Distribution of coins (RSRB data)

Villas

Villas produce proportionally more coins than farms. Farms generally produce smaller numbers of coins, and where they appear in greater numbers this is often due to a later, villa phase e.g. Frocester, where an Iron Age and early Romano-British farm developed into a villa complex by the late C3rd. 17 coins in periods from the Late Iron Age to AD260 are known; the number rises to 171 from AD260 to the C5th, when the site appears to go out of use (Price 2000). This highlights a problem with the aggregation of coin totals, which do not take into account the transition of sites from one category to another; however, it does also emphasise the increased extent to which villa sites seem to have been engaged in (or in some cases became sites of) monetary exchange
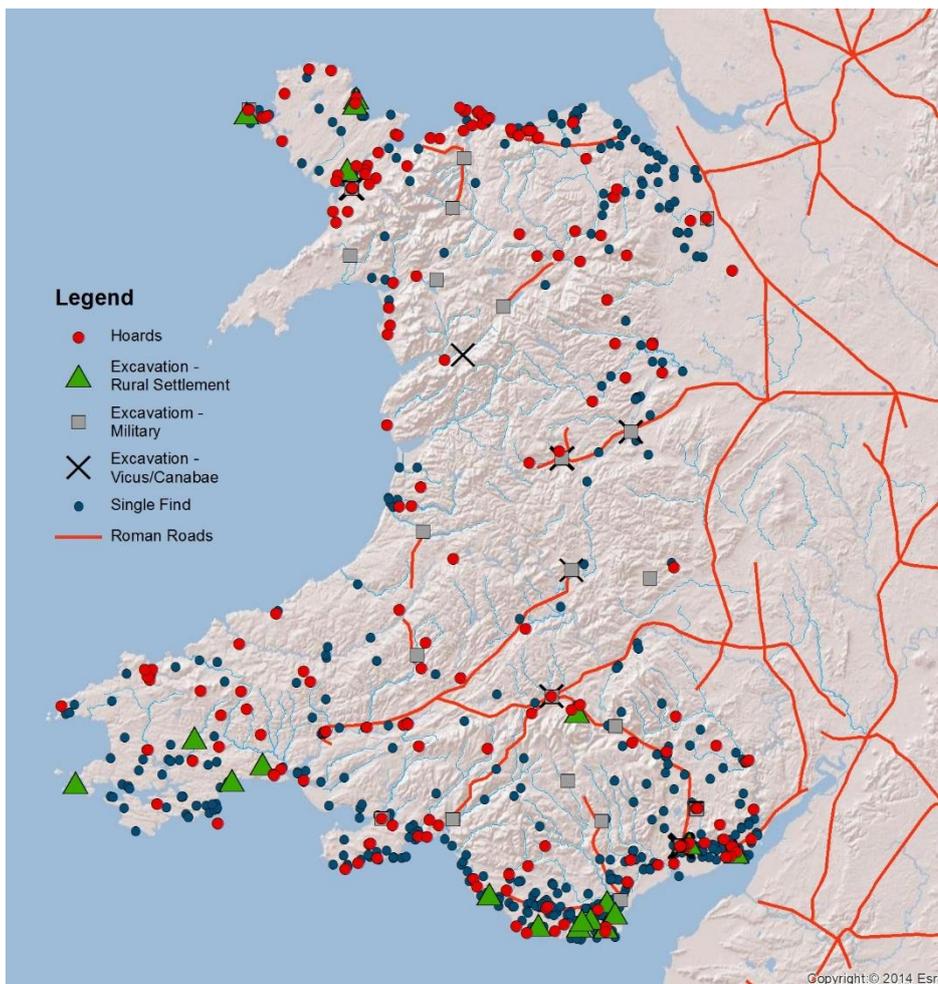
Figure 5.14 Distribution of coins from all sites (data from Guest and Wells 2007)

Chronology

The majority of coins in the RSRB for which a date could be assigned fall in the late 3rd to 4th centuries (Fig. 5.15), with a quarter of all coins from rural sites dating from AD330 – 348 (though 691 coins from this period come from Kingscote (Gloucestershire), skewing the figures somewhat). Unidentified coins are not included in the graph below, but within this category a greater number of coins fall into the C3rd/4th category. The IARCW data demonstrates the same broad trend, with significant peaks in the mid-late C3rd and again in the mid C4th.
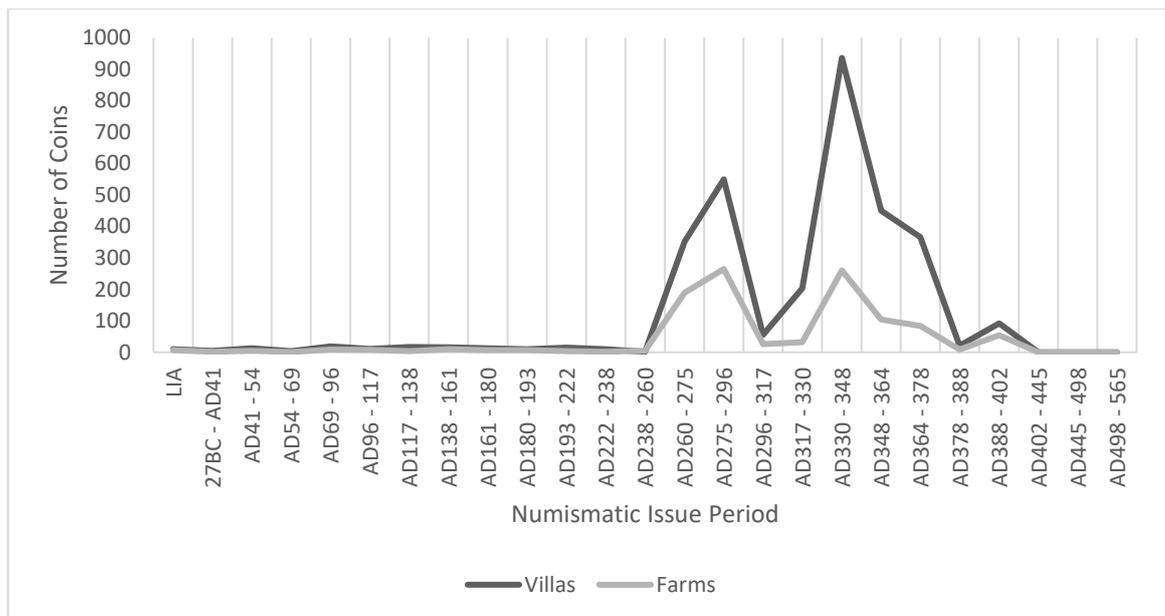
Figure 5.15. Coin loss by period and site type (data from RSRB)

Denomination

With the greater level of detail afforded by the IARCW dataset it is also possible to analyse which denominations were in widest circulation in the region.

Radiates and nummi form 44% and 39% of the total rural coin assemblage respectively, suggesting that low-value coins were preferred. Nummi and radiates also form a significant proportion of all finds from hoards (49% and 41% respectively), though the denarius is predominant until the first quarter of the C3rd (coinciding with its withdrawal from circulation). Similarly, the majority of coins found on rural sites are composed of copper alloy (171 coins; 1 further billon). Only 11 silver coins are known from rural sites, and there are no attested gold coins from rural excavations. Higher value metals such as silver and particularly gold are found primarily in hoards; only 82 gold coins are known from the region and of these 26 occur in hoards (a further 37 are found as single finds).

Around half the Iron Age coins in Wales are Western issues, originating from the region of the Dobunni and demonstrating that the south east of the study region had a prior tradition of coin use (Guest 2008, 40). The majority of the Iron Age coins present in Wales are gold coins, and these form almost a quarter of all gold coins present within the study region. These occur primarily between the Wye and the Severn, and the intrinsic value of the gold in conjunction with the lack of coin

use in Wales suggests that these were likely deliberate depositions (Guest 2008, 53).

5.3.2 Pottery

Much information regarding site finds could only be recorded at a basic level due to the lack of standardisation in recording practice across the UK. As discussed in the previous chapter, incorporating pottery for analysis posed significant difficulties for this thesis. These difficulties were also experienced by the project team of the RSRB, and with the quantity of sites to be processed the lack of standardisation in quantification and terminology made the mass assimilation of ceramic data unfeasible. Pottery was therefore recorded at a basic level, with limited quantification by sherd count where possible and presence / absence for major types including samian, amphorae, and mortaria – broad categories with extensive distributions which are therefore easily standardised across all sites (Smith et al 2016, 14). At this limited level, basic ceramic information could be collected from 88% of all sites in Britain – however, the decision to capture only at this high level means that the RSRB database contains no information for coarse wares which are more susceptible to variation in recording, particularly those with limited or localised distributions. As described in the previous chapter the ceramic information within the RSRB has therefore been supplemented with data from my own ceramic study, the methodology for which was designed to mitigate some of the difficulties by adopting a Minimum Number of Vessels approach. A broad overview of the results of the approach is provided here.

Coarse / Fine

At the broadest level pottery has been divided into coarse and fine wares, with amphorae and mortaria included as separate categories. Coarse pottery forms the majority of all identifiable types (Table 5.18).

Broad Type	MNV
Amphora	65
Coarse	4205
Fine	938
Mortarium	303
Total	5511

Table 5.18. MNV by type

The Central Belt has the highest MNV, almost twice as high as that of Upland Wales and the Marches, suggesting greater access to pottery in this region. Central West has the lowest MNV but this is due to the smaller number of sites in this region. The regional breakdown in Table 5.19 shows that the Central Belt has a higher MNV than Central West and Upland Wales and the Marches in all categories except for mortaria, for which Upland Wales and the Marches has the highest MNV.

Region / Category	MNV
Central Belt	**3198**
Amphora	33
Coarse	2431
Fine	618
Mortarium	116
Central West	**940**
Amphora	11
Coarse	738
Fine	133
Mortarium	58
Upland Wales and the Marches	**1373**
Amphora	21
Coarse	1036
Fine	187
Mortarium	129
Total	5511

Table 5.19. MNV by category and region

Category	MNV
Liquid Holder	80
Drinking Vessel	390
Tableware	1446
Kitchen/Storage	2025
Ritual	3
Uncertain	1513
Total	5457

Table 5.20. MNV by functional category

The ceramics are also assigned to a functional category. Table 5.20 shows that the highest MNV can be assigned to the Kitchen/Storage category. This category includes vessels such as jars, mortaria, and storage containers. The second highest category for which a function can be attributed are the Tablewares. These include

bowl, dish, and plate forms. Drinking vessels include cups and beakers. Liquid holders include flagons.

Fabrics

The major fabrics and their MNV are given in Table 5.21. Of the fabrics which can be assigned, Black Burnished Ware has the highest MNV. This is consistent with its distribution across Roman Britain. Though Black Burnished Ware incorporates two main fabric types (South East Dorset BB1 and BB2, produced in Kent) while closer definitions have been maintained in the database, throughout this analysis Black Burnished Ware will be the preferred term.

The high MNV of samian ware is likely due in part to a distortion in the figures arising from multiple factors, including the preferential retention of samian ware in older excavations, the ease with which samian ware is identified, and the ways in which samian is quantified within reports. However, the decision has been taken to retain samian ware in the same database as the other fabrics in order not to give an artificially reduced and therefore misleading view of the level of finewares within the study region. In subsequent chapters samian ware will be primarily analysed separately. Distributions of samian ware and Black Burnished Ware are given below.

Fabric	MNV	DATE RANGE
Black Burnished Ware	1147	C1 - 4
Grey	1119	C1 - 4
Samian	735	C1 - 3
Severn Valley Ware	573	C1 - 4
Oxfordshire	173	C3 - 4
Caerleon	48	C2 - 3
Mancetter-Hartshill	30	C2 - C4
Nene Valley Ware	29	C2 – C4
Savernake Ware	15	C1 – C4
New Forest Ware	11	C3 – C4
Other	1399	-

Table 5.21. MNV of major fabrics within the study region with broad fabric date ranges

Samian

Samian ware is distributed unequally across the region, with concentrations in the south-east and in the north-west, some distribution in the eastern Marches and isolated occurrences elsewhere (Fig. 5.16). The presence of a seemingly isolated concentration of sites with samian present in north west Wales is perhaps unusual, given the region's reputation as largely artefact poor and practically aceramic both in the Iron Age and throughout the Roman period. This region retained a military presence throughout the Roman period, and this concentration of samian ware may be linked to markets based in military supply chains instead of civilian supply and demand.

Region	MNV
Central Belt	471
Central West	109
Upland Wales and the Marches	155
Total	735

Table 5.22. MNV of samian ware by region
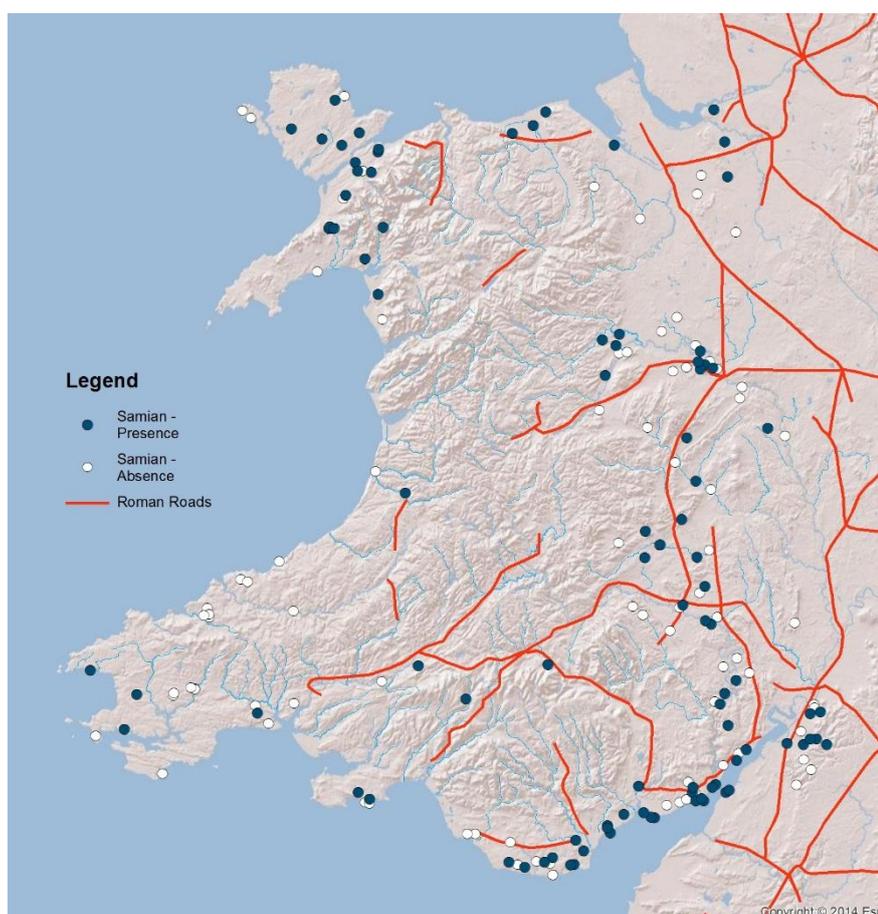
Figure 5.16. Presence and absence of samian ware

Black Burnished Wares

Black Burnished Wares shares a similar distribution with samian ware, with areas of concentration in the south east and north west (Fig. 5.17; Table 5.23). This is likely due to the similar methods of distribution: both wares form part of military trade networks (Allen and Fulford 1996). The more limited distribution of Black Burnished Ware in the south-west may be linked to the absence of known military installations; more unusual perhaps is the apparent lack of Black Burnished Ware from rural sites in the north-east, where military sites are known and the legionary fortress at Chester would presumably form a significant node of supply.
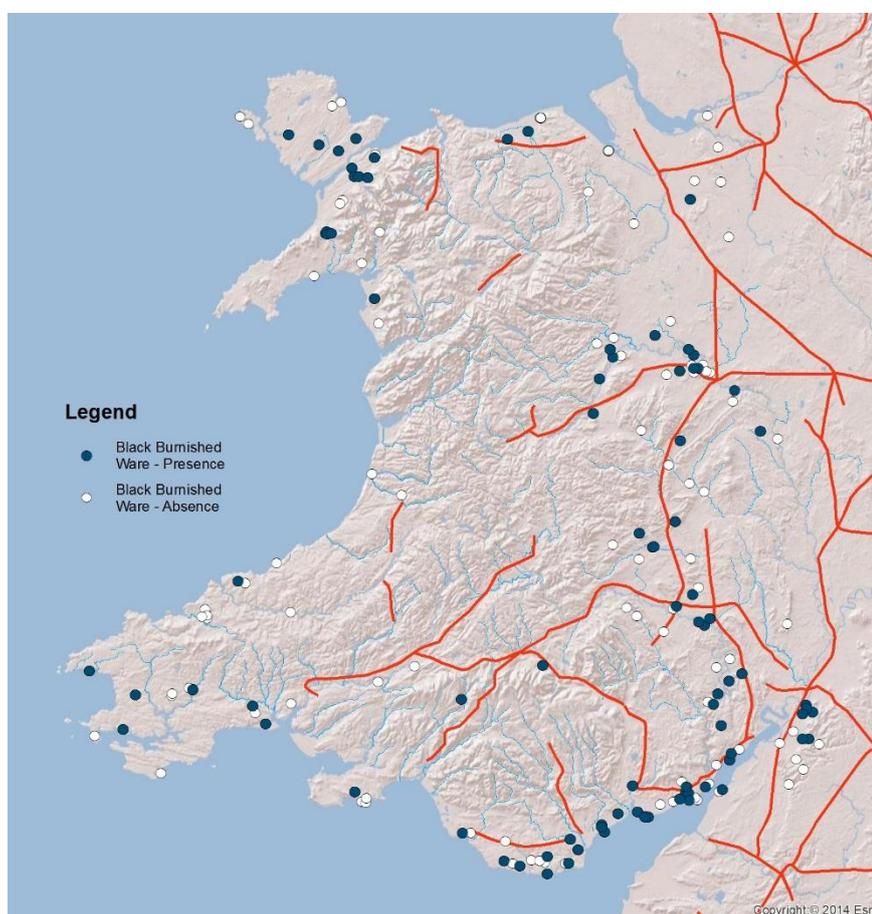
Figure 5.17. Distribution of Black Burnished Ware

Region	MNV
Central Belt	567
Central West	185
Upland Wales and the Marches	395
Total	1147

Table 5.23. MNV of Black Burnished Ware by region

Amphorae and Mortaria

Just under half of all amphorae are located in the Central Belt (Table 5.24). Sites with amphorae present are found primarily in the south, in broadly coastal regions, with a small cluster of sites in the north west near the Menai Strait (Fig. 5.18).
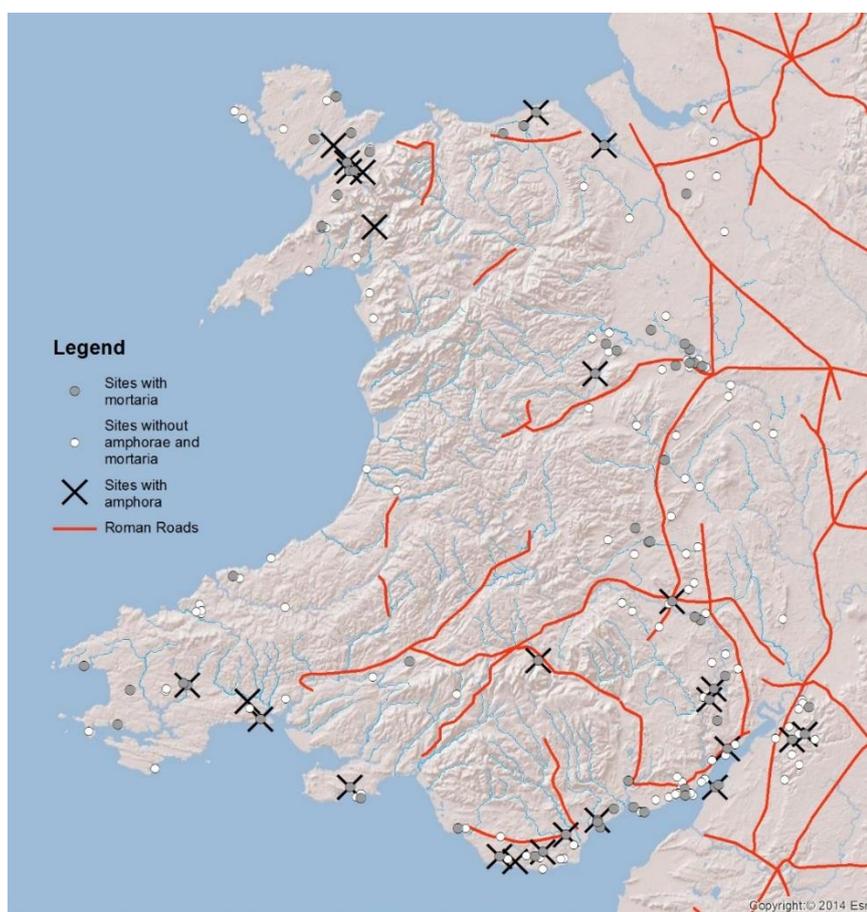
Figure 5.18. Distribution of amphorae and mortaria

Amphorae are sometimes viewed as proxy for the commodities which they contained, implying the consumption of wine and oil at the sites in whose assemblages they occur and therefore the adoption of Roman-style consumption

practice, but amphorae could equally have entered the archaeological record of a site through secondary use. This will be analysed in subsequent chapters.

Mortaria occur in much greater numbers than amphorae and have a broader distribution, particularly in the mid-Marches and the north west.

Region	Number of records	Total
Central Belt	24	96
Central West	11	56
Upland Wales and the Marches	11	116
Total	46	268

Table 5.24. Number of amphorae by region

5.3.3 Other Evidence

Evidence suggests that some sites were also engaged in other forms of production which contributed to their economy, such as metalworking. This section will cover the distribution of structures and some forms of material culture associated both agricultural and secondary production.

Workshops

Buildings designated as workshops are found on nine rural settlements in the region, with a bias towards sites in the Upland Wales and the Marches region, particularly in the old county of Gwynedd in the north-west. Like Hafotty-wern-las (see above) several sites in the region display mixed curvi- and rectilinear stone construction, with the rectilinear buildings often defined as workshops based on artefact distribution. At Hafotty-wern-las the presence of slag and other metal-working debris was used to support this interpretation (see above); the presence of similar artefacts is used at other sites for the same purpose. At Cefn-Du deposits of vesicular slag material were found deposited within the floor of a wattle-and-daub circular structure (Waddington 2013, 168); and evidence of intense burning and ferrous slag and iron nails were found in smaller roundhouses at Coed-y-Briain, interpreted as possible workshops (Williams 1923, 292). The presence of metalworking byproducts can therefore be used to determine the function of certain buildings and the economic activities of some sites.

Ironworking

Figure 5.19 shows the distribution of all sites at which there is evidence of metalworking. The practice of iron working is clearly widespread throughout the region with concentrations in the north-west and in the Marches, particularly around the Severn Estuary – such concentrations are not unexpected, given the Roman exploitation of mineral resources in the north-west and in the Forest of Dean. Metal extraction and object production likely played a part in the rural economies of these regions, though the scale of production at individual sites will have varied. Certain sites posessed large-scale iron production facilities e.g. Chesters (Gloucestershire), with two iron smelting furnaces set in an enclosed area south-west of the main villa building in the 3rd – 4th centuries (Fulford and Allen 1992), where iron production was clearly integrated into the economic life and likely the wealth of the site. At other sites limited quantities of metalworking debris or the lack of dedicated infrastructure suggests small-scale, site-level use, perhaps for the repair of metal tools.
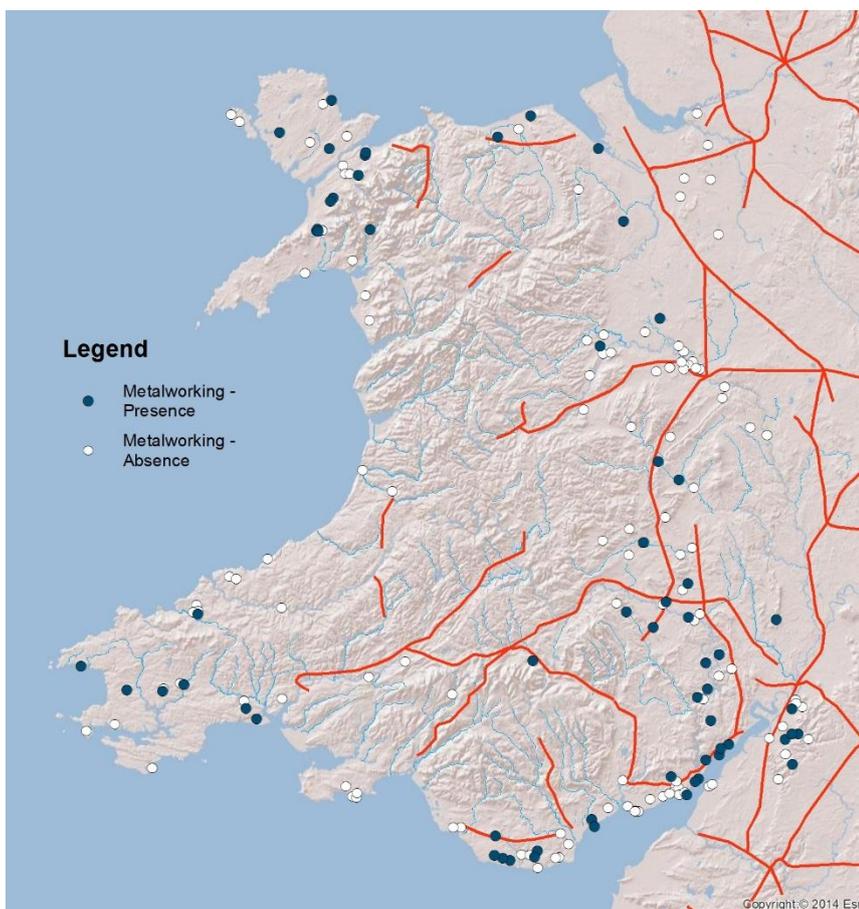
Figure 5.19. Distribution of sites with evidence for ironworking

The nature of the metal working at each site is difficult to ascertain, as the data from the RSRB does not always distinguish between ferrous and non-ferrous metalworking or between smelting and smithing slags.

Textile production

The processing of the secondary products of certain forms of arable agriculture can be identified in the archaeological record. Artefacts included in this category include objects associated with fibre production, spinning, weaving, and sewing – primarily loomweights, but also spindlewhorls and needles. Objects of this category are distributed primarily in the south-east, but also in the south-west and north-west and in regions at the interface of upland and lowland (Fig. 5.20).
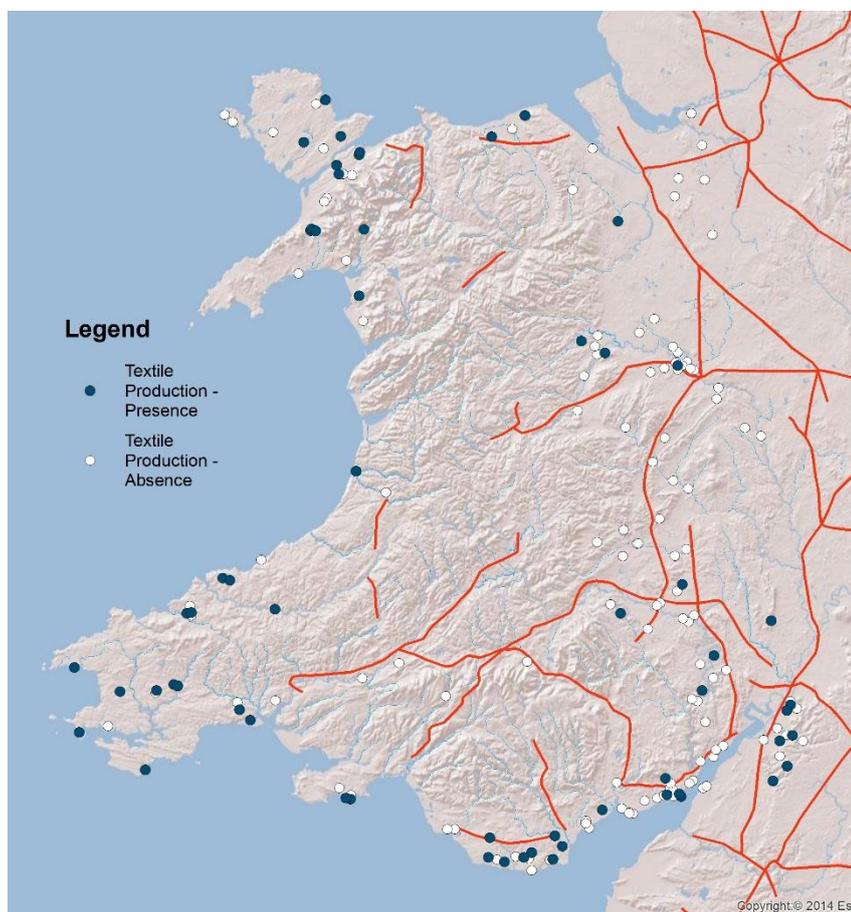
Figure 5.20. Distribution of sites with evidence of textile production

Corndriers

Corndriers are found on sixteen sites in the study region and are distributed primarily in the southern and eastern parts of the region (Fig. 5.21), generally in lower-lying areas which are well-suited to arable cultivation. Corndriers are distributed with a preference towards villa sites and are present on only two non-villa sites lying in the south east of the region (RAF St Athan [Glamorgan-Gwent] and Cae Summerhouse [Glamorgan-Gwent]).
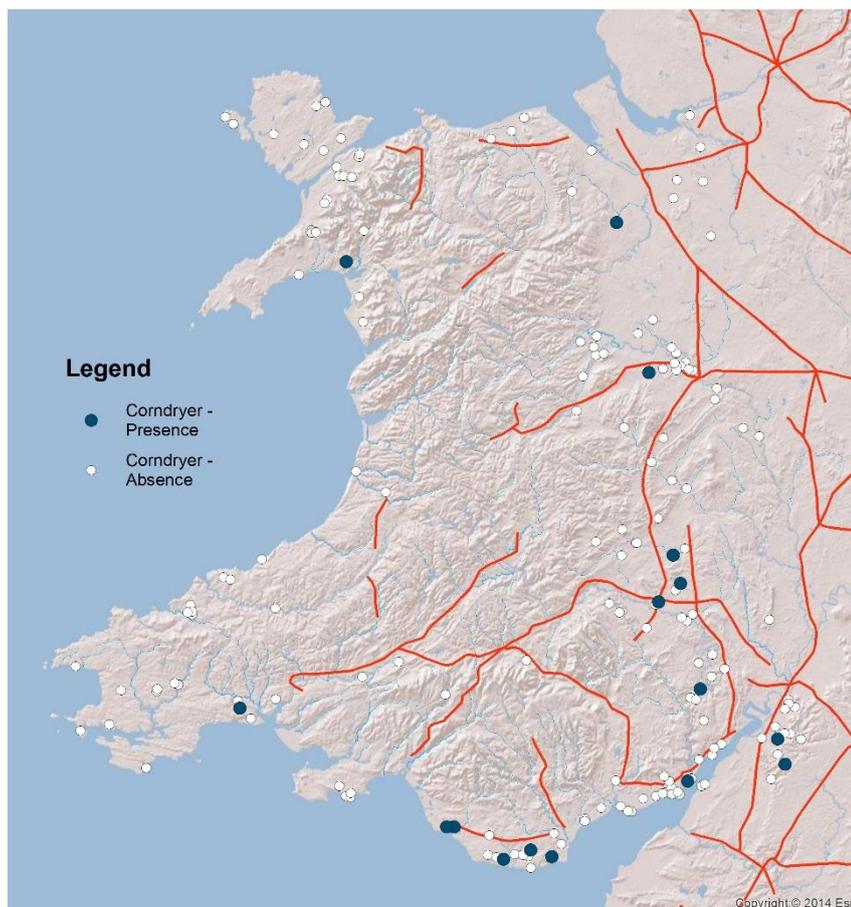
Figure 5.21. Distribution of sites with corndriers

5.4 Personal Identity and Socio-Cultural Practice

This section will focus on categories of find that can be used to explore personal identities and social practices, including items of personal ornament, brooches, and items associated with the care of the body.

5.4.1 Personal Ornament

This category includes brooches, bracelets, dress accessories, hairpins. These items can be used to analyse the adoption of new modes of display in accordance with Roman fashion e.g. finger-rings were relatively unknown in the Iron Age (Johns 1996, 41).

Objects associated with personal ornament occur widely (Fig. 5.22). Though there is a concentration in the south east, objects of this category also appear widely on sites in the north west. There is no significant difference between the distribution of particular items of metal jewellery, e.g. between bracelets, finger rings, and brooches, though generally finds are far more strongly concentrated in the Central Belt (Table 5.25). Hairpins are strongly concentrated in the east and south-east of the region; only two sites in the Central West, and eight in Upland Wales and the Marches.
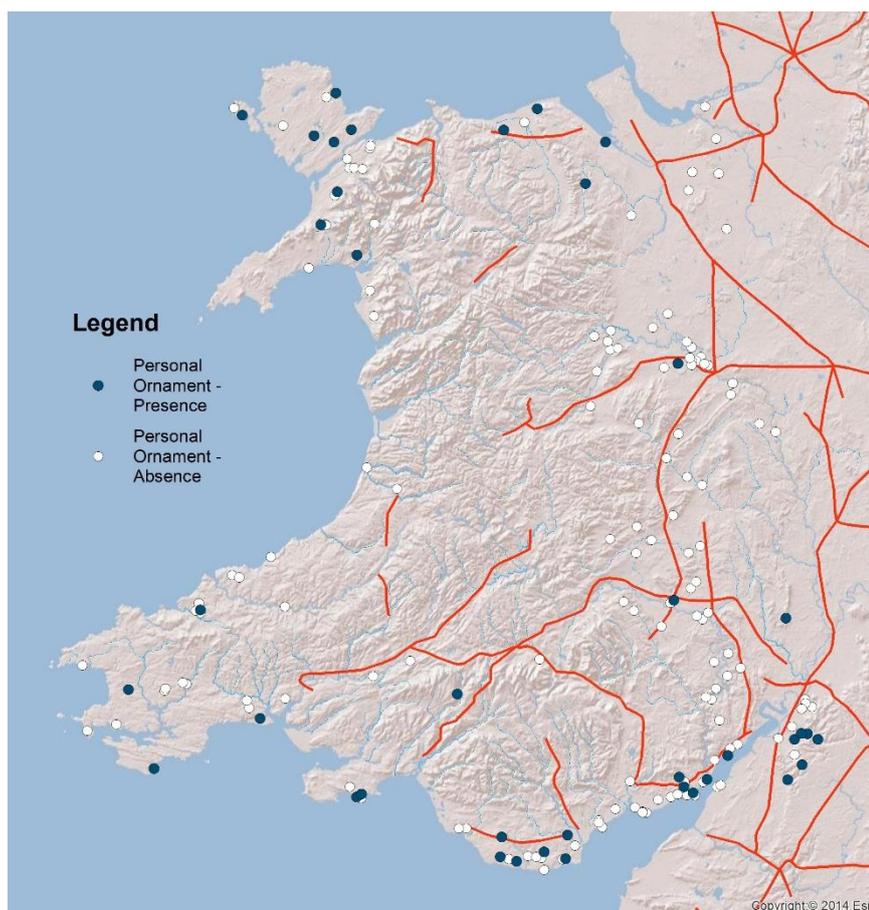
Figure 5.22. Objects associated with personal ornament.

There is a strong distinction between villa and farm sites, with villas producing the majority of these objects e.g. 82% of all bracelets and 71% of all finger rings come from villa assemblages. 92% of all hairpins derive from the assemblages of villa sites.

Row Labels	Bracelets	Hairpins	Finger Rings	Brooches
Central Belt	294	510	106	428
Central West	14	13	2	19
Upland Wales and the Marches	38	30	24	87
Total	346	553	132	534

Table 5.25. Objects associated with personal adornment by region

5.4.2 Brooches

Brooches are unequally distributed throughout the region with a strong concentration in south east Wales and Gloucester/Herefordshire (Fig. 5.23), and though the disparity between the number of sites at which brooches are present is not too great between Upland Wales and the Marches (38%) and the Central Belt (52%), the number of brooches from the Central Belt is significantly higher, providing 80% of the total number within the study region. As with many other small finds categories the overall totals conceal significant bias toward only a few sites: Kingscote (203 brooches) and Frocester Court (107 brooches) – both sites which are distinctive not only for their size and complexity, but also for the extent and longevity of the programmes of excavation to which they have been subject. From such large assemblages there is a precipitous fall to the site with the third highest number of brooches: Whitton Lodge (36), and again to Thornwell Farm (12); otherwise brooch finds are limited to an average of one or two per site. The numbers of brooches at sites in Upland Wales and Marches sites is generally low. The average number of brooches on a site is four, though even this is inflated due to the presence of two or three distinctive sites. Two of these sites are cave sites: Minchin Hole (11 brooches) and Ogof-Yr-Esgyrn (7 brooches). The higher numbers of brooches at these sites are likely linked to ritual activity linked with burial practice (Pollock 2006, 88). Prestatyn (33 brooches) has an ambiguous site biography and a regionally distinctive finds assemblage, and though classified under the RSRB as a rural settlement with some industrial activity it is likely associated with the military in some phases of occupation (Blockley 1989).

Despite the ubiquity of brooch finds at Roman sites and the presence of extensive brooch reports in excavation reports, until the publication of Mackreth's corpus (2011) there was a lack of typological work accessible to the general reader. Typological series were limited to those produced by Collingwood (1930) and Hull (unpublished but forming the typological basis for other works e.g. Hattat 1989, Bayley and Butcher 1980). The Mackreth corpus is comprehensive, based on records of c15,000 brooches divided into 59 families which are further divided into types and sub-types (some of which are themselves further sub-divided), but the detail and complexity of its typological series make it difficult to apply to large datasets compiled from diverse sources, such as the RSRB, particularly where the researcher does not have the luxury of re-examining artefact assemblages. The RSRB database uses 36 categories, 33 of which comprise a simplified Hull typology of major types and some of the primary sub-types (for example, COLCHESTER, COLCHESTER DERIVATIVE etc). The three remaining categories are for unclassified finds (UNCLASSIFIED BOW, UNCLASSIFIED PLATE, and UNCLASSIFIED).
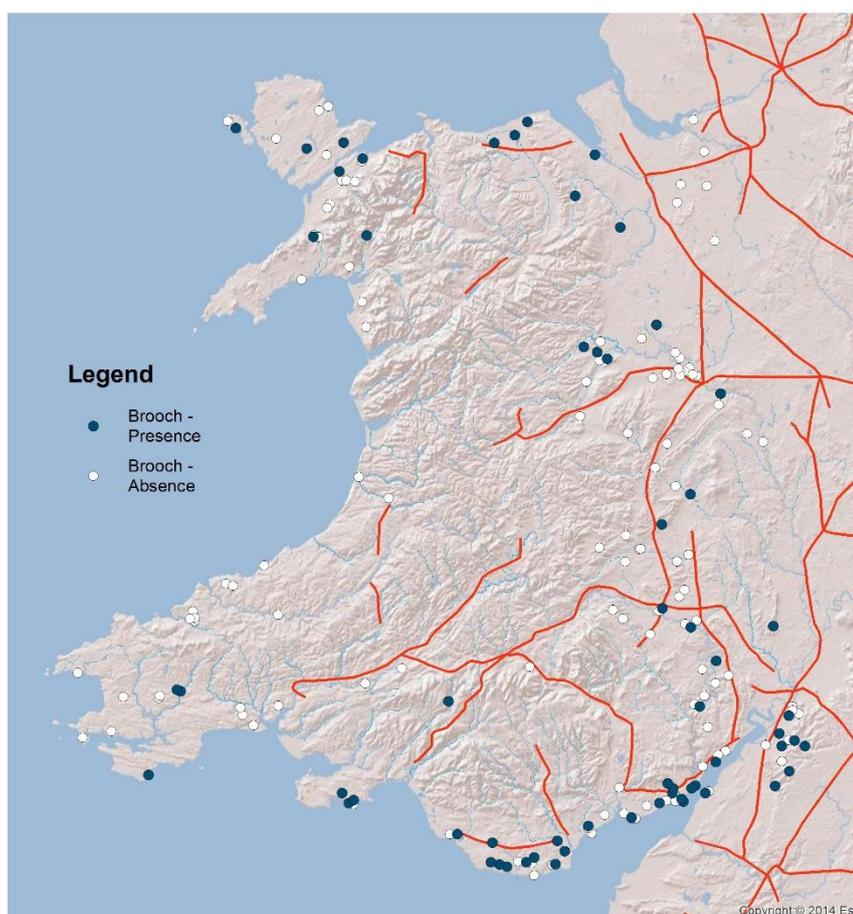
Figure 5.23. Distribution of sites with brooches.

5.4.3 Toilet Implements

Objects within this category include nail cleaners, tweezers, and cosmetic artefacts. Their distribution is strongly concentrated in the south-east around the Severn Estuary, and they occur in greater numbers at villa sites. An unusually large assemblage in the context of the immediate region is also found at Whitton, consisting of a toilet set and four cosmetic spoons.
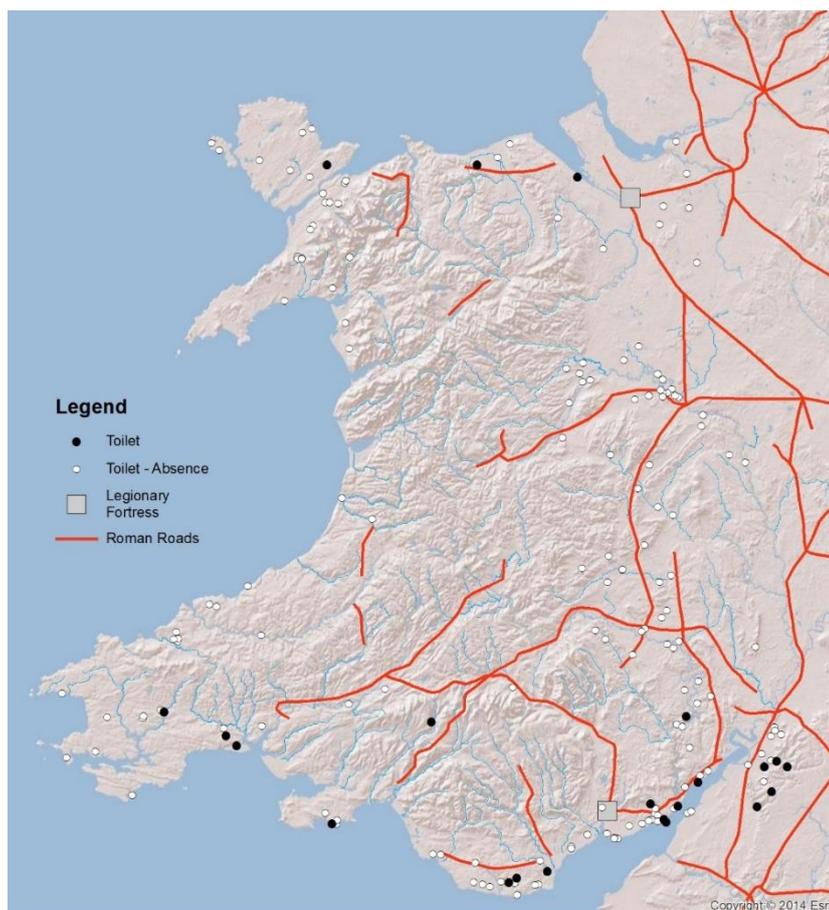
Figure 5.24. Distribution of objects associated with personal care

5.4.4 Objects associated with writing

This category comprises objects associated with writing, including styli, seal boxes, and inkwells. Writing is a technology which is particularly associated with Roman culture and lifestyle. Though a recent study of the distribution of styli on villa and non-villa rural settlements states that across Roman Britain they are found with 'surprising frequency' (Hanson and Connolly 2002, 155) and that

literacy may therefore have been less restricted to high-status and urban sites than has traditionally been allowed, within this study region objects associated with writing remain rare (appearing on only thirteen sites) and suggest that the practice did not become widespread. The objects are primarily distributed in the south-east, with a cluster across the Severn Estuary in Gloucester, and appear primarily on larger villa sites e.g. Kingscote (Gloucestershire), which with 28 styli and five seal boxes, represents the source of most of the objects of this class in this region. Frocester (Gloucestershire), with three seal box fragments and three styli, forms the next largest assemblage. With five styli Whitton (Glam) is something of an anomaly within Wales proper; other sites tend to produce only single finds. Objects associated with writing in the south-west and north tend to appear on sites with unusual and possibly military characteristics e.g. Pentre Farm (Clwyd-Powys), or Plas Coch (Clwyd-Powys). They are not present in the assemblage of any farm sites in the north-west.
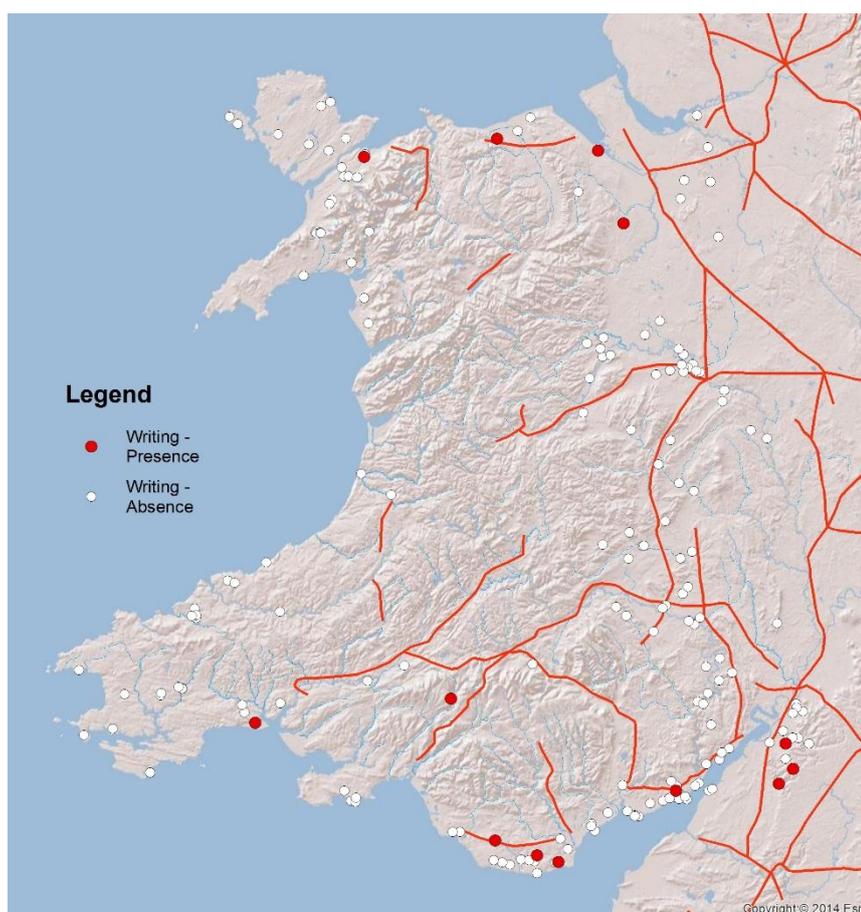
Figure 5.25. Distribution of objects associated with writing

5.5   Summary

This chapter has provided an overview of the RSRB dataset. It has introduced and given definitions for the major site types which will form the basis of the analysis in subsequent chapters. It has also provided distribution patterns for these site types and for the major morphological and structural elements of rural settlements in this region.

It has also provided an introduction for the artefact types which will be used in subsequent chapters to explore the research questions outlined at the beginning of this thesis. It has provided broad distribution patterns for major artefact groups associated with the study of the economy, including coinage and pottery, which will be built upon in Chapter Eight. Introductions and distribution patterns have also been provided for the artefacts associated with personal identities and social practices at rural settlements, which will be used to analyse these objects in greater depth in Chapter Nine.

The following chapter will build on these patterns to explore patterns of land use and settlement distribution in greater detail.

6. Landscape

6.1 Introduction

This chapter will examine the evidence for regional settlement diversity within the study area by building on the general overview given in the previous chapter to explore the distributions of sites and their associated characteristics in greater depth.

Though it has been argued elsewhere in this thesis that Wales and the Marches as a whole have been marginalised within the broader study of Roman Britain, it should be stated that the region has long been recognised as containing distinct regional settlement patterns. These have primarily been explored through regional surveys of specific areas, as described in Chapters 2 and 3. General syntheses of the study region have usually provided a general overview, bolstered by type-sites (Arnold and Davies 2000, 65-89), and there have been no studies of the study region which proceed from direct examination of the archaeological data and consider the material culture.

In considering the regional development Wales and the Marches, the region is commonly divided into ordinal quadrants, each with its own broadly-understood settlement characteristic – the south-east traditionally viewed as a more densely-settled and prosperous region boasting some villa settlement, the south-west characterised by smaller curvilinear enclosed settlements, the north-west of stone-built enclosures with roundhouse groups, and the north-east a region of sparse farm settlement (Jones 1990; Arnold and Davies 2000).

The influence of geography and topography as factors in the settlement patterns of Wales and the Marches has long been emphasised. While the influence of geography on human activity has formed an important strand in the archaeology of Britain as a whole, it has been particularly prevalent within this study region. These ideas have proved enduring: indeed much of the internal and external definitions of Welsh identity have emphasised the 'timelessness' of Welsh culture and linked this directly to the landscape (Gruffudd 2000, 591). In the 20th century these were particularly influenced by the work of successive scholars, including geographer and anthropologist H J Fleure, whose identification of an enduring

physical 'Celtic type' cast the upland interior of Wales as a form of refuge where ancient things – peoples, customs, and cultures – endured (Fleure 1923, 241). This work in turn influenced Fox's division of Britain into upland and lowland regions characterised not only by geographical but cultural differences: the lowland home to cultures which were fluid and receptive to change and the upland resistant and tending to the retention of older customs (Fox 1932, 40). This geographical characterisation has proved enduring, with much work still tending towards these constructions. We must therefore be wary of simplistic characterisations of the nature of settlement which proceed from geographic and environmental determinism.

The discussion of these similarities and differences of settlement is dependent largely on data drawn from individual excavations of particular type sites, such as Whitton (Glam) and Bryn Eryr (Gwynedd), both particularly large and detailed research excavations – smaller, development-based excavations have received more limited attention.

This chapter will use the material afforded by the RSRB and supplemental projects to examine regional variation in rural settlement from a data-driven perspective, considering the morphology and regional distribution of site types and material culture to explore regional responses during the Roman period. It will consider the location and density of settlements and their morphology.

6.2 Settlement Location

6.2.1 Settlement Location and Density

Settlement density varies considerably across Wales and the Marches. The relative numbers of sites within each region has been discussed in the previous chapters, but in summary a far greater number fall within the Central Belt despite this forming only a fraction of the geographical area, particularly in comparison to Upland Wales and the Marches. Another striking pattern is that very few settlements are present in the upland interior. Settlements in the upland interior are primarily vicus settlements. These have been included in the RSRB database to supplement the dataset, but their inclusion gives a false impression of the overall rural settlement pattern and of its nature.

Numerous factors affect modern understanding of ancient settlement patterns, and the absence of settlement evidence does not necessarily reflect ancient settlement density. The recovery of information is heavily dependent on modern settlement and development patterns, and infrastructure projects in otherwise undeveloped areas (e.g. pipeline or road construction schemes) can provide opportunities to fill the gaps in the settlement record. The concentration of settlements identified during the A55 road scheme on Anglesey, for example, indicated a far denser occupation pattern on the rich agricultural soils of the island interior than had previously been identified (Cuttler et al 2007, 250). Similarly, the Brecon to Tirley gas pipeline project significantly increased the number of known sites in Herefordshire (Cruse 2013); six sites identified as part of archaeological interventions during the works are included in the RSRB dataset.

However, though the absence of settlement in this region may in part be determined by the lack of archaeological investigation and of modern settlement, this does not entirely explain the absence of evidence and other sources of data confirm the relative lack of material in this region. A search of the Portable Antiquities Scheme database (finds.org) for Roman artefacts demonstrates a similar distribution (though again, the effect of modern factors including land use and detectorist activity must be taken into account).

6.2.2. The Portable Antiquities Scheme: Evidence of Absence?

The distribution of Roman PAS finds corresponds broadly to the distribution of RSRB settlements, with denser areas in the south and east, particularly along the coast (Fig 6.1). The PAS records a greater concentration of finds in the upland interior than of rural settlements in the RSRB dataset - however, the distribution of finds in this region does correspond well with that of military sites (Fig 6.1), and the vicus settlements which are recorded in the RSRB. Away from the river valleys and the immediate hinterland of forts PAS finds distribution is sparse.
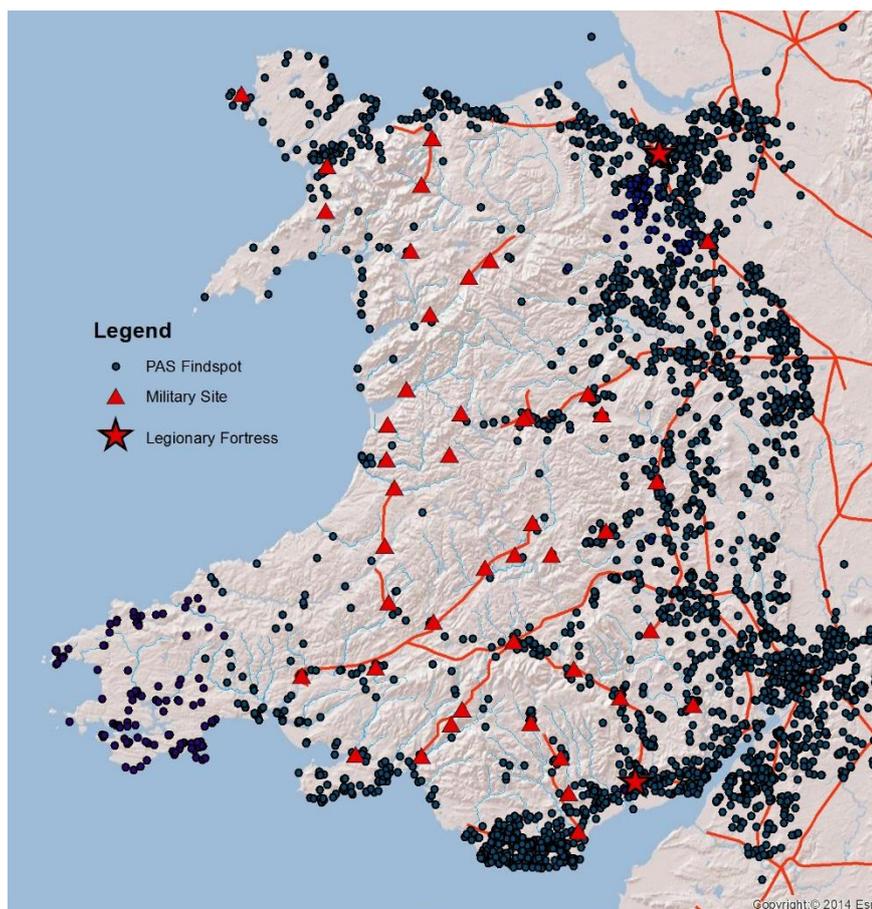
Figure 6.1. Distribution of Roman PAS finds with known Roman military sites

A limited range of object types are also recorded. In Powys, the Unitary Authority covering much of the mountainous interior - including both the Brecon Beacons and Cambrian mountain ranges and parts of the Black Mountains - a total of 6352 PAS finds are recorded, of which 6224 (98%) are coins. 6159 of these coins are derived from the Iron Age and Roman Coins in Wales dataset (Guest and Wells 2008) and their distribution by site type can be examined in closer detail (Table 6.1). This reveals a significant relationship with military sites. While 90% of coins in the region derive from hoards (c5000 from a single 4th century hoard at Cae Bardd), the majority of non-hoard finds derive from military or vicus sites: 281 coins compared to only 12 coins from rural settlements. This suggests that the circulation of material culture in the region was concentrated in military and military-adjacent networks.

However, in order to understand whether this is a settlement pattern peculiar to the Roman period - and therefore indicating a particular and distinctive use of the landscape - or one consistent with longer traditions of landscape use, it is necessary to compare the distribution of finds in this period to periods before and

after the Roman occupation. Distribution maps of PAS finds from the Neolithic to the Post-Medieval are given below (Figs 6.2 to 6.7)

Find Type	No of Coins	%
Excavation - hillfort	2	0.0%
Excavation - military site	169	2.7%
Excavation - 'other' site	11	0.2%
Excavation - rural settlement	12	0.2%
Excavation - uncertain site	1	0.0%
Excavation - vicus / canabae	112	1.8%
Group	261	4.2%
Hoard	5541	90%
Single Find	50	0.8%
Total	6159	100.0%

Table 6.1. Breakdown by site type of Roman coins in Powys (data from IARCW)
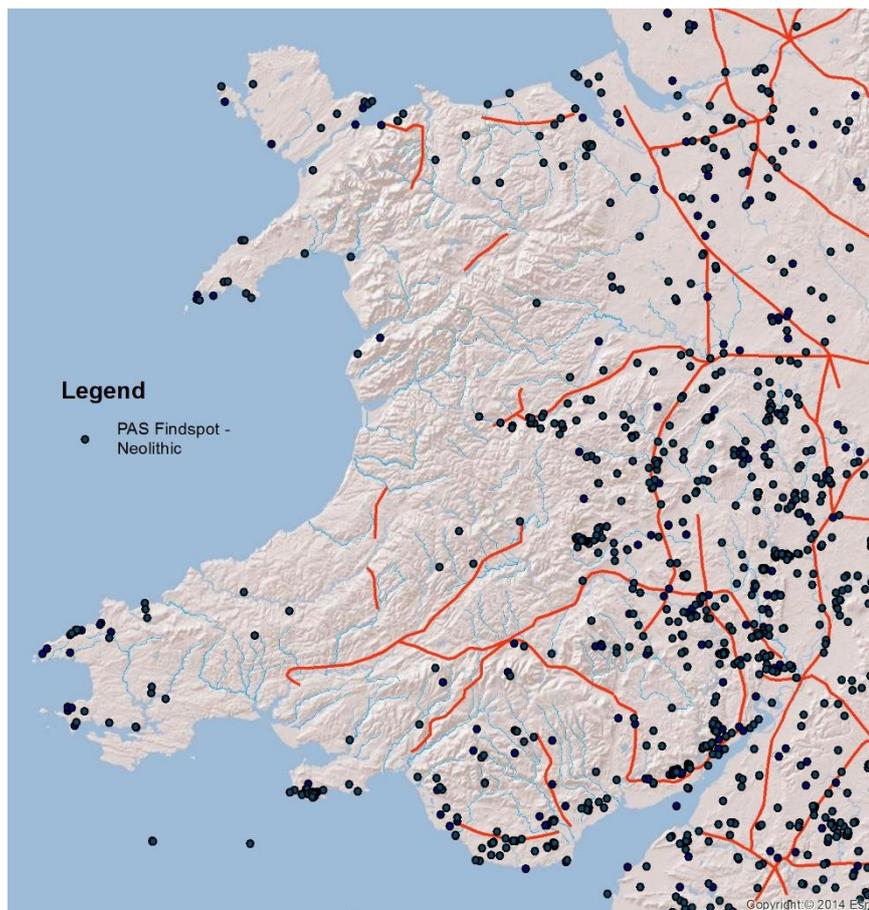
Figure 6.2. Distribution of Neolithic PAS finds
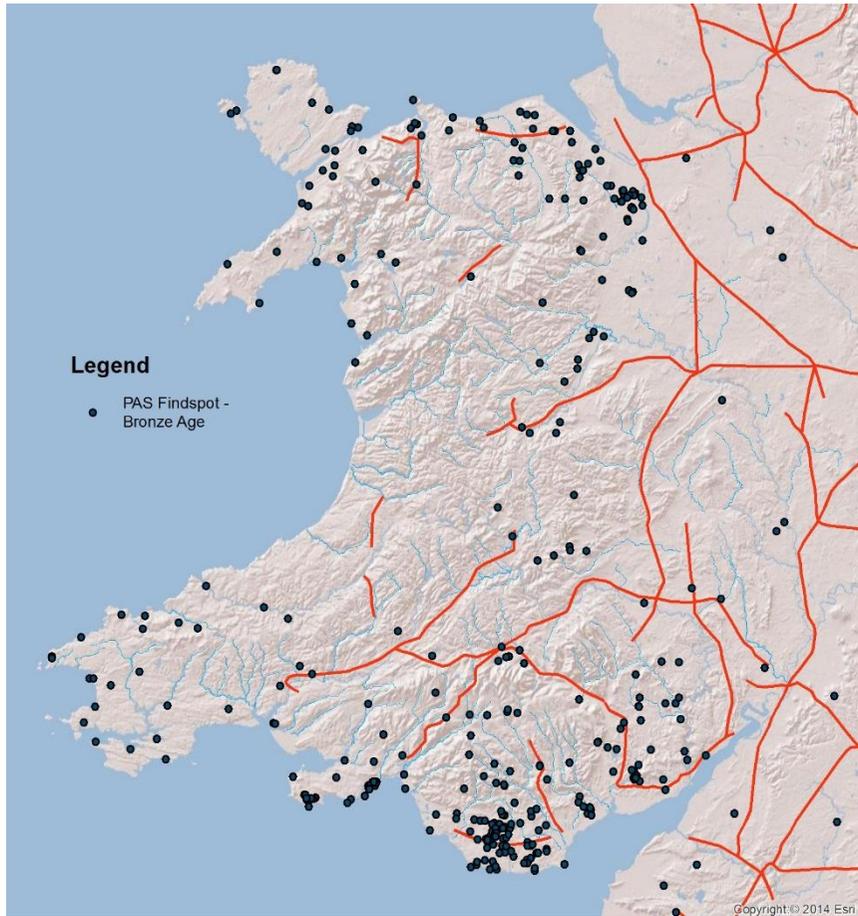
Figure 6.3. Distribution of Bronze Age PAS finds
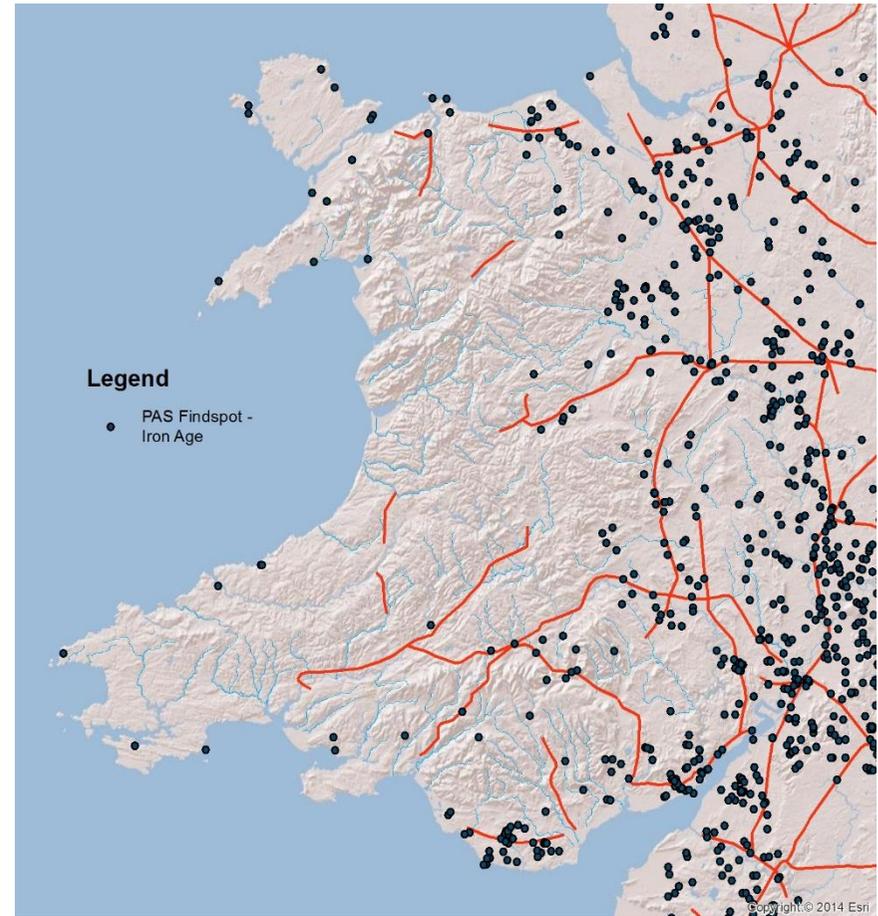
Figure 6.4. Distribution of Iron Age PAS finds
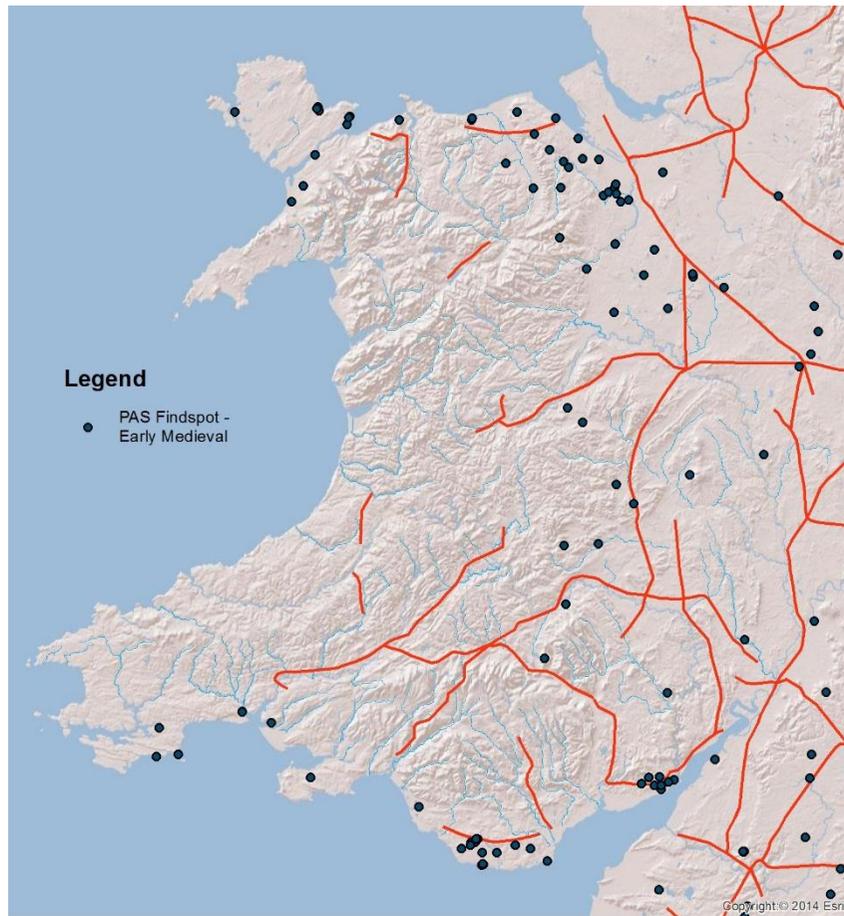
Figure 6.5. Distribution of Early Medieval PAS Finds
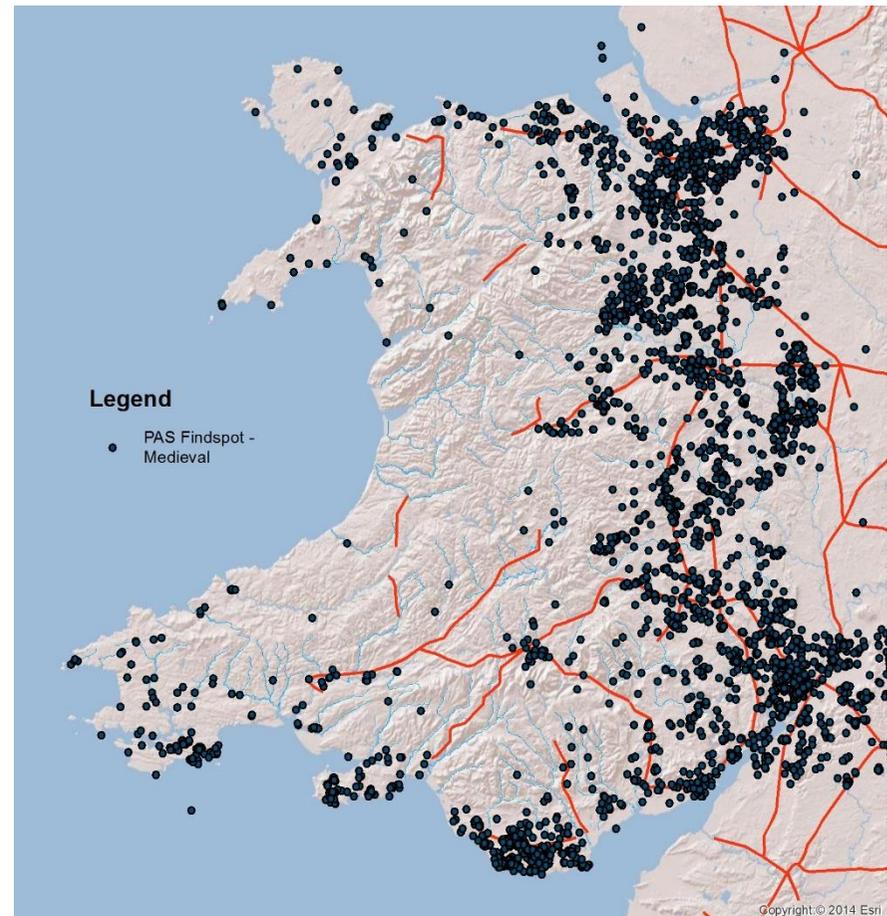
Figure 6.6. Distribution of Medieval PAS finds
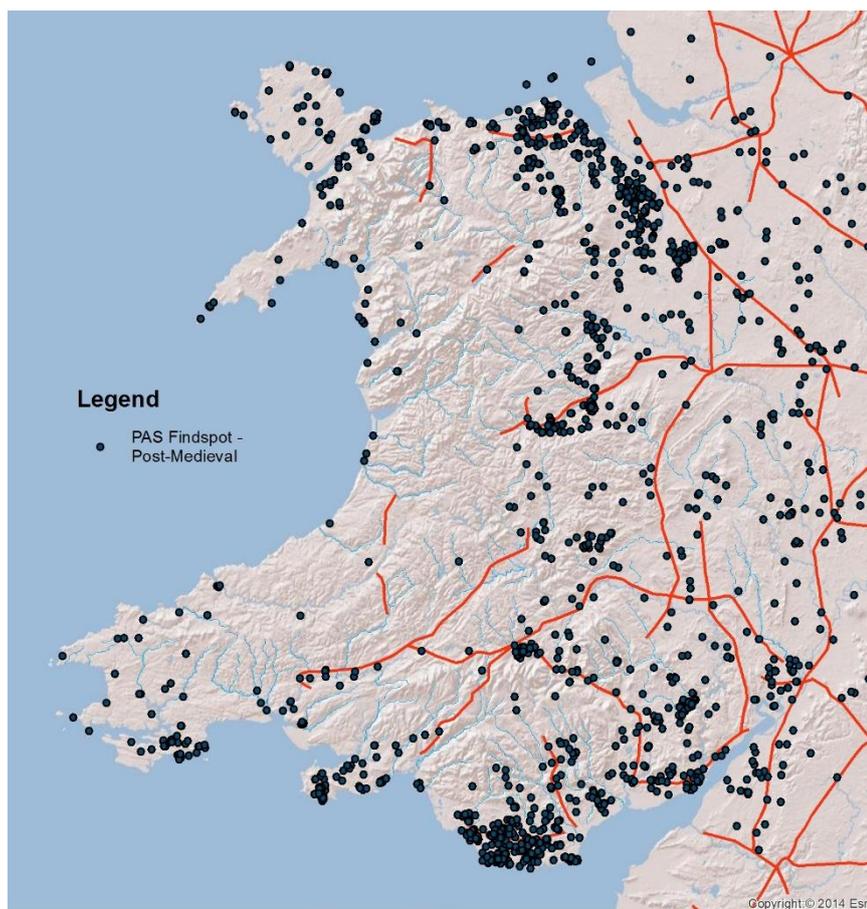
Figure 6.7. Distribution of Post-Medieval PAS finds

Viewing the distribution of PAS finds over a long timescale shows shifting patterns throughout different periods. The potential for bias in PAS recording should also not be underestimated, both in terms of the areas surveyed by detectorists and in the recognition of particular finds of interest. The density of Neolithic finds in comparison to some later periods may be due to the durability and relative ease of recognition of lithic artefacts in comparison to those of later periods in which metal artefacts are more common (Bond 2010, 27).

Modern land use also affects detection rates. Detector use is easier in ploughzone areas, particularly in rolled fields where ploughing continually brings new finds to the surface (Robbins 2013, 58), and finds are therefore biased towards areas of ploughzone agriculture. However, the Land Cover Atlas of the United Kingdom (Rae 2017) finds that in Wales only 5.7% of land falls under the category 'non-irrigated arable land'. By contrast, 52.4% of all land in Wales is classified as 'pasture', with a further 11.5% 'natural grassland' and 8% 'moor and heathland' (Rae 2017, 22). While this does not preclude metal detector use, it does constrain

the amount of land which is conducive to successful detection. The variety of land cover patterns may help to explain the disparity between PAS finds at regional and subregional levels; for example, in Powys (explored above) the land cover is primarily pasture (51.1%) and natural grassland (18.5%), with very limited areas of arable land (3.63%) whereas by contrast, the cluster of PAS data in the Vale of Glamorgan may be linked to the much higher proportion of arable land (22.5%) in this county (Rae 2017)

Several studies have explored the biases introduced into PAS data collection by the various limitations of landscape and modern land-use (Richards *et al* 2009; Brindle 2013; Robbins 2013) and an understanding of the function of such constraints may further explain why settlement distribution appears to be so limited in the study within this area. The *Viking and Anglo Saxon Landscape and Economy* project (Richards et al 2009) mapped the distribution of PAS records against various constraints e.g. modern land use and elevation, and found that the impact was particularly pronounced in Wales, with only 1.8% of finds in Wales recorded from land lying above the 300m contour (Richards *et al* 2009, 2.4.2.7) i.e. in much of the mountainous interior, above the limit of ploughzone farming. The lack of PAS finds and of recorded settlements likely indicates that there were genuine gaps in the settlement pattern in this region. However, as the act of ploughing tends to bring new artefacts to the surface, the absence of artefacts above the level of ploughzone farming may be a taphonomic as well as settlement factor.

Bias in the identification of finds can also be introduced by known archaeology. Such biases have been identified in other regions during the Roman period: in a study of PAS finds on the Isle of Wight, Robbins (2013) identifies the targeting both of known sites and regions of archaeological interest as a factor in the overrepresentation of Roman finds within the PAS database (Robbins 2013, 62) and this may further account for the overrepresentation of finds associated with the Roman military as discussed above. Over 70% of PAS finds (including non-Roman objects) were located within 2km of a Roman road (Robbins 2013, 62). Within the study region of this thesis, Roman finds do appear to cluster around Roman military sites.

However, the level of difference between the periods does indicate that there was some variation in landscape use throughout these periods, and particularly in the exploitation of the uplands. Neolithic and Bronze Age distributions (Figs 6.2, 6.3) suggest that there was some activity in these periods, though the isolated nature of PAS finds means that the nature of this use is unknown. Few settlements have been identified from these periods and the majority of the known sites are of a mortuary or ritual nature, perhaps creating what Lynch terms a 'ritual landscape' (Lynch et al 2000). This raises the possibility that the absence of settlement in the uplands in the Iron Age and Roman periods is premised on cultural and religious rather than economic considerations.

The Iron Age and Early Medieval periods are particularly poor in finds in these regions. This may suggest that it is the concentrations of Roman material which are anomalous, with the military and vicus settlements representing an intrusive element into an otherwise continuous tradition of sparse landscape use at higher elevations. The deterioration of the climate during the Bronze Age/Iron Age transition has been suggested as a cause of settlement abandonment, with the cooler, wetter climate limiting the viability of farming in such marginal landscapes (Caseldine 2018), though the general applicability of such environmentally deterministic factors has been questioned (Tipping 2002, 11). Dark's survey of pollen sequences from this period across Britain found that five out of the nine pollen sequences from Wales showed evidence for woodland regeneration during the Bronze Age/Iron Age transition, with all of these sites lying above 150m (Dark 2006, 1391). The precariousness of farming in marginal landscapes may have led to movement to lower landscapes in order to lower risk, though it should be noted that most analyses focus on the evidence for arable cultivation and that pastoralism – particularly seasonal transhumant pastoralism – may have left few archaeological traces.

While the lack of recovered artefacts does not necessarily mean that none were ever present, similarly the absence of artefacts does not necessarily mean that there was no human activity. Transhumant pastoralism in the form of the *hafod* and *hendre* system has often been employed as an explanation for the absence of upland settlement in various periods from the Roman through the medieval and post-medieval (Ward 1997, 97-108). Transhumance describes a system of seasonal movement from upland to lowland pasture, with livestock moved to a temporary

upland settlement (hafod) in the summer and returned to the permanent lowland settlement (hendre) in the winter. Though there is little material evidence for such settlement and understanding of its function as a social and economic system in Wales derives only from references in medieval literary sources (Ward 1997, 105), an early form of a system which by its nature resulted in limited settlement and material culture residue fits well with the archaeological evidence. The existence of a mobile and relatively economically-disengaged population in the highland regions may also serve to explain the longevity of small forts in these areas and perhaps why their associated civilian settlements did not endure as independent nucleated settlements or small towns past the removal of the garrison, as was often the case in other parts of Roman Britain.

6.3 Settlement Distribution and Chronology

In order to understand the regional differences within the study region, it is first necessary to define where the settlements are located. The overall distribution of rural settlements has been outlined briefly in the previous chapter, but to make valid comparisons it will be further necessary to compare settlements of the same period.

Region	Iron Age		Early AD75 - AD150		Middle AD150 - AD300	
	No of Sites	%	No of Sites	%	No of Sites	%
Central Belt	29	35	55	39	52	41
Central West	14	17	28	20	24	19
Upland Wales and Marches	41	49	59	42	51	40
Total	84	100	142	100	127	100

Table 6.2. Sites by region and period (Iron Age to AD300)

Region	Late AD300+		Post-Roman		UNKNOWN
	No of Sites	%	No of Sites	%	
Central Belt	23	40	2	20	1
Central West	10	17	1		2
Upland Wales and Marches	25	43	7		6
Total	58	100	10		9

Table 6.3. Sites by region and period (AD300+)

As discussed in previous chapters, one of the major difficulties in using the RSRB data is chronology. Broad chronological data including rough period of occupation and the phasing of sites (where possible to determine from the excavation reports) is included in the RSRB dataset, but these are difficult to apply consistently across the whole dataset in a way that allows for secondary analysis. In order to analyse the chronological variation in settlement patterns across the region, the sites have therefore been broadly reclassified as Early (AD75-150), Middle (AD150-300), and Late (AD300+) (Tables 6.2, 6.3). Evidence of Iron Age and post-Roman occupation has also been noted. Though this necessarily means that the chronological analysis is also conducted at a high level and cannot give fine detail, the chronological analysis of settlement patterns from data has not previously been attempted for this region, and it was therefore decided that an analysis on this scale would still make a valuable contribution to our understanding of settlement in the Roman period.

A small number of sites could only be dated to the Roman period and so could not be reclassified in this way. These are generally sites which have undergone limited intervention (for example as evaluations in advance of development) or where Roman occupation has only been identified through comparison of site morphology (rectilinear enclosures and buildings are often attributed to the Roman period) and finds or other evidence (such as Rock Green (Shropshire), where dating of the rectangular cropmark enclosure to the Roman period is reliant upon sherds of Severn Valley Ware and a single bow brooch [Carver and Hummer 1991]). It should also be noted that the identification of sites as dating to the Roman period is largely due to the comparative abundance of material culture which can be identified as Roman. The cumulative effect of this is that settlements with Iron Age origins are likely underrepresented within the regional assemblage.

The chronology and settlement pattern of villas and farms is discussed separately, as the RSRB does not allow for the separation of single sites into villa and farm phases.

6.3.1 Defining Continuity

As the following section will deal with ideas of settlement continuity and change, both in the analysis of the transition from Iron Age to Romano-British periods and throughout the Roman period itself, it will first be helpful to consider what is meant by those terms. Archaeologists often emphasise 'continuity' of occupation without considering what this means or looks like at a settlement level.

As noted above, one of the major difficulties with examining continuity at rural sites is the scale at which the chronology of the sites can be consistently captured at every stage of data collection, from the initial excavation to the compiling of data for the RSRB, to reclassification for inclusion in this thesis. Sites which experience episodes of abandonment and reoccupation are difficult to identify with these broad categories and are better-identified through closer analysis of case study sites. The form of occupation in different periods is also difficult to discern. For example, Prestatyn (Clwyd-Powys) is occupied in both the Iron Age and Roman periods and would therefore superficially appear to be an example of settlement continuity. However, the manner of occupation in each period is very different: in the 2nd or 1st centuries BC the site was a farm with stake-walled roundhouse, but from the c70s AD this was replaced by a sequence of rectilinear working buildings including bronze workshops, a masonry bathhouse, and timber aqueduct, with military involvement implied by the presence of ceramic building material associated with the Holt kilns and in some cases stamped with Legio XX Valeria Victrix (Blockley 1989). This is therefore an example where there may be continuity of occupation at a particular site, but not of the same kind of occupation. The inhabitants of the settlement would not have considered this continuity.

Pottery is often used as an indicator of occupation and its absence consequently of abandonment. One of the drawbacks of this approach is that a reduction in the use of pottery or change in depositional practice may register as abandonment at sites with a limited assemblage of material culture. Biglis (Gwent-Glamorgan) is a site listed with occupation from the Iron Age through the Romano-British period; however, a lack of pottery dating to the end of the 1st century and the first half of the 2nd suggests that there may have been a period of abandonment or reduced occupation between the first and second phases of occupation at the site,

spanning approximately the end of the 1st century AD to the middle of the 2nd (Parkhouse 1988, 31; Webster 1988, 33).

Conversely, where certain kinds of well-dated pottery are present the date of the latest forms are sometimes used to date the abandonment of the site – the absence of later forms are understood to mean that occupation at the site had ceased. However, such wares (in particular samian) were likely to have been curated and in use beyond the end of their production lives and may therefore give a false impression of the date at which certain sites were abandoned (Willis 2005, 6.7). In the same way, changes in the focus of settlement may also register as abandonment, particularly in small-scale excavations where a limited area of investigation may not identify shifts in settlement focus. It is important to consider such possibilities in any discussion of settlement continuity.

Continuity is broad brush term, which tends to simplify settlement processes into a binary of stasis and change and elides the small fluctuations which must have formed part of the life of each settlement within the study region. While the intent of this thesis is to move beyond simplistic dichotomies – Roman/native, transformation/stasis – towards more complex and fine-grained understandings of the ways in which settlements reacted to the circumstances of the Roman period, within the broad chronological approach it is unfortunately inevitable that some conflation of periods and elision of complexity will also take place.

6.3.2 Late Pre-Roman Iron Age and Early Roman (AD75-AD150)

Only four villa sites (Frocester (Gloucestershire), Huntsham (Herefordshire) Llandough (Glamorgan-Gwent), Whitton (Glamorgan-Gwent)) show evidence of pre-villa Iron Age occupation, and all are located within the Central Belt. The scarcity of this evidence is likely due to the fact that many such sites were subject to excavation during the mid C20th and earlier. Villas, with their readily-identified rectilinear stone features and richer material culture, were more likely to be excavated in the course of antiquarian investigations (for example, Cwmbrwyn (Glamorgan), excavated in 1905-6 [Ward 1907, 175-212]). Such campaigns during the early development of archaeology were ill-equipped to identify the physical evidence of Iron Age activity such as postholes, ditches etc. It is therefore likely that further investigation would identify Iron Age phases at a

greater number of villa sites, particularly those which are known to have a Roman, pre-villa farm phase. There are nine villa sites with Roman pre-villa farm phases and all four of the sites which display Iron Age domestic activity are represented within this sample. For the reasons outlined above it is likely that more villa sites developed from unidentified Iron Age farm phases - as at Llantwit Major, where a 1970s re-examination of the initial early C20th excavation evidence suggested a pre-villa phase within a ditched enclosure (though the presence of the pre-Roman enclosure and early Roman timber structures were 'partly inferred from the Whitton excavations' [Hogg 1974, 238] – perhaps a salutary reminder to be wary of using regional exemplars from which to infer similar developmental trajectories at other sites).
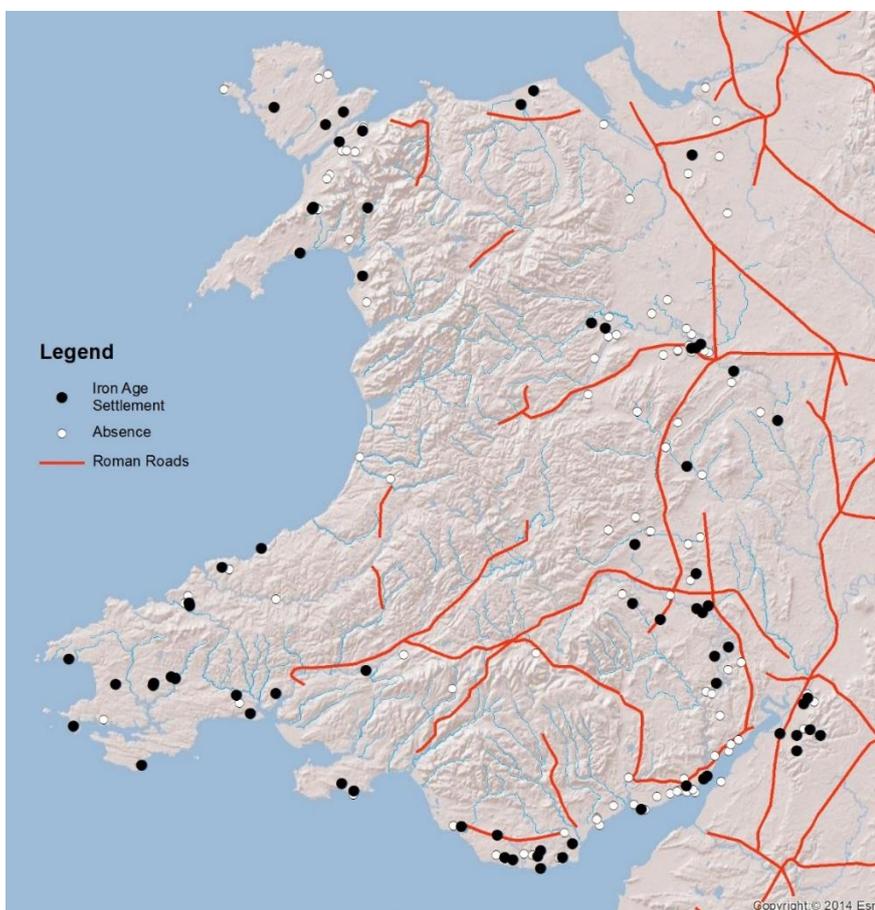
Figure 6.8. Distribution of settlements with Iron Age activity

By contrast, Iron Age activity is noted at 70 farm sites (Fig 6.8) This may indicate that farms enjoyed greater settlement continuity, and that the introduction of the villa as an architectural form represented a stronger break with pre-Roman tradition than has previously been supposed for sites such as e.g. Whitton (Glamorgan-Gwent), and may beg the question of how far the transition from farm

to villa can be viewed as settlement continuity, notwithstanding the potential biases already outlined.

Sites with evidence of continuity of occupation from Iron Age to Early Roman are more likely to be located in the north west (35 sites out of a total of 77 sites with both Iron Age and Early Roman activity are from Upland Wales and the Marches). This may indicate greater longevity of settlement in this region, and a more limited impact on settlement patterns resulting from the Roman conquest. There may also have been an environmental aspect to this continuity of settlement patterning, with favourable locations for agricultural settlements more difficult to find and therefore more likely to be continuously settled.
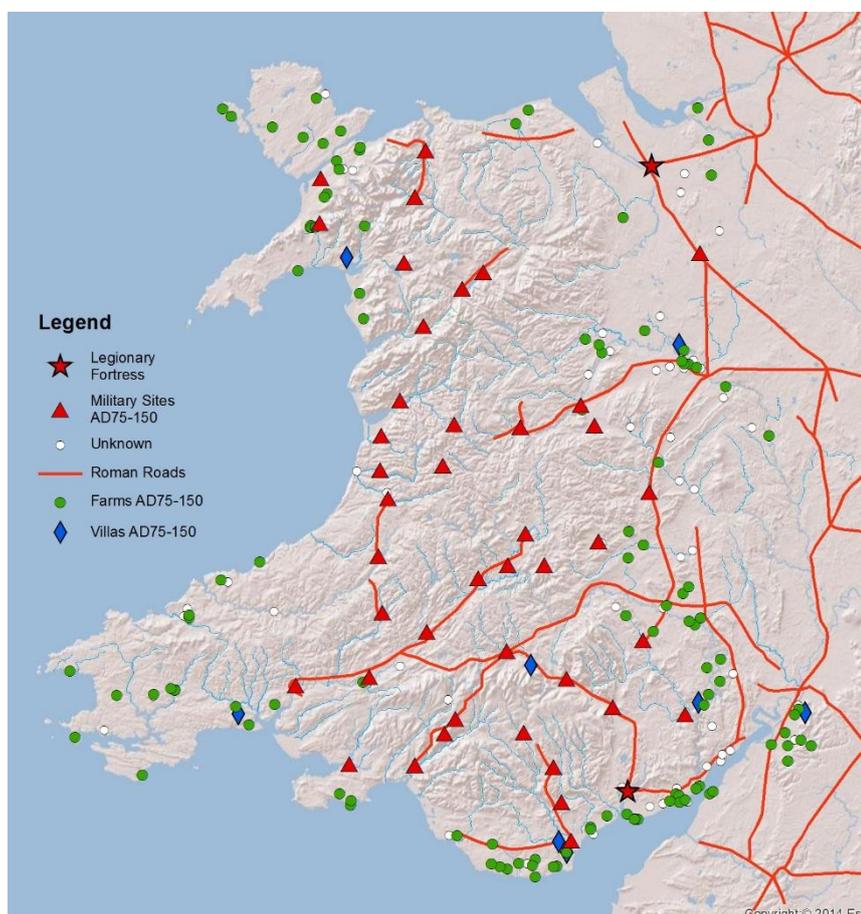
Figure 6.9. Sites with Early Roman (AD75-AD150) settlement

There appears to be fairly little correlation between the general rural settlement pattern and that of the military, though villas do appear to have been located in closer proximity to roads and military sites than farm settlements. The absence of settlement in the upland interior in comparison with the intensity of the military

occupation in this region is particularly striking and suggests that the intent of the military disposition was not to exert direct control over settled populations but to supervise or curtail movement and communication through the region: many of the known military sites command river valleys or passes through the uplands. While this naturally facilitated transport and supply of personnel and goods between military installations, the extent to which this transformed the relationship between the rural population and the landscape should also be considered (Witcher 1998, 68).

6.3.3 Middle Roman (AD150-AD300)

In all regions the number of occupied farms decreases during the Middle period (see Table 6.2), the late 2nd and 3rd centuries, though the number of villas increases during the same period. This is particularly so in the Central Belt (Table 6.2), where three times the number of villa sites are occupied during this period as in the Early period, perhaps suggesting a shift in social organisation, or an increase in the general level of wealth in this region in particular.

An increase in the number of villas may be noted alone the line of the Marches, particularly in the region of the Forest of Dean and the Wye Valley. This may have been linked to the importance of the Forest of Dean as a major focal point of the Romano-British iron industry (Sim and Ridge 2002, 28). Some villas in this region, such as Chesters (Gloucestershire), Boughspring (Gloucestershire), and Park Farm (Gloucestershire), appear to have been closely involved with the regional metal-working industries (Fulford and Allen 1992, 159).
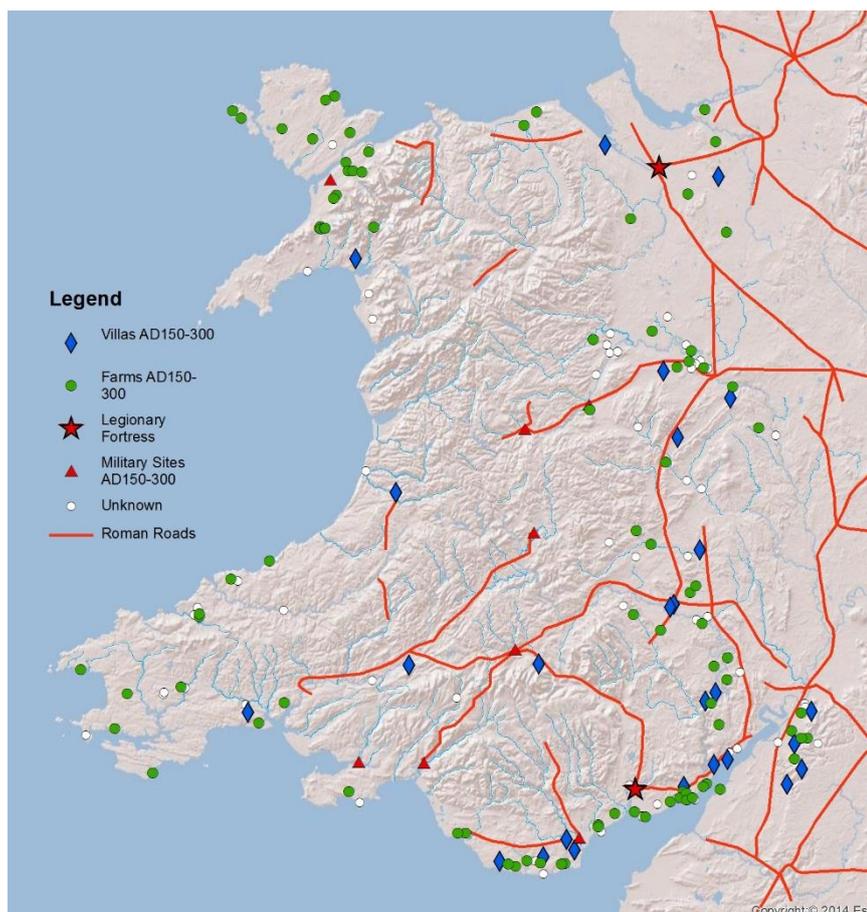
Figure 6.10. Sites with Middle Roman (AD150-AD300) settlement

Again, the denser areas of settlement are concentrated in the south and east of the study region. This pattern is likely due to a combination of ancient patterning and modern development and land-use. However, the strongly coastal distribution of these settlements is striking.

There are significantly fewer military sites occupied in this period, though notably this does not appear to have had an effect on the settlement pattern in the upland region. Where the forts persist in the uplands – for example, Castell Collen, Caersws, and Forden Gaer – they are again usually at the intersection of lines of communication (Burnham and Davies 2011).

6.3.4 Late Roman (300+)

In the 4th century and onwards the number of occupied rural settlements diminishes significantly, with the numbers of occupied farm sites dropping by between a half to two thirds in all regions (see Table 6.4). The same pattern can be observed in villa settlements. While the causes of such a dramatic reduction in

the number of occupied settlements are unclear, the 4th century is generally recognised as a period of unrest across the Empire. The establishment of the Saxon Shore defensive fort system in England is mirrored by the reoccupation of some coastal forts in Wales, such as Neath and Loughor, and the establishment of new forts at Cardiff and Caer Gybi (Holyhead) among others in order to counter Irish incursions (Arnold and Davies 2000, 28). The turmoil of these events may have caused a shift in settlement patterning. At Caerwent the 3rd and 4th centuries are defined by an increase in large, well-appointed houses which may have functioned in part as urban farms (Arnold and Davies 2000, 53-54), perhaps indicating an increasing desire for settlement nucleation within the safety of the town's defensive walls.

However, it should also be noted that the reduction in the number of known sites may not be directly related to a decrease in settlement occupation or population but to a decrease in the circulation of material culture by which such sites can be dated. This period also sees a marked reduction in material culture, and particulalrly in the distribution of pottery in the study region, corresponding with a general reduction in the circulation of pottery from the 2nd century.
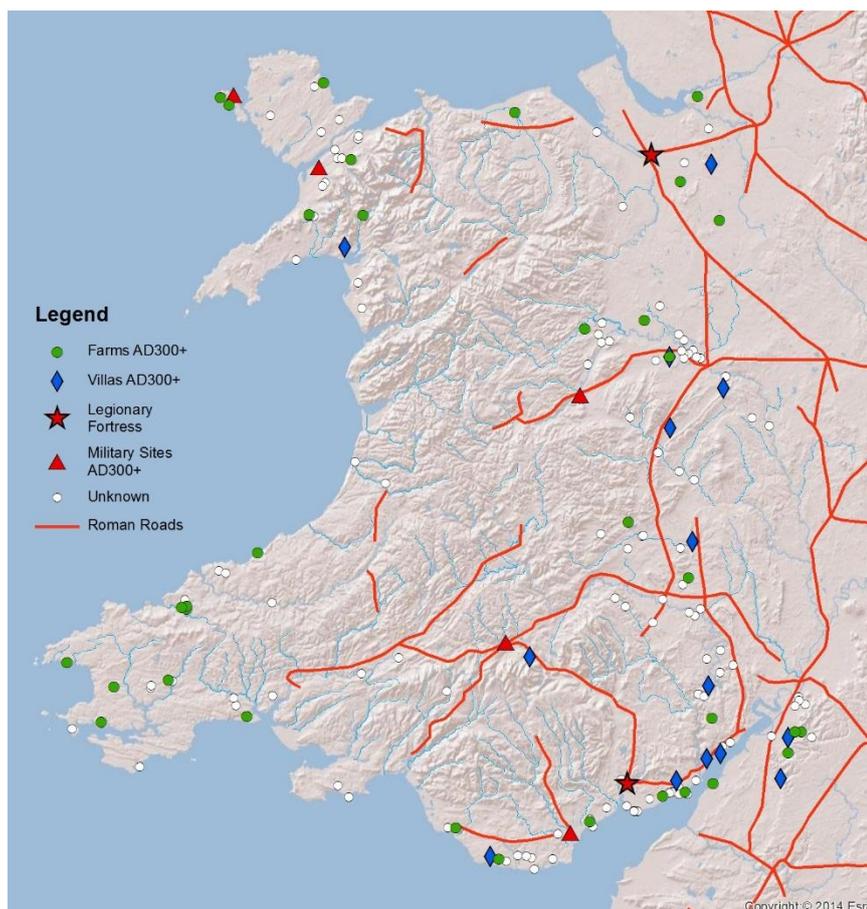
Figure 6.11. Late Roman Settlement AD300+

	Farms			Villas		
	Early	Middle	Late	Early	Middle	Late
Central Belt	42	33	10	4	13	7
Central West	20	15	6	1	7	4
Upland Wales and Marches	50	40	18	3	6	3
Total	112	88	34	8	26	14

Table 6.4. Chronological distribution of farms and villas by region

6.4 Site Morphology

6.4.1 Issues

As explored in the previous chapter, the RSRB provides basic information on settlement morphology to map settlement diversity throughout the region, and sites are categorised as complex, enclosed, and unenclosed. While this allows the

categories to be applied to a broad dataset across a wide region, it can obscure some morphological distinctions and can create a reductionist view of the complexity of rural settlement.

The RSRB database only captures the site's morphology at its latest and most developed phase e.g. Hunts Grove (Gloucestershire), the only complex farm in the region, developed the regular and formalised use of space which characterises it as such in the Middle period. The site was also occupied during the Iron Age and Early periods with more irregular features (Norton 2010, 24), yet because the database captures the final form of the site it is therefore characterised as a complex settlement in both periods. These are issues that can emerge as a result of 'big data' analysis, which, as already noted, in the accumulation of large datasets tends to elide such nuances. As with many aspects of 'big data' approaches it is necessary to weigh the benefits and drawbacks of such analysis (Cooper and Green 2017, 246). These have been explored in detail in the previous chapters, but in summary there is a tension inherent in 'big data' approaches between the ability to view patterns and trends on a broad geographic and chronological scale with the loss of fine detail in analysis.
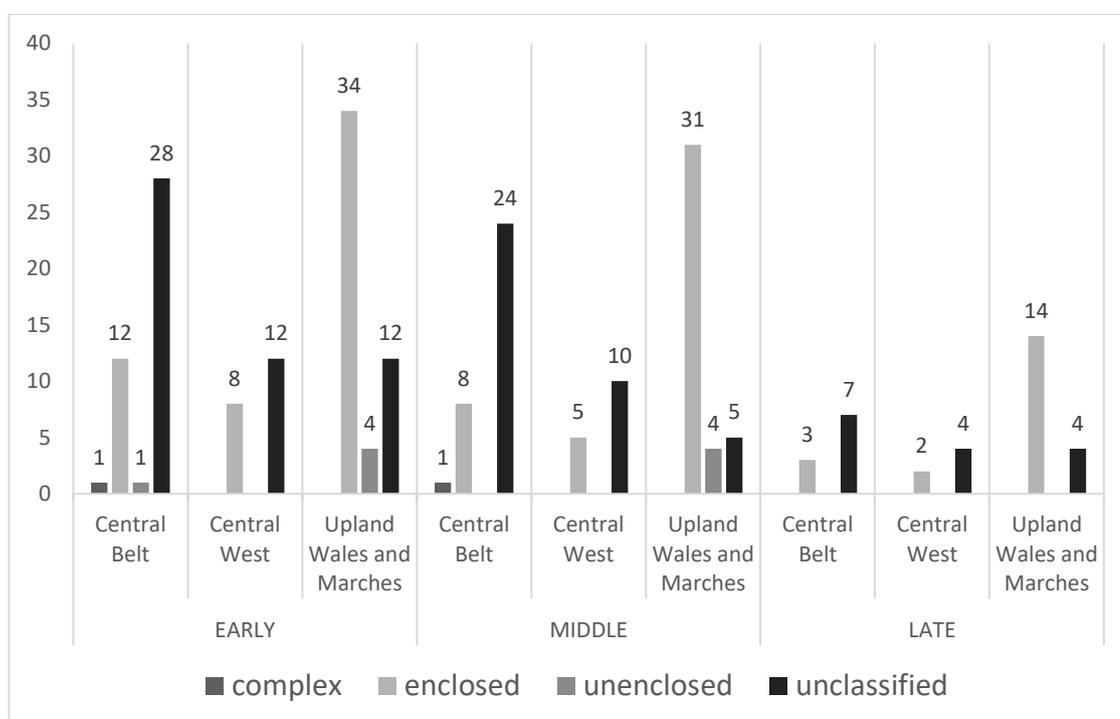
Figure 6.12. Farm sites by period and settlement type

6.4.2 Enclosed Settlements

Enclosed settlements have been selected for further analysis here as they represent the only category of settlement with a recognisable form in sufficient numbers to show any meaningful trends. Settlements have been categorised into their topographical distribution (Fig. 6.12).

Topography	Upland Wales and Marches	%	Central Belt	%
Coastal	4	9	1	8
Fen	0	0	2	17
Hill	16	36	1	8
Plateau or Plain	19	43	6	50
River Valley	5	11	2	17
Total	44	100	12	100

Table 6.5. Comparative topographical distribution of enclosed settlements
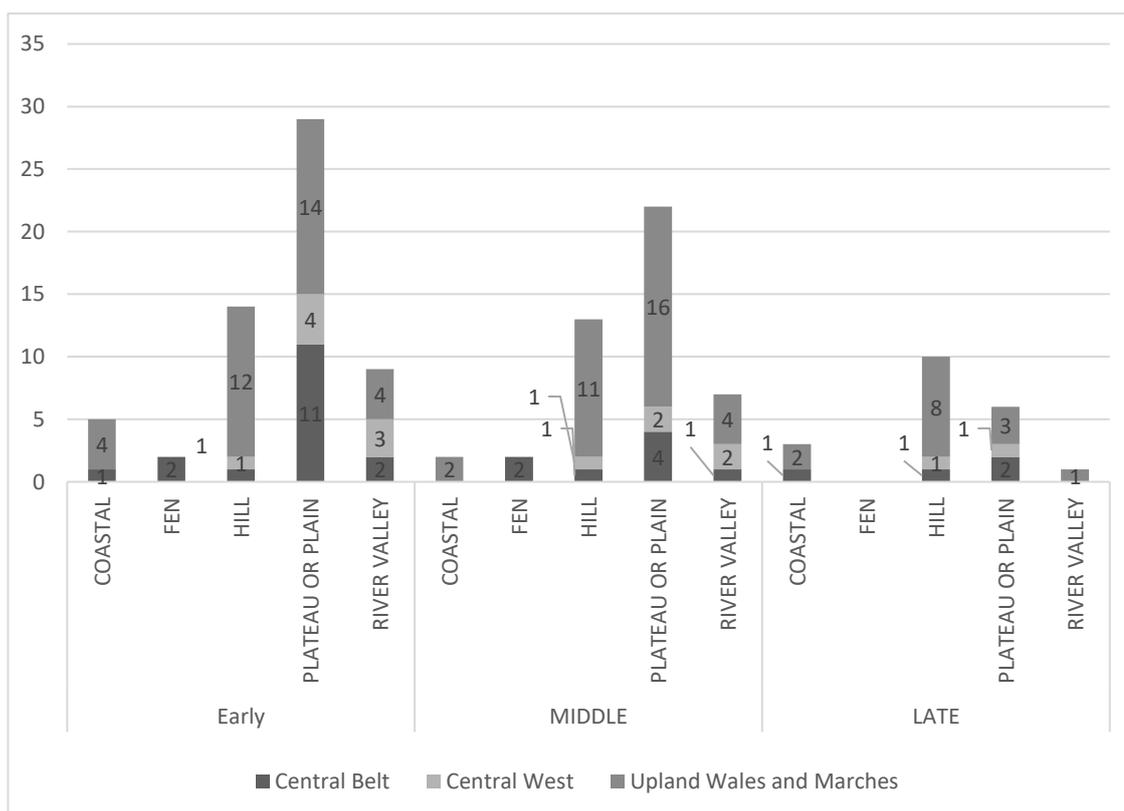
Figure 6.13. Enclosed settlements by region and topography

Some regional diversity can be observed in the topographical distribution of enclosed settlements (Table 6.5). A greater number of enclosed settlements appear in Upland Wales and the Marches in all periods, and enclosed sites also appear to enjoy greater longevity within this region. Enclosed settlements in this

region display a strong distribution towards hills (43%) and plateaux/plains (36%), though this is likely due to the geography of the region and the availability of land suitable for settlement.

There is little chronological variation in the distribution of enclosed settlements. In Upland Wales and the Marches enclosed settlements display a consistent distribution towards hills and plateaux/plains in both the Early and Middle periods, though it is perhaps notable that enclosed settlements on plateaux/plains experience a steeper decline in the Late period than settlements with a distribution towards hill regions (Table 6.6). This may indicate a sense of unease in rural settlements during this period, perhaps caused by the Irish incursions, therefore leading to a withdrawal to upland locations.

Upland Wales and Marches			
Period	Topography	Number	%
Early	Coastal	4	12
	Fen	0	0
	Hill	12	35
	Plateau or Plain	14	41
	River Valley	4	12
	Total	**34**	**100**
Middle	Coastal	2	6
	Fen	0	0
	Hill	11	35
	Plateau or Plain	16	52
	River Valley	4	13
	Total	**31**	**100**
Late	Coastal	2	14
	Fen	0	0
	Hill	8	57
	Plateau or Plain	3	21
	River	1	7
	Total	**14**	**100**

Table 6.6. Detailed breakdown of enclosed settlement topographical diversity in Upland Wales and the Marches

In the Central Belt and Central West regions the decline in enclosed settlements seems to have occurred earlier, in the Middle period. This may indicate a change in the organisation of settlement and landscape during this period, though the numbers of enclosed settlements in both regions are small. However, in the Central Belt this argument may be supported by the increasing numbers of villa

settlements, suggesting a shift in social organisation and perhaps ideas of land tenure.

6.4.3 Villa Settlements

The twenty-nine villa sites in the region display a strong topographical bias towards river valleys (55%) and plateaux/plains (28%), with only three sites located at hill locations (10%) and a single site categorised as coastal (Chesters [Gloucestershire]). This pattern of distribution holds throughout the RSRB regions, with the primary focus of villa settlement on river valleys in all cases (Table 6.7). While this may be due in part to modern settlement and development bias (as discussed elsewhere in this thesis) it is likely that the pattern does represent to a certain extent the ancient settlement distribution. River valleys provide ideal conditions for agricultural settlement, and that villas should generally be located in low-lying, agriculturally rich land is not surprising when they are conceived of as agricultural settlements on a larger scale than smaller, perhaps subsistence-level farm sites.

Topography	Central Belt	Central West	Upland Wales and the Marches	Total
Coastal	1	0	0	1
Hill	2	0	1	3
Plateau or Plain	4	4	1	9
River Valley	7	5	4	16
Total	**14**	**9**	**6**	**29**

Table 6.7. Regional topographical distribution of villa settlements

Villas also appear in close proximity to closer nucleated and military sites, and also to the road network. This suggests that the communications network and the focus of urban and nucleated settlement in the region influenced the development of rural settlement. This view may be supported by the fact that villas in the study region generally occur within 10km of the nearest urban or peri-urban centre (Table 6.8).

The position of villa settlements in relation to the road network and their proximity to larger nucleated settlements (in areas where these exist) may indicate that they served a role as intermediaries between the military/urban

context and the deeper countryside. This may tie in to Derks' and Roymans' (2016) characterisations of villa settlements in peripheral regions as intermediary nodes within its social and economic systems.

Villa	Caerwent	Cardiff	Cowbridge
Castle Tump	1		
Ely		3	15
Llandough		3.5	18
Moulton		12	10
Whitton		9	10
Llanbethery		15	6
Caermead (Llantwit Major)			5.5
Dan-y-Graig			15

Table 6.8. Distance of villa settlements from nearest nucleated centre (after Evans 2001, 28)[4]

In their study of a villa settlement located in a region of the Netherlands which has little other villa settlement, Roymans and Derks (2016) discuss what they call 'peripheral regions' (Derks and Roymans 2016, 161). Such regions are defined by the authors using a number of characteristics, including:

- Limited agrarian productivity
- Underdeveloped transport infrastructure
- Weak development of nucleated settlements with central place functions
- Low levels of consumption among rural populations
- Limited social hierarchy with emphasis on communality
  (Derks and Roymans 2016, 162)

Derks and Roymans argue that the integration of this peripheral region into the larger political entity of the Roman Empire led to the emergence of elites who occupied an intermediary position within the asymmetrical power relationship between the region and the external power centre (Derks and Roymans, 163). Though the focus of their discussion lies primarily on physically marginal land such as the English Fenlands (Derks and Roymans, 160), parts of the study region of this thesis display many of the characteristics associated with peripheral regions as

---

[4] Moulton and Dan-y-Graig are not identified in the RSRB as villa settlements. Both possess features associated with villa settlement, such as finds of opus signinum and painted plaster, and in the opinion of this author are likely to have been villas. However, as the purpose of this thesis is to explore the utility of the RSRB dataset their assigned classifications have been preserved.

defined: across the study region as a whole there is weak development of nucleated settlements which served the function of central places, and generally low levels of material culture consumption. Some of the social and economic roles ascribed to villas in this model may therefore apply to the villa settlements within this region.

6.5 Structural Morphology

Data regarding structural morphology has been preserved in the RSRB database at a high level, including evidence of rectilinear and circular buildings. This dataset has been supplemented (for Wales) with data from the project *Characterising the Welsh Roundhouse* (Ghey and Johnston 2007), available at the ADS. This project collected and analysed evidence for excavated prehistoric and early historic roundhouses in Wales, and data relating to sites present within the RSRB has been extracted from this project and used to supplement the information within the RSRB. Sixty-three sites within this project database overlap with the RSRB and the dataset used within the rest of this thesis. Chronological information about sites is captured within the Welsh Roundhouse Project's database; however, in order to standardise across both projects the dating has been adapted to the Early – Middle – Late paradigm used for other sites in the database. Attribution has been given wherever this data has been used; where no attribution is given the data derives from the RSRB.

6.5.1 Roundhouses

The roundhouse endured as an architectural form from the third millennium BC throughout the Romano-British period and beyond in both Wales and the Marches (Ghey et al 2008, 1). Upland Wales and the Marches has the greatest number of sites with circular buildings present, and with the greatest number of circular buildings within these settlements (see Table 6.9). This is a region where the prevalence of roundhouse settlement has been long-established, particularly in the north-west: in Gwynedd over 1000 roundhouse settlements and hillforts have been identified, though far fewer have undergone excavation (Waddington 2013). Their exceptional preservation in north-west Wales is due to a regional preference for stone construction, as further evidenced by the fact that 46% of all masonry structures derive from Upland Wales and the Marches (Table 6.10). However,

while the preservation of circular buildings in this region is due to their stone construction, their ubiquity even on sites occupied throughout the Roman period suggests a regional preference for the form.
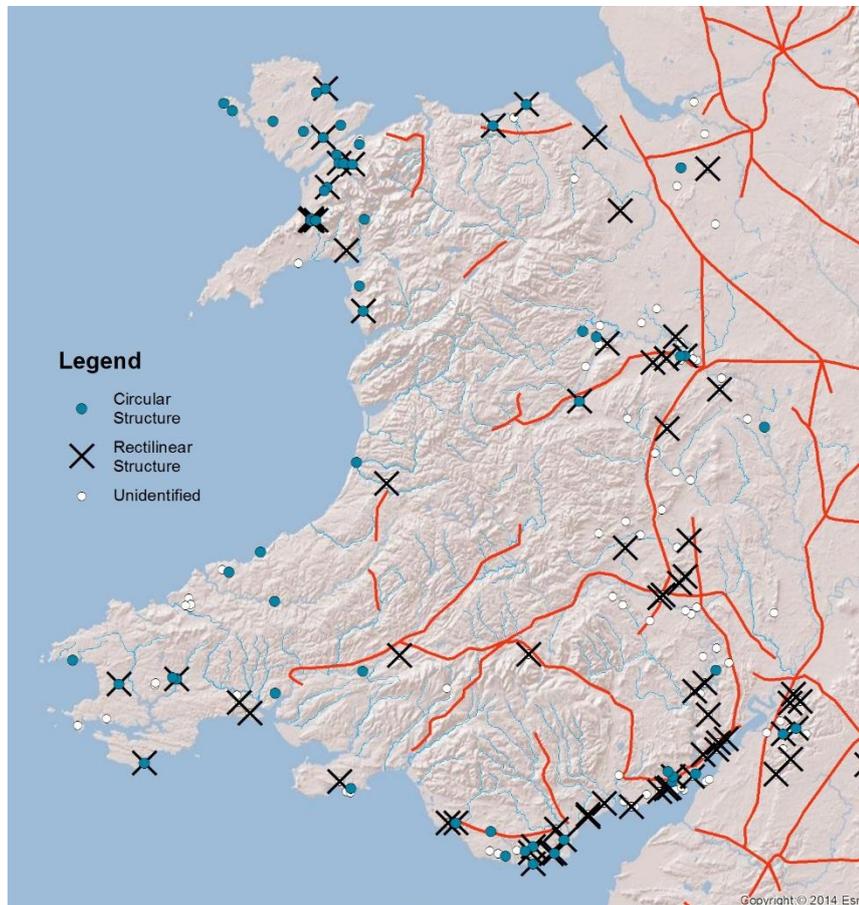
Figure 6.14. Distribution of circular and rectilinear structures

Region	Sites with Circular Buildings	Number of Circular Buildings
Central Belt	12	45
Central West	4	6
Upland Wales and the Marches	38	97
Total	54	148

Table 6.9. Number of circular buildings by region

Region	Number of masonry structures
Central Belt	29
Central West	12
Upland Wales and the Marches	35
Total	**76**

Table 6.10. Number of masonry structures by region.

As with other forms of settlement, sites with circular buildings present are most commonly located within river valleys or on plateaux/plains. An exception to this are the settlements of Upland Wales and the Marches, where just over a quarter of sites with circular buildings are located in hilly zones, and this is consistent with the wider pattern of settlement in this region.

Nucleated and enclosed roundhouse groups are the most common in both regions and in all periods. This is likely due to the better preservation of nucleated and enclosed settlement groups, particularly in Upland Wales and the Marches with its tradition of stone buildings, with a correspondingly improved likelihood of discovery and excavation. However, the persistence of the roundhouse throughout the Roman period suggests a strong attachment to the form and its social or religious meaning. This adherence to the roundhouse form may have signalled a wish to adhere to a continuing native settlement tradition, perhaps one that placed their inhabitants in contrast to the rectilinear architectural forms present at Roman military and civilian settlements. This may be particularly the case in north-west Wales, where military presence continued throughout the Roman period.

	Topography	Number of sites with Circular Buildings	Number of Circular Buildings
Central Belt	Coastal	1	1
	Hill	0	0
	Plateau or Plain	6	28
	River Valley	5	16
Central West	Hill	0	0
	Plateau or Plain	3	5
	River Valley	1	1
Upland Wales and the Marches	Coastal	6	11
	Hill	10	29
	Plateau or Plain	20	53
	River Valley	2	4
	Total	**54**	**148**

Table 6.11. Topographical distribution of sites with circular buildings and number of circular buildings

Region	Site Type	EARLY	MIDDLE	LATE	Total
Central Belt	Nucleated / enclosed	10	8	3	21
	Scattered hut	0	0	0	0
	Single hut	1	1	1	3
	Unclassified probable	2	2	0	4
	Total	**13**	**11**	**4**	**28**
Upland Wales and the Marches	Nucleated / enclosed	33	30	16	79
	Scattered hut	2	2	2	6
	Single hut	2	1	0	3
	Unclassified probable	1	1	0	2
	Total	**38**	**34**	**18**	**90**

Table 6.12. Regional and chronological distribution of site types (data from Ghey *et al* 2007).
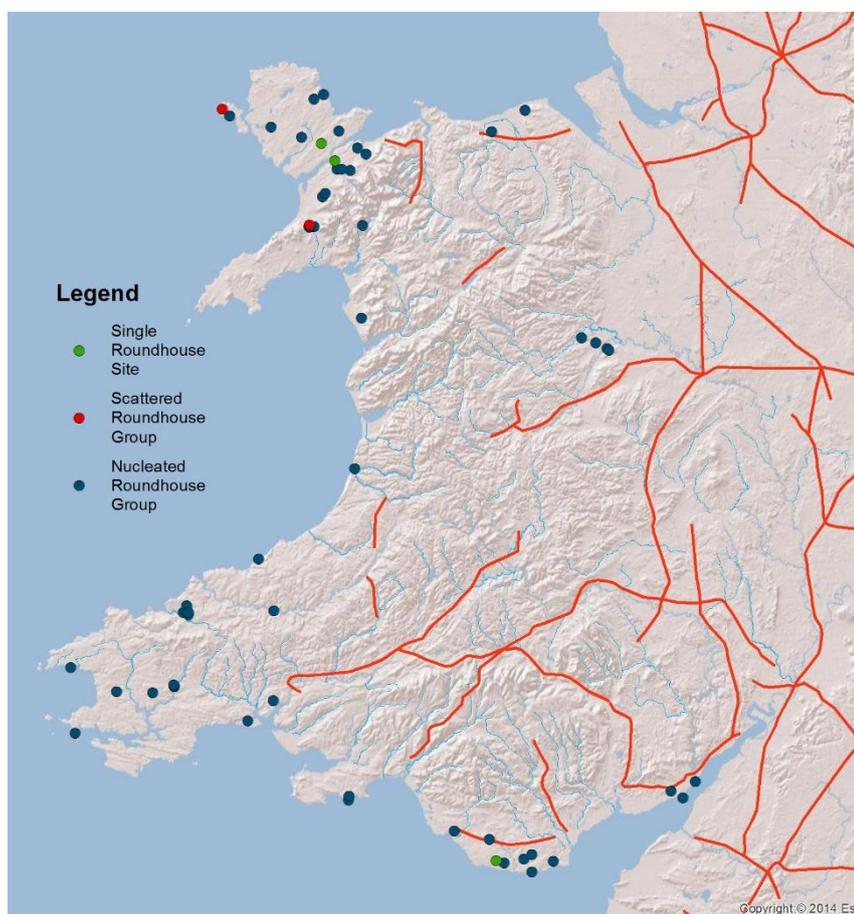
Figure 6.15. Distribution of nucleated, scattered, and single roundhouse (data from Ghey et al 2007).

6.5.2 Rectilinear Structures

As explored in the previous chapter, rectilinear structures are widespread but their distribution is weighted towards the south-east. Though rectilinear settlement is often considered an introduction of the Roman period, the identification of rectilinear structures at Goldcliff (Glamorgan-Gwent) dating to the Iron Age suggests that there was a tradition of rectilinear construction in the Late Pre-Roman Iron Age. However, this was not widespread, and it does appear that rectilinear construction was closely associated with the Roman period. This is particularly the case with masonry rectilinear construction, such as villa settlements. The presence of rectilinear stone construction is often used as a means of identifying villa sites.

Villa sites are a particular category of rectilinear settlement. Though individual villas exist on a broad spectrum of architectural and material elaboration, certain characteristics can serve to define villas as a broad settlement class. These elements include the presence of hypocausts, mosaics, and wall-plaster or window glass. The presence of these material and architectural features is regional: and their distribution is generally towards the south and east (Table 6.13). Evidence suggests that the most widespread element of villa settlement is the hypocaust.

Region	Hypocaust		Mosaic		Plaster		Window	
	No of sites	%	No of sites	%	No of sites	%	No of sites	%
Central Belt	12	86	13	93	14	100	8	57
Central West	8	89	6	67	7	78	5	56
Upland Wales and Marches	6	100	1	17	3	50	1	17

Table 6.13. Distribution of villa characteristics by region and percentage of regional villas where they are present

However, the possession of these material signifiers does not necessarily mean that a building should be identified as a villa in the traditional sense (i.e. as a civilian agricultural settlement). Pentre Farm (Clwyd-Powys) is listed (among other site types) as a villa due to its architectural and material characteristics, but there is strong evidence of military involvement in both layout and material culture (including nine tiles stamped with Legio XX Valeria Victrix [O'Leary et al 1989, 92]). Furthermore, excavations at nearby Pentre Ffwrndan (also known as

Pentre Bridge/Croes Atti[5]) uncovered evidence of several furnaces (Petch 1936, 74) and more recently timber-framed buildings associated with lead-ore processing (including washing tanks, small hearths, lead wastes and unprocessed lead ore) in use from the 1st to 3rd centuries (Jones 2017), indicating a ribbon settlement centred on the lead industry similar to other settlements in the north-west, such as Ffrith (Clwyd-Powys) (Blockley 1989). This evidence supports the view that Pentre Farm is more appropriately understood as an official residence relating to the lead industry. The presence of hypocausts on sites with strong military sites strengthens the association between the hypocaust and Roman forms of settlement and ways of living.

Though certain material categories do seem to have been closely associated with villa settlements, the presentation of villas was diverse, and the class appears to have been fluid and receptive to its regional context. This may have been due to the different economic circumstances or the goals of individual villa owners. What is constant at all villa sites is that they represent an architectural break with local tradition and would have been recognisable as such within their regional contexts.

6.5.3 Mixed Architecture

As discussed briefly in the previous chapter, the presence of roundhouse and rectilinear buildings were not mutually exclusive even at the level of the individual site. In particular there is a distinct regional pattern of settlements in Gwynedd - Din Lligwy, Hafotty-Wern-Las, and the sites of the Graeanog ridge (Fig. 6.16) - employ both circular and rectilinear forms. The rectilinear buildings are primarily associated with slag and metal-working debris (e.g. Hafotty-wern-las [Williams 1923]) indicating a differential approach to the articulation of space for domestic and auxiliary functions, with circular buildings consistently associated with domestic occupation and rectilinear with non-domestic functions. The association is not universal, and at other sites in Gwynedd auxiliary functions are associated with circular structures, for example, at Cefn Du (Gwynedd) and Coed-y-Briain, where material associated with iron-working was recovered from circular structures (Waddington 2013; Williams 1923a, 292). The consistent association appears to be between rectilinear structures and auxiliary functions. Rectilinear

---

[5] This site is not present in the RSRB data collection.

structures are not used for domestic functions at any of these sites. This suggests a strong link between rectilinear buildings and auxiliary functions.
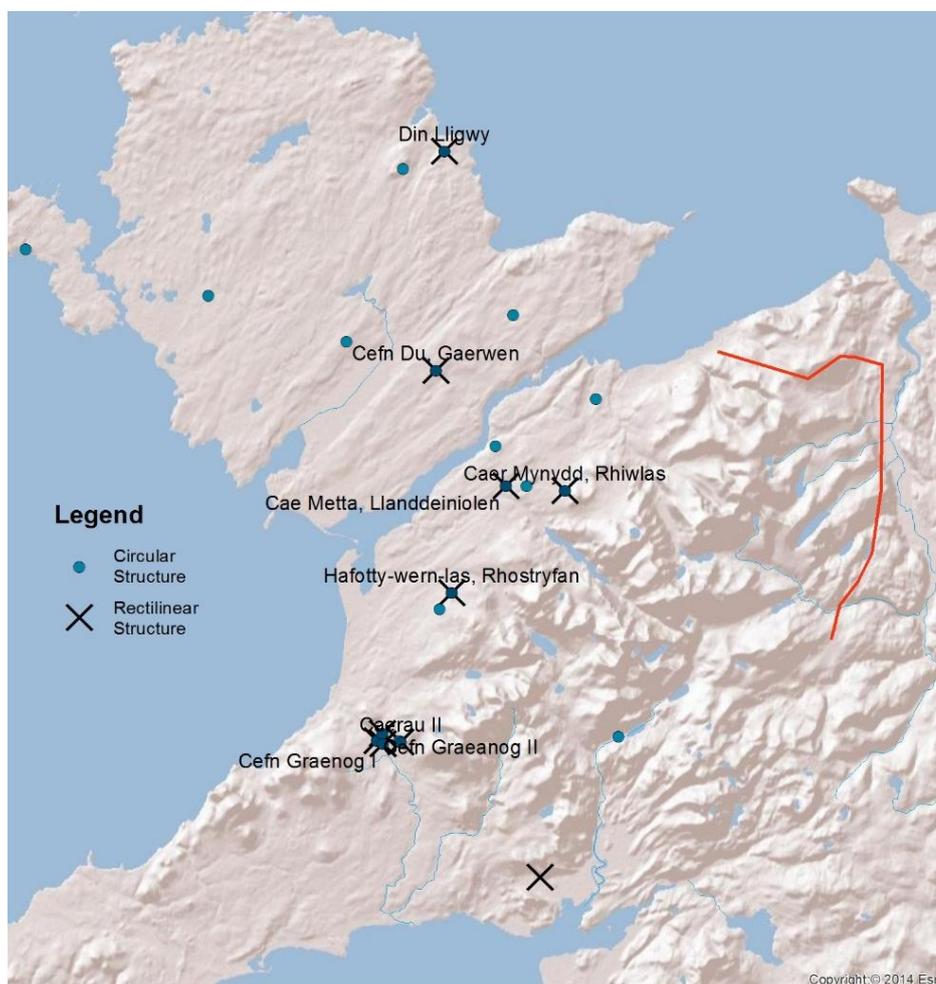
Figure 6.16. Sites in Gwynedd with both roundhouse and rectilinear buildings in the same phase.

Though phasing is complicated to discern for some sites, curvilinear and rectilinear buildings also appear together on sites in other regions, in some cases with a similar link between rectilinear construction and non-domestic function. At Whitton (Glamorgan-Gwent) two subsquare buildings in Areas B and G, at the periphery of the site were contemporary with domestic roundhouse occupation in Phase IV/V (roughly the period spanning AD95 to AD135) (Jarret and Wrathmell 1981, 87-90). Both were of similar construction to the roundhouses of the same Phase. Some pottery was recovered from the wall trenches of both subsquare buildings, but neither finds nor evidence for a hearth were recovered from the interior of either structure, strongly suggesting a non-domestic function. The disparity in size between these structures (c56.25m^2) in comparison with the larger domestic roundhouses in the same phase (Roundhouse D3: 113.1m^2) and

even the smaller peripheral roundhouses of previous phases (Roundhouse B1: 75.4m^2; Roundhouse B2: 70.9m^2) and the similarly peripheral locations of both the subsquare structures and the smaller roundhouses, may indicate that they served similar, auxiliary functions (though all roundhouses but Roundhouse E was found to have a central hearth).

Other rectilinear structures at Whitton include two four-post structures and two granaries (one dating to the 1st century AD was constructed in a twelve-post configuration resembling Roman military granaries (Jarrett and Wrathmell 1981, 41, 78)). The four-post structures are common on Iron Age sites in England, and are widely understood to be raised-floor structures related to the storage of grain. They are known from several Iron Age sites in Wales and the Marches (e.g. RAF St Athan), but are less common in Roman contexts, though examples are noted at Cae Summerhouse (Glamorgan-Gwent) (Davies 1973, 55). However, the lack of known four-post structures at other sites may be linked to the size of the excavation; Davis notes that four-post structures have been identified at all Iron Age sites in the Vale of Glamorgan where excavation was in excess of 1000m^2 (Davis 2017, 347). The evidence of four-post structures will be explored in greater detail in the following chapter.

6.6 Discussion

This chapter has shown that there are strong regional settlement patterns within the study area, and has also shown that patterns of settlement differ for a variety of reasons. Though simplistic geographic and environmentally deterministic explanations should be avoided, the underlying geography of Wales and the Marches and the significant areas of mountainous upland can be seen to have had a strong influence on regional settlement distribution, with almost no sites or artefact distributions known from the central upland regions. Whether this is a true reflection of ancient settlement pattern or a product of modern land use practice is not entirely clear, but the balance of both settlement and PAS evidence suggests that any human activity in this region left relatively few structural and artefactual traces and therefore had a character which was distinct from the lowland regions. The possibility of a transhumant pastoral landuse in this region accords with the lack of permanent settlement evidence, and also fits in with the longevity of the forts in the upland regions which persisted into the 2nd

and 3rd centuries as the military presence in the region was otherwise reduced or removed. The military presence at important lines of communication within this upland region likely controlled or curtailed access, changing the native relationship to the landscape.

Settlement types are also regionally varied and diverse. The persistence of the roundhouse form in some parts of the region, in particular the north-west, demonstrates a continued adherence to Iron Age settlement patterns. The distinction made between the roundhouse and rectilinear forms of settlement is striking and suggests that the roundhouse had special significance in this region.

The modern construction of this region as a single geopolitical entity and of the Marches as a liminal space between Wales and England can influence modern perceptions of the ancient settlement pattern and the people who lived within the region. However, the evidence suggests that this was a diverse region with significant differences in settlement patterns, and that certain areas – particularly the south-east and parts of the central Marches – were more closely engaged with communities to the east than to the west. It is in the south-east and the Marches that new forms of settlement were introduced and became widespread, particularly villa settlements.

However, the limitations of the evidence have also been shown, particularly in the difficulty of tracking chronological change. The broad nature of the chronological evidence makes any attempts to track different trends in settlement patterns over time difficult. However, categorising the settlements as Early, Middle, and Late Roman to the best of our understanding does show that there was a fluctuation in the numbers of settlements through the period of study and a level of settlement reorganisation, with new and distinctive settlement forms (villas) adopted and appearing in greater numbers in some regions in the Middle period, while continuity from Iron Age forms were retained in other regions. This suggests variation in response to the Roman occupation and its consequences through time, and varying levels of engagement with and acceptance of the new introductions which were brought about as a result of the Roman occupation.

Regional patterns of settlement and artefact distribution are the result of numerous factors. However, patterns of material culture can be both a result of

the availability or lack thereof of certain artefact types, perhaps due to market restrictions. They can also be formed by the choices of the inhabitants of rural settlements for economic or social reasons, and these will be explored in the following chapters.

7. Economy

7.1 Introduction

The economy of the Roman Empire has been a subject of debate among academics, and views are generally split along the lines of the extent of its complexity. The split is primarily between those who view the Roman economy as simple in comparison to that of modern, capitalist societies, and those who emphasise its scale and complexity and suggest that economic concepts (such as growth) can be usefully applied within this context.

The 'primitivist' model of the Roman economy draws largely on the work of Moses Finley (1985) and emphasises elements such as the importance of subsistence agriculture, the 'consumer' city, the perceived lack of technological innovation and diffusion throughout the empire, and the lack of economic rationality. Partly in reaction to this model, more recent studies have stressed the complexity of the Roman economy, particularly in the context of pre-industrial societies, citing evidence of complex accounting systems from Egyptian papyri and the unprecedented scale of trade to argue that certain modern economic concepts may be applicable to the ancient world.

Some scholars have sought a position between the two extremes, emphasising the scale and complexity of the Roman economy while acknowledging that it was not a modern, capitalist economy and should not be conceptualised as such. The fundamental principles of this approach are that between 200BCE and 200CE both agricultural production and land under cultivation increased and that this was accompanied by an increase in overall population and per capita production and a peak in trade, and that taxation may have acted as an economic stimulus (Hopkins 1980). Mattingly defines the major innovation of the Roman economy as that of scale, both in production and distribution, and suggests that the Roman economy should perhaps be understood not as a holistic system but rather as a series of interweaving political, social, and market economies which interacted with each other (Mattingly 2006, 296).

The Roman empire was extremely large and diverse, and it is likely that the economy did not function in the same way throughout its extent or with the same

levels of complexity. Though documentary evidence is available for certain areas, particularly Egypt (Mattingly 2006, 283), there is little evidence for the economy of Roman Britain. Strabo's Geography notes the commodities which Britain was known to export, including coin, cattle, gold, silver, iron, hides, slaves, and hounds (IV v2-3), which suggests that Britain's main productive strengths were in agriculture and mineral extraction. The 4th century Edict of Diocletian also indicates that exports of British textiles, such as wool capes and rugs, were well-regarded throughout the empire and may have comprised a large portion of the province's economic activity (Wild 2002, 1).

However, as Fulford notes, Strabo does not note the quantities in which these goods were exported, nor which regions they were exported from or to (Fulford 2008, 309). Our primary method of understanding the rural economy is therefore the material evidence. This chapter will explore the material evidence for three main strands of the Roman economy:

- Production
- Distribution
- Consumption

The section on production will consider the material evidence for agriculture, both arable and pastoral. It will also consider the evidence for secondary, non-agricultural production which may have taken place at rural sites. It will explore the occurrence of agricultural implements, and structural evidence such as corn-dryers and granaries.

The section on distribution will focus primarily on ceramics as evidence of trade and the movement of materials and commodities throughout the study region.

Finally, the section on consumption will focus on coinage as evidence of the integration of rural settlements into the monetary economy.

7.2 Production

Agricultural production is difficult to engage with archaeologically, as the primary outputs of agricultural production are perishable commodities such as crops or

livestock. Though archaeobotanical and zooarchaeological data was collated in the RSRB database, these datasets have not been included in the analysis of this thesis. Archaeobotanical and zooarchaeological assemblages of sufficient size for analysis are limited within the study region, in part due to excavation and recovery strategies but largely due to the acidic soils which characterise much of the region's soil profile and are not conducive to the survival of organic remains (Caseldine 2018). Quantified animal bone assemblages were available for only 30% of sites and archaeobotanical data for 37% of sites. Additionally, in order to maintain the focus of this thesis on material culture, archaeobotanical and zooarchaeological data have not been included in this analysis,

7.2.1 Agriculture

The RSRB categorises the economy of the settlements within its dataset as Mixed, Pastoral, Arable, and Uncertain (Table 7.1). However, the general level of uncertainty of the data for this region makes drawing general conclusions difficult.

Region	Agricultural Regime	Number of Sites
Central Belt	Mixed	19
	Pastoral	2
	Uncertain	43
Central West	Mixed	4
	Uncertain	34
Upland Wales and the Marches	Mixed	13
	Uncertain	67
Total		182

Table 7.1. Agricultural regime by region

No sites within the study area are classified as arable, and only two sites in the Central Belt are classified as pastoral. These are the Wentlooge Level sites of Nash (Glamorgan-Gwent) and Goldcliff West (Glamorgan-Gwent). Preserved hoof-prints in Iron Age contexts and rectangular structures interpreted as seasonal cattle-byres at Goldcliff West suggest that the area was used as seasonal pasture; some scholars have suggested that the large-scale programme of drainage in the Severn Levels was motivated by the need to reclaim land for cattle-raising for the provision of the military (Allen and Fulford 1986, 115), and may have formed part of the *prata legionis* for Caerleon (Mason 1988, 183)

Topography	Agricultural Regime	Number of Sites
Coastal	Mixed	2
	Pastoral	1
	Uncertain	14
Fen	Mixed	4
	Pastoral	1
	Uncertain	5
Hill	Mixed	4
	Uncertain	34
Plateau or Plain	Mixed	14
	Uncertain	40
River valley	Mixed	12
	Uncertain	51
	Total	182

Table 7.2 Agricultural economy by topography

All other sites within the study region are classed either as having a mixed regime which combined arable and pastoral agriculture, or uncertain, where the data is not sufficient to draw firm conclusions as to the primary agricultural economy. The lack of settlements securely designated as arable or pastoral in nature means that it is difficult to draw any conclusions regarding the distribution of various kinds of agriculture and the topography of the region (Table 7.2). The only firm correlation is that both pastoral sites are in low-lying, coastal regions, which would have been well-suited to cattle-rearing.

7.2.2 Agricultural Implements

67 agricultural objects are present within the dataset in total (Table 7.3). Agricultural implements are present at just 17 sites in total and their distribution is heavily biased towards the Central Belt (10 sites), while Central West (2 sites) and Upland Wales and the Marches (5 sites) make up the remainder. The agricultural implements within this dataset were primarily made of metal and were liable to reuse and recycling, and this likely accounts for their limited survival in the archaeological record. Corrosion of metal objects is also accelerated in acidic soils, which are prevalent throughout the study region (Kibblewhite et al 2015). Otherwise, many implements were likely made of organic materials such as wood, which survives poorly.

Region	Number of Objects
Central Belt	45
Central West	6
Upland Wales and the Marches	16
Total	67

Table 7.3. Number of agricultural implements by region

There is no breakdown of the different kinds of agricultural implements within the RSRB database but, where possible, this has been provided in a free text field. These have been collated into Table 7.6.

The objects in the regional assemblage are related to both arable and pastoral agriculture and indicate a generally mixed farming economy both regionally and at the site level, with objects related to both crop processing and livestock present at the same site, for example, shears and ox goads are present at Frocester (Gloucestershire) in addition to scythe blades and spuds (Table 7.5). The proportion of objects related to arable production (such as ploughshares and reaping hooks) and pastoral production (such as shears) are relatively equal within the study region.

Agricultural Regime	Number of Objects
Arable	35
Pastoral	24
Uncertain	6
Total	65

Table 7.5. Number of objects associated with arable and pastoral agriculture

The objects related to arable agriculture fall broadly into objects associated with planting and those associated with harvesting.

Tillage

Only five items related to ploughing are identified at sites within the study region (Table 7.6), including at Fox's Field (Gloucestershire), Coygan Camp (Dyfed), Dinorben (Clwyd-Powys), and Prestatyn (Clwyd-Powys). Allen (2017) notes that surviving implements identified as ploughshares are often incorrectly identified as such and are more likely to belong to ards, which were both lighter and had been the principal pre-Roman tillage instrument in northern Europe and likely remained

so during the Roman period (Allen et al 2017, 42). No distinction is made within this study for lack of definite information, and it is only suggested that ploughing using either the plough or ard was practised throughout the study region. Other evidence of ploughing is rare, but ard marks are identified at Stackpole Warren (Dyfed), in Iron Age/Romano-British contexts (Benson et al 1990). Though the numbers of items are very small, their distribution indicates that the technology was widespread throughout the study region.

Harvesting

The numbers of items related to harvesting crops (reaping hooks, scythes, sickles) is also small, with only 12 items represented (Table 7.6). Such implements would have been used for harvesting tall crops such as wheat and barley and indicate that arable production took place throughout the study region, and that methods of harvesting were similar throughout. The objects are distributed equally between the Central Belt and Upland Wales and the Marches, though with some distinctions in the distribution of the various types which may reflect differences in terminology but may also be reflections of differences in agricultural practice or tradition. The scythe is considered to have been a Roman introduction (Allen et al 2017) and is present at only a single site, Frocester (Gloucestershire). Elsewhere in the Central Belt reaping hooks are present at two sites, Kingscote (Gloucestershire) and Whitton (Glamorgan-Gwent). Within the Upland Wales and the Marches assemblage sickles are identified at Coygan Camp (Dyfed), Dinorben (Clwyd-Powys), and Cefn Graeanog (Gwynedd).

Site	Object	Number

Frocester	Shears	5
	Spade sheaths	2
	Spud	1
	Scythe blade	1
	Pruning Hook	2
	Tine	2
	Ox goad	5
	Cattle bell	2
Wortley	Shears	1
	Trowel	1
Kingscote	Spud	2
	Hoe	1
	Reaping Hook	1
	Shears	1
	Ox goad	4
Chesters	Spade/shovel	1
Fox's Field	Shears	1
	Ploughshare	1
Midsummer Hill	Ox goad	1
Magna Castra	'Agricultural tools'	Unspecified
Whitton	Reaping Hook	4
	Ox goad	1
Biglis	Pruning Hook	1
Caldicot	Shears	1
Minchin Hole	Spade binding	1
Mynydd Bychan	Ox goad	1
Newhouse Park Chepstow	Pruning Hook	1
Coygan Camp	Sickle/billhook	4
	Two-pronged hoe	1
	Ploughshare tip	1
	Plough equipment	1
Dinorben	Ploughshare	1
	Pruning knife	1
	Iron sickle	1
	Shears	1
	Pruning hook	1
Prestatyn	Ploughshare	1
	?Tool	1
Cefn Graeanog	Sickle	1
Total		**60**

Table 7.6. Breakdown of agricultural implements from RSRB (note: numbers could not be collated for Magna Castra)

7.2.3 Processing and storage

Crop-processing at sites is indicated through a number of material categories, primarily through structural remains such as corndriers and granaries, but also through artefacts such as quernstones and millstones. The distribution of these forms will be explored below.

Corndriers

Corndriers are among the most easily identified structures at Romano-British rural sites. They are commonly thought to have been used for drying glume wheats (such as spelt) prior to threshing, though experiments carried out at Butser Ancient Farm cast doubt on the efficacy of the structures for this purpose and suggested instead that they were used as malting floors as part of the brewing process (Reynolds and Langley 1979). However, analysis of charred grain assemblages from corndriers found that both germinated grains for malting and parched grains from glume wheats were present and suggests that they were multifunctional structures (Van der Veen 1989, 317).

Whatever their primary function, corndriers are evidence of the large-scale processing of crops in the countryside and are indicators of the intensification of arable agriculture during the Roman period, whether as a means of securing a surplus for sale or perhaps for the provisioning of the military. The construction of a corndrier must have represented a significant investment for the rural landholder and therefore its benefits must have justified the expense (Allen et al 2017, 61). Corndriers allowed for the processing of large volumes of cereals at once, and the drying of glume wheats facilitated the threshing process and allowed clean grain to be sold to the market which was both easier to transport and could be given a standardised weight (Allen et al 2017, 61).
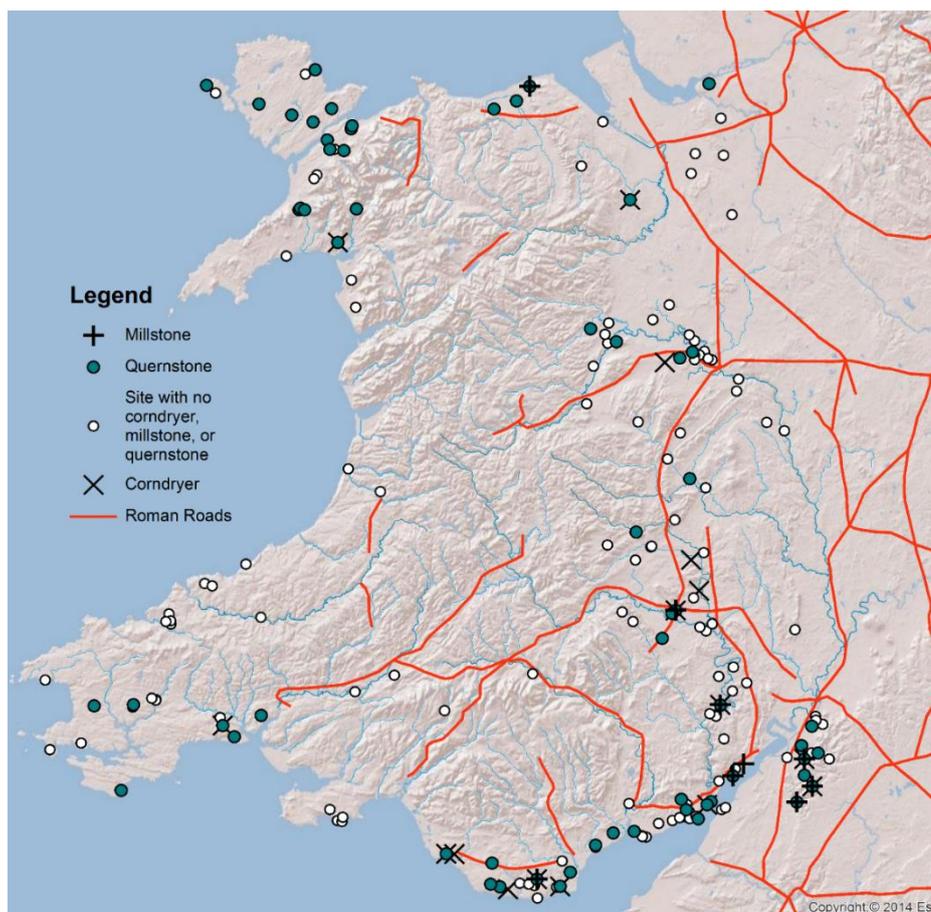
Figure 7.1. Distribution of sites with quernstones, millstones, and corndriers

Corndriers are present at 16 sites within the study region, and their distribution is weighted towards the south-east and along the line of the Marches (Table 7.7; Fig. 7.1). As well as being concentrated in the south and east, sites with corndriers also have a fairly limited topographical distribution (Table 7.8), with the majority present on sites in low-lying areas such as plateaux and river valleys, regions better suited to arable agriculture.

Region	Number of Sites
Central Belt	9
Central West	5
Upland Wales and the Marches	2
Total	16

Table 7.7. Regional distribution of sites with corndriers

There is a strong association between corndriers and villas, with seven of the sites at which corndriers appear classed as villa settlements. Several further sites show some of the features of villa settlements but are not classed as such within the RSRB due to the uncertainty of the archaeological evidence. For example, Dan-y-

Graig (Glamorgan-Gwent) demonstrates some features of a villa site such as opus signinum floors, painted wall-plaster (both uncovered in 19th century excavations), and a series of masonry structures of possible winged-corridor plan (Newman 1990). This suggests a strong association between corndriers and high-status settlement, perhaps linked to the profits which could be made from the production of arable surplus. The introduction of the corndrier may also signal increasing centralisation within the agricultural process, with certain sites acting as nodes of production within the region's settlement system

Topography	Number of Sites
Fen	1
Hill	1
Plain or Plateau	9
River Valley	5
Total	16

Table 7.8. Topographical distribution of sites with corndriers

The farm site at Biglis (Glamorgan-Gwent) is regionally unusual in having evidence of five corndriers throughout the duration of the site's occupation. Two circular dryers are dated to the early phase of the site's occupation, perhaps the 1st century. One oval corndrier is dated to the 3rd century, and a subrectangular one of the 3rd/4th century. The subrectangular corndrier may have been constructed to replace a 3rd century T-shaped corndrier which had been reused as an inhumation burial (Parkhouse 1988, 17). Biglis does not develop into a villa but continues as a roundhouse settlement throughout its history. The presence of the corndrier may indicate that the site specialised in arable production.

As shown by the variety of structures at Biglis, corndriers could be constructed in a variety of forms. Within the study area the T-shaped form is the most common: seven of the 16 examples are T-shaped, with one further double T-shaped at Kingscote (Gloucestershire). The T-shaped is generally dated to the 3rd century or later (Allen et al 2017, 59), and this is consistent with the dating of the corndriers at sites within this region, suggesting that they became most widespread from the 3rd century onwards and therefore that this period saw the greatest intensification of agricultural production.

During the later Roman period corndriers were often cut into existing buildings, particularly villa buildings (Allen et al 2017, 60). Five of the corndriers within the

study region are noted as insertions into villa or other buildings, at sites such as Frocester (Gloucestershire), Huntsham (Herefordshire) and Lea Cross (Shropshire). While this seems to suggest a change in function and social status of the villa building, Lodwick instead suggests that it represents part of an internalising process by which agricultural processing becomes increasingly integral to the function of the site (*ibid*). It may also be viewed as an exertion of control over the process, perhaps indicating a further shift towards centralisation.

Quernstones and Millstones

Grain had to be ground into flour before it could be used in cooking. This was performed using grinding stones, either quernstones or millstones.

Quernstones are reasonably well-represented throughout the study region, though they cluster at sites in low-lying regions where one might expect the concentration of arable agriculture to be most pronounced (Fig. 7.1). Quernstones were operated by hand and the processing of grain in this way was labour-intensive and would have taken a significant amount of productive time (Cool 2006, 73). The efficiency of quernstones was improved during the Roman period with the introduction of the rotary disc quern, which became the dominant type and largely replaced the Iron Age beehive type, though evidence suggests that beehive querns were retained in some cases throughout the Roman period (Cool 2006, 73). Beehive querns are present at several sites within the study region but are likely Iron Age in date. Quernstones are present at 60 sites within the region, and they are distributed fairly equally between the Central Belt and Upland Wales and the Marches, with a minority in Central West (Table 7.9).

Millstones were also used for processing grain, but were larger (grinding stones over 0.6m diameter are usually classed as millstones) and could therefore be used to process grain in larger quantities (Cool 2006, 73). Millstones are much more restricted in distribution, and present on only nine sites, primarily within the Central Belt (Table 7.9). The presence of a millstone implies the presence of a mechanized mill, which could be powered by water, man, or animal power. However, structural evidence for the presence of a watermill is suggested at only one site: the villa at Chesters (Gloucestershire), where the course of a double-

aqueduct or leat was traced. This, in conjunction with a large ditch running close to a structure in which two millstones were reused (Fulford and Allen 1992, 201).

Region	Sites with quernstones present	Sites with millstones present
Central Belt	24	7
Central West	7	1
Upland Wales and the Marches	29	1
Total	60	9

Table 7.9. Regional distribution of sites at which quernstones and millstones are present

Though they served much the same purpose, the distribution of quernstones and millstones is strikingly different. While quernstones are present on a broadly equal number of sites between the Central Belt (37%) and Upland Wales and the Marches (36%), with a smaller proportion in the Central West (18%), millstones appear on only a very small proportion of sites. Within the Central Belt millstones are present on only 11% of sites, a proportion which drops to 3% for Central West and 1% for Upland Wales and the Marches. This suggests significant restrictions on the kinds of site at which millstones appear and different levels of intensity of arable production.

Some of this disparity in distribution may be explained by the significant differences in the distribution of quernstones and millstones along the settlement hierarchy. Eight of the nine sites at which millstones are present are villa sites and the ninth is Prestatyn (Clwyd Powys), which has been noted in previous chapters as a regionally distinctive and likely connected with the military. Quernstones appear on a much more diverse range of sites (Table 7.10), particularly farm sites. This is consistent with their function and their utility for processing smaller amounts of grain, perhaps for household consumption, while millstones are related to the processing of larger amounts of grain and may have been used for the production of surplus.

Five of the sites at which millstones are present are also sites at which corndriers are present: Magna Castra (Herefordshire), Huntsham (Herefordshire), Kingscote (Gloucestershire), Whitton (Glamorgan-Gwent), Frocester (Gloucestershire), suggesting a connection between the two classes of evidence. All five are villa sites and lie in the south-east (Fig 7.1). This suggests a strong connection between

the processing of particularly large amounts of grain and villa settlements in the south-east.

	Number of Sites		
Region	Farm	Hillfort	Villa
Central Belt	19	3	8
Central West	5	0	3
Upland Wales and the Marches	25	3	2
Total	49	6	13

Table 7.10. Distribution of sites at which quernstones appear

Storage

Storage structures are also strong indicators of arable production, though they have been identified at only 16 sites throughout the study region (Fig. 7.2). In this region such structures are primarily post-built, most commonly four- or six-post though other configurations are present (including a nine-post structure identified at Cefn Du (Gwynedd) (Cuttler et al 2012)). These posthole configurations are interpreted as raised-floor structures for the storage of grain and are associated with the Iron Age in other parts of Britain, though within the study region they appear in Roman contexts at Cae Summerhouse (Glamorgan-Gwent) and Whitton (Glamorgan-Gwent). Where the dating of such features is not secure they may therefore be dated to the Roman period.

Few other buildings are identified as granaries. At Whitton a raised-floor structure c5m^2 was in its initial phase constructed with rows of trenches rather than with individual postholes, which the excavators suggest was done in imitation of Roman military sill-beam construction (Jarrett and Wrathmell 1980, 78).

The only stone-built structure identified as a granary is at Magna Castra (Herefordshire) (Wilmott and Rahtz 1985). This was a large, buttressed structure which was constructed in the 2nd century and further extended in the late 2nd or early 3rd century. The size and capacity of this granary may be linked to the proximity of the villa site to the small town of Magnis (modern Kenchester) less than a kilometre away (Burnham and Wacher 1990). The town represented a ready market for any agricultural surplus produced by the villa and its estate.
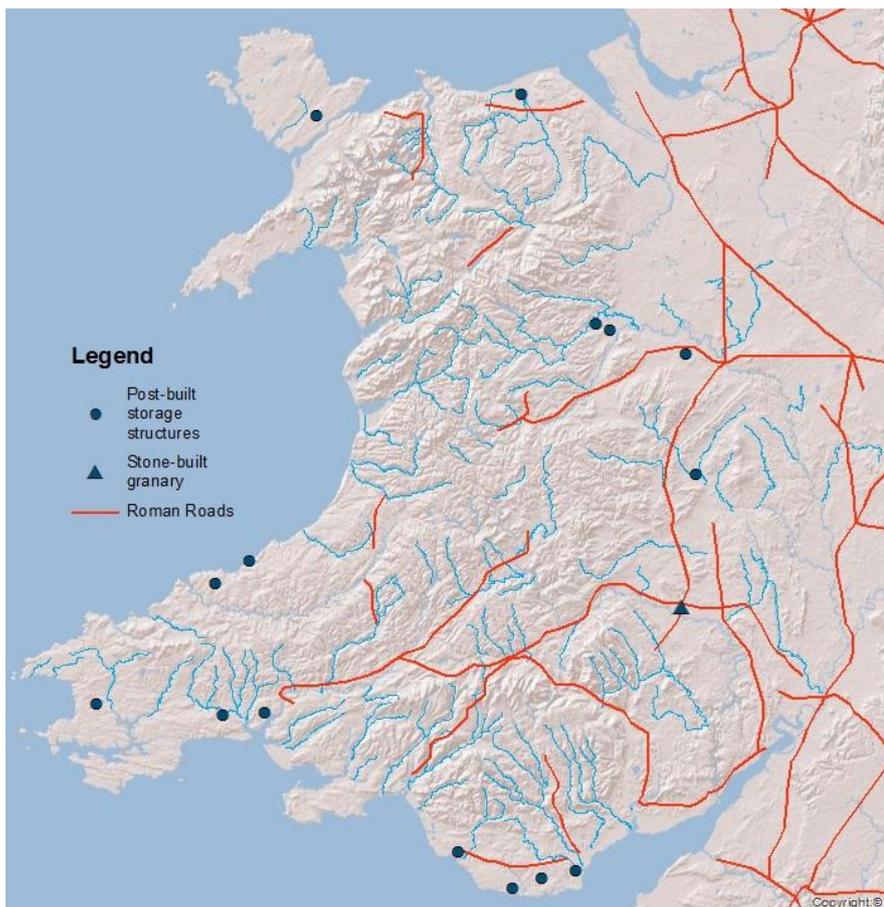
Figure 7.2. Distribution of sites with storage structures.

Conclusion

There is significant material and structural evidence for the importance of arable farming within the study region. The distribution of these artefacts suggest that processing grain was carried out at the site level, but that the concentration of material and features associated with the processing of large amounts of grain (such as corndriers and millstones) at villa sites suggest that these were perhaps engaged in the production of surplus.

In some regions villa sites may have served as nodes within a larger network of arable production, perhaps receiving produce from neighbouring settlements and processing this on a larger scale than smaller settlements could manage themselves.

7.2.4 Pastoral Farming

Objects associated with pastoral farming make up 37% of the total number of agricultural objects, slightly fewer than those associated with arable farming. The

two main categories within the material assemblage of the study region are ox goads and shears.

Ox goads are also known from several sites, including Frocester, Kingscote, Midsummer Hill (Herefordshire), Whitton, Mynydd Bychan. These are metal implements usually in iron, consisting of a socketed point set on a wooden stick and was used for encouraging the movement of cattle (Manning 1971, 126).

These are all fairly low-lying sites, located in regions to which cattle production is best suited. There are further similarities in that Frocester, Kingscote, and Whitton are all villas; Mynydd Bychan and Midsummer Hill are both hillforts. These settlements may have carried out the functions of central places in regions which lacked other nucleated settlements to perform the function of markets, as has been suggested in other marginal landscapes (Derks and Roymans 2011). It is possible that the processing of animals for their secondary products including fleece was carried out at central locations, perhaps as part of an economic system of exchange which facilitated the processing of these products for market, or through a system in which villas operated as estates with tenant farmers who would have brought their livestock to the central place for processing.

A total of ten shears are known from six sites (Table 7.11). There is a strong distribution of these artefacts towards the south-east and the Central Belt and, with the exception of the hillfort at Dinorben, all sites at which shears are present are villa sites. As suggested above, this may indicate some element of centrality to the sheep shearing process, perhaps with flocks from outlying farms brought to a villa estate seasonally for the fleece to be recovered and processed. For example, the large number of shears present at Frocester (Table 7.11) may also indicate that shearing was carried out on a larger scale here. Sheep-shearing has historically been a communal practice requiring extra labour often provided by neighbouring farms, a practice which served to strengthened local social ties; the practice may therefore have formed part of the social as well as the economic fabric of the study region (Sutherland and Burton 2011, 246).

Site	Number of Objects
Frocester	5
Wortley	1
Kingscote	1
Fox's Field	1
Caldicot	1
Dinorben	1

Table 7.11. Sites at which shears are present

Shearing is not the only method of recovering fleece, though it has the benefit of retaining almost the whole fleece (Wild 2002, 5). Sheep can also be plucked (or 'rooed'), and this is particularly the case with 'unimproved' sheep which can shed their fleece in spring (such as the modern Soay or North Ronaldsay breeds, which are thought to closely resemble ancient sheep) (Ryder 2005). This method does not require the use of shears and may account for the scarcity of these objects in the regional material assemblage. There may have been a difference in the method of recovering wool at different site types, with a more centralised and formalised method adopted at larger, villa sites.

The function of some sites as central places may be indicated by the presence of animal paddocks. Tables 7.12 and 7.13 below identify the sites at which features identified as animal paddocks are present. Paddocks are present at around half of all sites at which material evidence of pastoral agriculture is found and are primarily found at villa sites. This again may suggest the corralling of animals close to the settlement.

Shears	Paddock
Frocester	Y
Wortley	N
Kingscote	Y
Fox's Field	Y
Caldicot	N
Dinorben	N

Ox Goad	Paddock
Frocester	Y
Kingscote	Y
Midsummer Hill	N
Whitton	Y
Mynydd Bychan	N
Dinorben	N

Table 7.12, Table 7.13. Presence of paddocks at sites with evidence of pastoral agriculture.

7.2.5 Pastoral – Secondary Production

Pastoral farming may have been geared towards the rearing of livestock for slaughter and meat production, but the processing of animal products can also be seen in the archaeological assemblage. This is particularly the case with textile production.

Textile Production

In the Edict of Diocletian British wool products seem to have been highly regarded, and the lack of other British products mentioned within it has led some to suggest that by the time the Edict was compiled in AD301 textile production was Britain's leading industry and that its products – including wool cloaks and rugs – were Britain's most notable exports (Wild 2002, 1). This section will explore the evidence for textile production within the study region.

The raw fleece requires several processes before a workable textile can be created, and some of these steps can be viewed archaeologically through the tools and artefacts associated with the individual process. The objects related to each step of the process of textile production are listed separately within the RSRB (Table 7.14) and their relative distribution can therefore be tracked.

Region	Fibre Production	Spinning	Weaving
Central Belt	0	84	40
Central West	0	5	3
Upland Wales and the Marches	0	124	13
Total	0	213	56

Table 7.14. Distribution of objects associated with stages of textile production

Fleece must be processed before it can be used in textile production. The wool must first be washed and combed to remove the grease from the fleece to produce a workable fibre that can be spun. The category for objects associated with fibre production include artefacts such as woolcombs, used to card the raw fleece after it had been collected. There are no objects related to fibre production within the regional assemblage (Table 7.14), though this does not mean that none were present.

After the animal fibres had been processed, they would be spun to create wool. Items associated with spinning include spindles, distaffs, and spindlewhorls. Spindles and distaffs were commonly made of wood and therefore rarely survive within the archaeological record, but spindlewhorls were usually made of stone or reused ceramics and usually survive well. Spindlewhorls were fitted onto the spindle in order to increase the rate of spin and thereby speed up the process of creating wool. Items associated with spinning are the most numerous category of artefact associated with textile production within the study region (Table 7.14) and appear at 51 sites.

The largest number of objects associated with spinning derive from Upland Wales and the Marches, forming 58% of the total assemblage from the study region (Fig 7.3). While the Central Belt represents 39% of the total assemblage, this is dominated by three sites with particularly large numbers of spindlewhorls (Frocester: 22; Whitton: 19, Kingscote: 9) which collectively represent 60% of the total number of spindlewhorls in the Central Belt assemblage. These are also all villa sites. The items are much more evenly spread among the sites of the Upland Wales and the Marches. There are two sites with larger numbers of spindlewhorls (Prestatyn: 21; Dinorben: 13) collectively a 27% of the regional total). This may indicate that sheep-led pastoralism was much more widespread in Upland Wales and the Marches than in the Central Belt, which would be consistent with the subregional topography.

However, as with other categories of evidence already explored above, it may also indicate that the processing of the fleece into wool was carried out at the level of the household and perhaps therefore intended for household consumption rather than sale as surplus. The smaller number of sites at which spindlewhorls are present and their concentration on a smaller number of sites may again point to a centralisation of secondary processing.
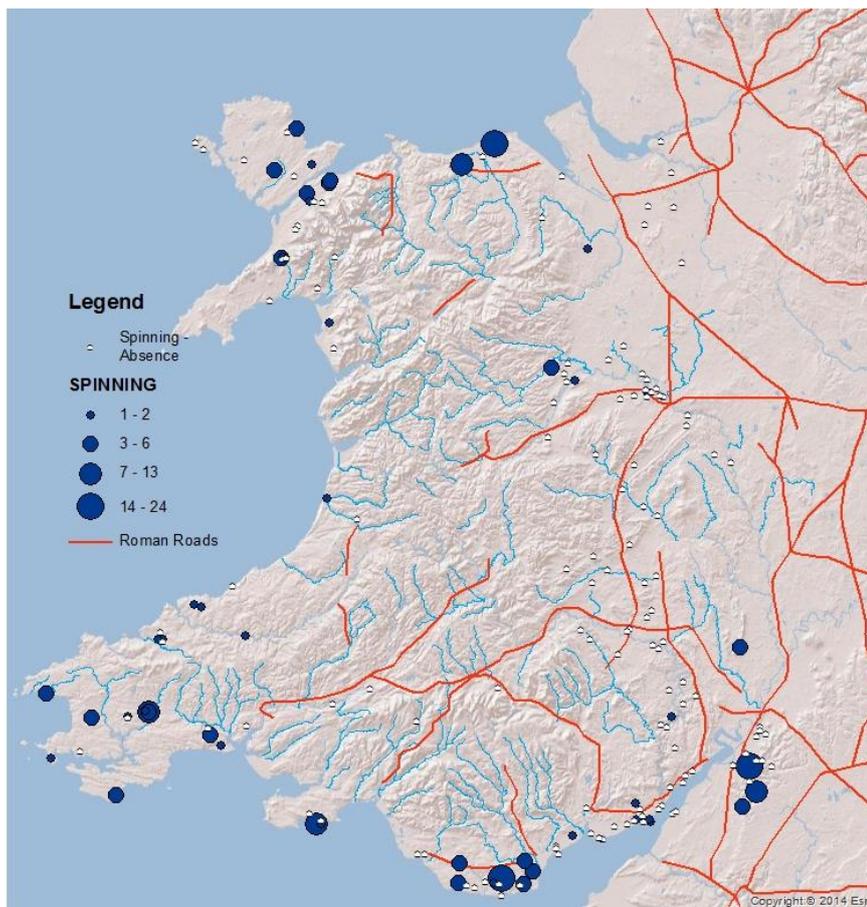
Figure 7.3. Distribution of objects associated with spinning

The final group of objects associated with textile processing are those associated with weaving, primarily loomweights (Fig 7.4). 56 such objects are present within the study region, 27 of which come from the villa site at Frocester (Gloucestershire), an assemblage which represents 48% of the regional total. Frocester's unusually high number of loomweights may indicate the production of textiles for market rather than for household use, though it should be noted here as elsewhere that Frocester produces significantly more artefacts in general than other sites within the region. With multiple loomweights required for each loom, the Frocester assemblage may represent better preservation or artefact recovery. An indication of what has not survived elsewhere is provided by Walesland Rath (Dyfed), which does not produce loomweights but does have possible evidence for preserved fragments of a loom from waterlogged contexts (Wainwright 1971, 101). However, the villa at Kingscote (Gloucestershire) which like Frocester also produces a large number of artefacts in general, produces only a single loomweight, and Whitton, with a regionally unusual assemblage of 19 spindlewhorls, produces only 3 loomweights.
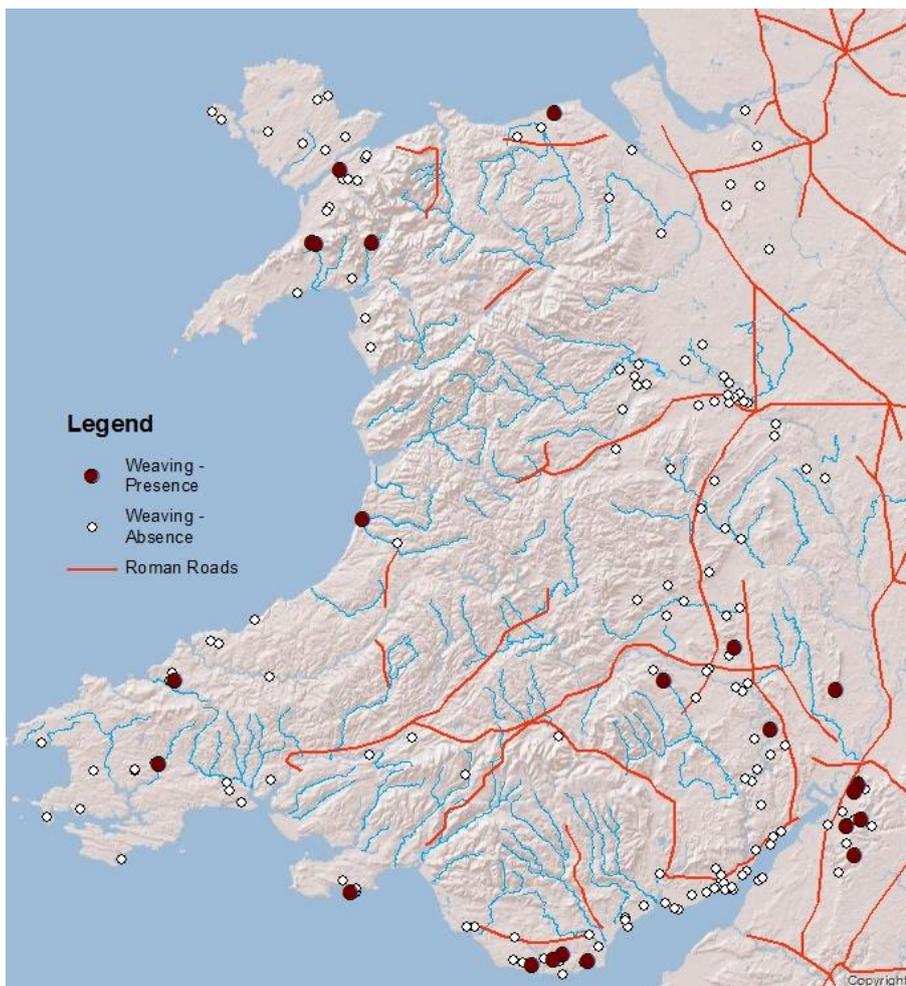
Figure 7.4. Distribution of objects associated with weaving

7.2.6 Other Production

There is evidence that rural settlements within the study region were also engaged in non-agricultural forms of production.

Metalworking

The RSRB captures data regarding the presence or absence of evidence for metalworking and iron slag at sites (Fig. 7.5). There is significant evidence for both metalworking and iron slag at rural sites and both are fairly evenly distributed throughout the study region. There are a cluster of sites around the south-east of the region, but this is unsurprising given the importance of the Forest of Dean as a centre for the Romano-British iron industry.
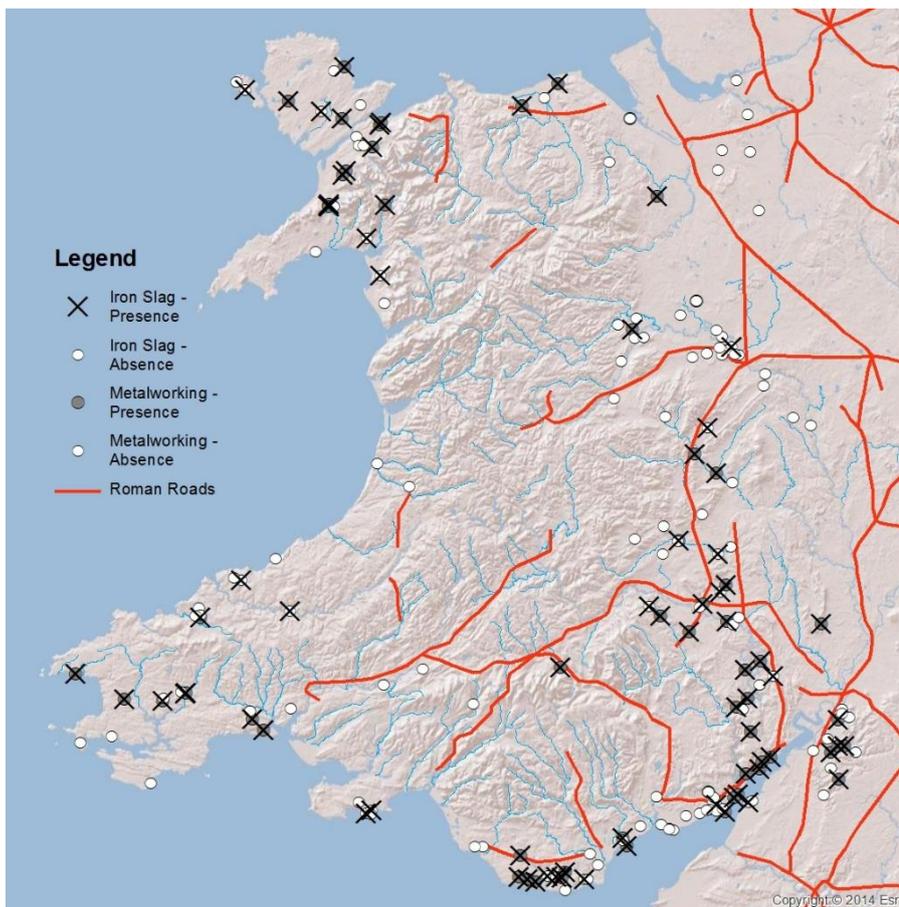
Figure 7.5. Distribution of sites with evidence for metalworking and the presence of iron slag

Evidence for metalworking appears on 67% of sites within the study region (Table 7.15), while iron slag appears on 43% of all sites. This suggests that metalworking was widespread on rural sites, though judging the scale and nature of this activity is difficult due to the use of presence/absence and the absence of information regarding ferrous/non-ferrous metalworking and whether the iron slag derives from smelting or smithing processes. Furthermore, this proportion is broadly consistent in each sub-region, with metal slag appearing on 48% and 46% of sites in the Central Belt and Upland Wales and the Marches respectively, and 26% of Central West sites.

The proportion of sites throughout the settlement hierarchy at which iron slag is present is fairly consistent (Table 7.15). Proportionally, the presence of both evidence of metalworking and iron slag is slightly higher on villa sites (46% and 50% of sites respectively, compared to 44% and 45% respectively of farm sites), but the difference is slight (and may be somewhat distorted by the double-counting of sites with both a farm and villa phase, as discussed elsewhere).

	Region	Presence	Absence	Total
Iron Slag	Central Belt	31	34	65
	Central West	10	28	38
	Upland Wales and the Marches	37	43	80
	Total	78	105	183
Evidence for metalworking	Central Belt	39	26	65
	Central West	29	9	38
	Upland Wales and the Marches	54	26	80
	Total	122	61	183

Table 7.15. Sites with presence and absence of evidence for metalworking and iron slag.

	Site Type	Number of Sites
Iron Slag	Farm	61
	Hillfort	8
	Villa	14
	Total	83
Evidence of metalworking	Farm	47
	Hillfort	8
	Villa	13
	Total	68

Table 7.16. Distribution sites with evidence of metalworking and presence of iron slag by site type

Workshops

The presence of workshops may also indicate secondary production, usually associated with metalworking. Workshops are rare within the study region and only nine sites have evidence of workshops present. Sites with structures identified as workshops occur primarily in the Upland Wales and the Marches, with a cluster in the north-west of the region (Fig. 7.6). These are usually identified as workshops based on the architectural differences with other buildings at the sites (they are more commonly rectilinear in form where domestic buildings are usually

curvilinear, as discussed in a previous chapter), though they also often contain material evidence such as furnaces or metalworking debris which contribute to their identification. The presence of such material can help to identify these structures in other regions where the architectural differences are less striking, for example, at the single Central West site of Magna Castra (Herefordshire), where the workshop was identified as such based on the presence of furnaces and metalworking debris within it (Wilmott and Rahtz 1985).
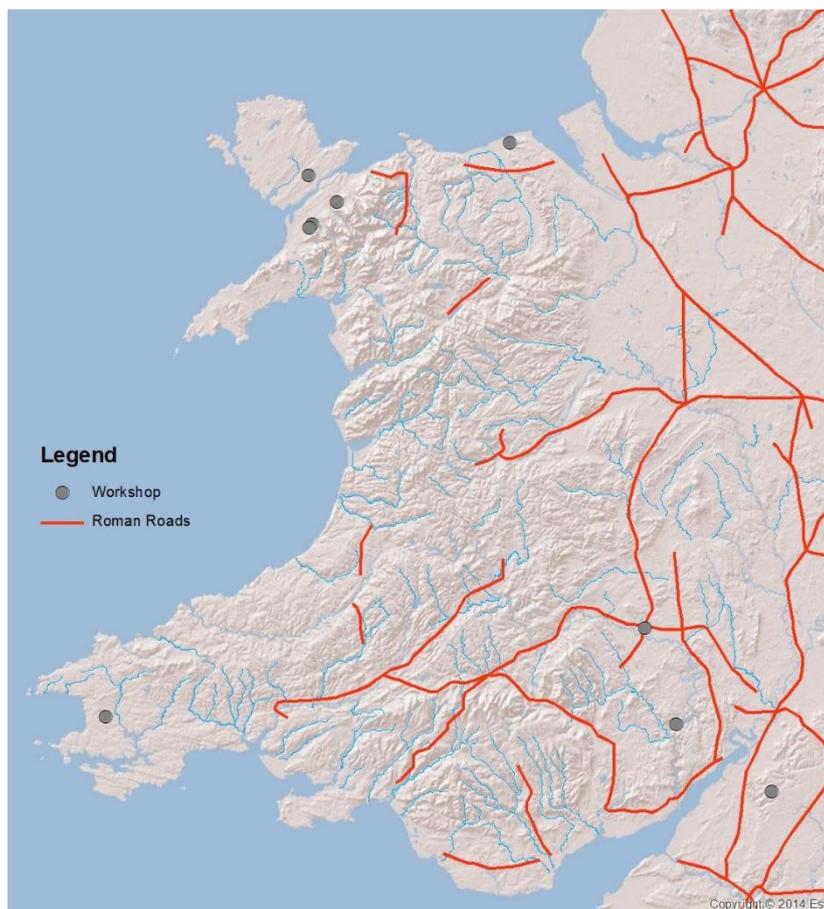
Figure 7.6. Distribution of sites with workshops

Furnaces are also present at the two Central Belt sites of Little Hadnock (Glamorgan-Gwent) and Kingscote (Gloucestershire), though the Kingscote workshop belongs to the early phase of the site during which time it was a nucleated settlement centred on a quarry (Timby 1998, 28). Outside of the cluster of sites with workshops in Gwynedd, workshops are identified as isolated sites in the north-east (Prestatyn (Clwyd-Powys), where there is evidence of lead-working) and Walesland Rath (Dyfed), though the Walesland Rath examples were Iron Age in date (Wainwright 1971, 100).

Region	Number of Sites
Central Belt	2
Central West	1
Upland Wales and the Marches	6
Total	9

Table 7.17. Numbers of sites with workshops present

7.2.7 Discussion

The evidence suggests that agricultural production was the primary economic function of rural settlements, and there is evidence that both arable and pastoral regimes were followed, both at a regional and individual site level.

However, evidence of large-scale crop-processing suggests that arable production was most intensive in the south-east, particularly in the coastal Vale of Glamorgan and around the Severn Estuary, where the majority of corndriers are present. The prevalence of corndriers and millstones on villa sites also suggests that these sites were particularly engaged in larger-scale processing and that the intensification of agriculture took place from the 2nd century onwards. These sites may have been engaged in the production of surplus, either for the purpose of selling to market or for the provision of the military.

The supply of the Roman army and whether the province could supply all its needs has been of considerable concern for archaeologists of Roman Britain. As an occupying force the Roman army required a variety of supplies: not only foodstuffs for the provision of soldiers, but secondary animal products, raw materials such as timber and stone, and durable artefacts such as ceramic building material and pottery (Carrington 2008, 19). There has been debate in recent years over the extent to which long-distance imports were required to fulfil the demands of the army (Thomas and Stallibrass 2008, 5). It is generally assumed that the legion relied on local supply networks as far as possible; however, recent work in strontium isotope provenancing has found evidence of animals in both military and rural contexts which were non-local in origin and had travelled significant distances (Madgwick et al 2017; Minnit et al 2014), perhaps suggesting wider networks of trade and supply.

Other developments in the south-east which may be linked to the intensification of agriculture under military influence include reclamation of landscapes in the Severn Estuary Levels (Rippon 2000, 190). Iron Age engagement with this landscape largely falls under Rippon's definition of exploitation (opportunistic use of natural resources) or modification (small-scale measures to mitigate the worst effects of flooding events) - such as the Iron Age settlements at Goldcliff on the Caldicot Levels (which form part of the broader landscape of the Gwent Levels), where trackways, lightly-constructed timber structures and preserved cattle hoofprints indicate seasonal pastoral activity, as noted above (Bell 1993).The major network of reens and field systems date to the Roman period and represent a much more significant process of transformation and reclamation. The Goldcliff stone (RIB 395) found in the 19th century on the Gwent Levels records the construction of 33½ paces of work by a cohort of legio II Augusta and has been viewed as evidence for military involvement in the construction and maintenance of coastal defences and wetland reclamation, possibly as part of the *prata legionis* or territory controlled directly by the legion (Rippon 1997, 99). Reclamation projects were expensive and required considerable outlay of materials and manpower, which could have been provided by the military – or possibly by villa estate owners, as has been suggested for the North Somerset Levels (Rippon 1997, 195).

7.3 Distribution

This section will explore the distribution of pottery within the study region. It will focus primarily on the distribution of fabrics as evidence of the trade in ceramics and other commodities during the Roman period, and whether access to pottery was widespread or constrained by economic or social factors.

One of the ways in which we can use pottery to study the economy of the study region is in considering how far they can be used as evidence of trade. This section will therefore explore importation and intra-regional trade in ceramics in the Roman period using the ceramic methodology outlined elsewhere.

7.3.1 General Distribution

The broad patterns of distribution of ceramics are outlined in a previous chapter; in summary, the presence of ceramics in rural assemblages is widespread, though often in small quantities. The highest quantities of ceramics are focused in the south-east and along the line of the Marches, and the importance of the coastal distribution will be highlighted below.

Chronologically there is little change in the overall presence of pottery within the study region across all periods, though in some particular fabrics there are distinct patterns which will be explored below.

The use of ceramics does not appear to contract with the removal of many military sites in the period AD150-300 (Fig. 7.8), which suggests that civilian demand was involved in the distribution of ceramics at rural sites.

Region	Early AD75-150		Middle AD 150-300		Late AD300+	
	Pres	Abs	Pres	Abs	Pres	Abs
Central Belt	49	16	48	17	39	26
Central West	26	12	29	9	22	16
Upland Wales and the Marches	55	25	55	26	44	36
Total	130	53	132	52	105	78

Table 7.18. Regional breakdown of sites with ceramics present and absent in the site assemblage
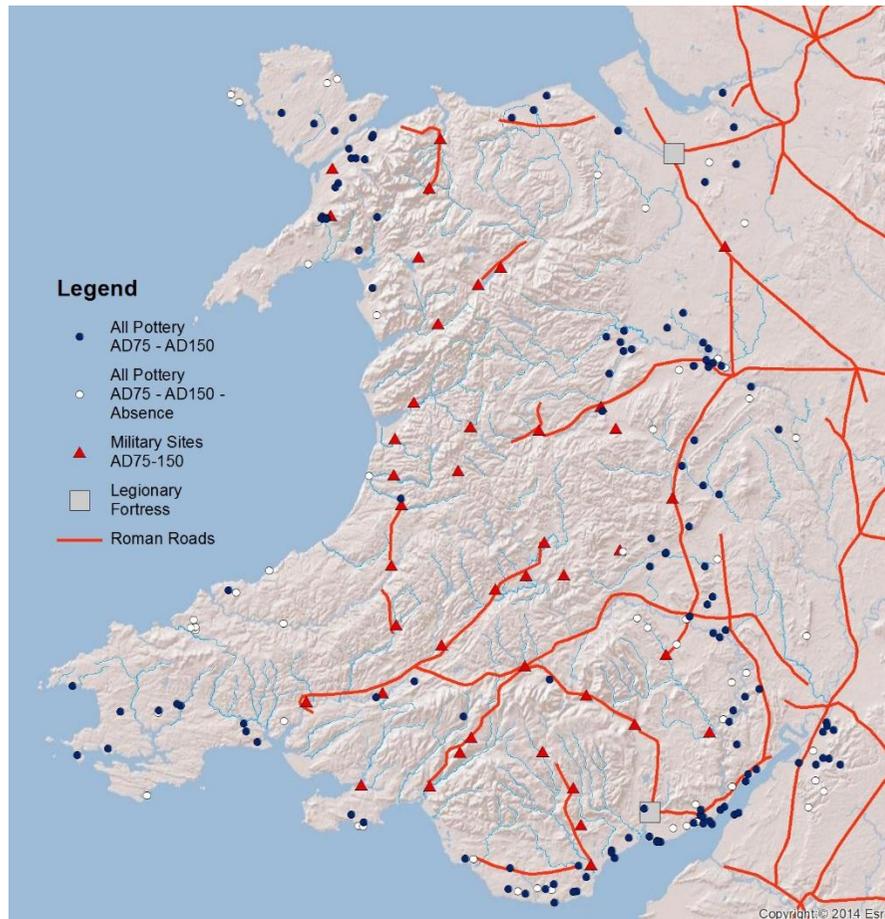
Figure 7.7. Distribution of pottery AD 75 – AD150
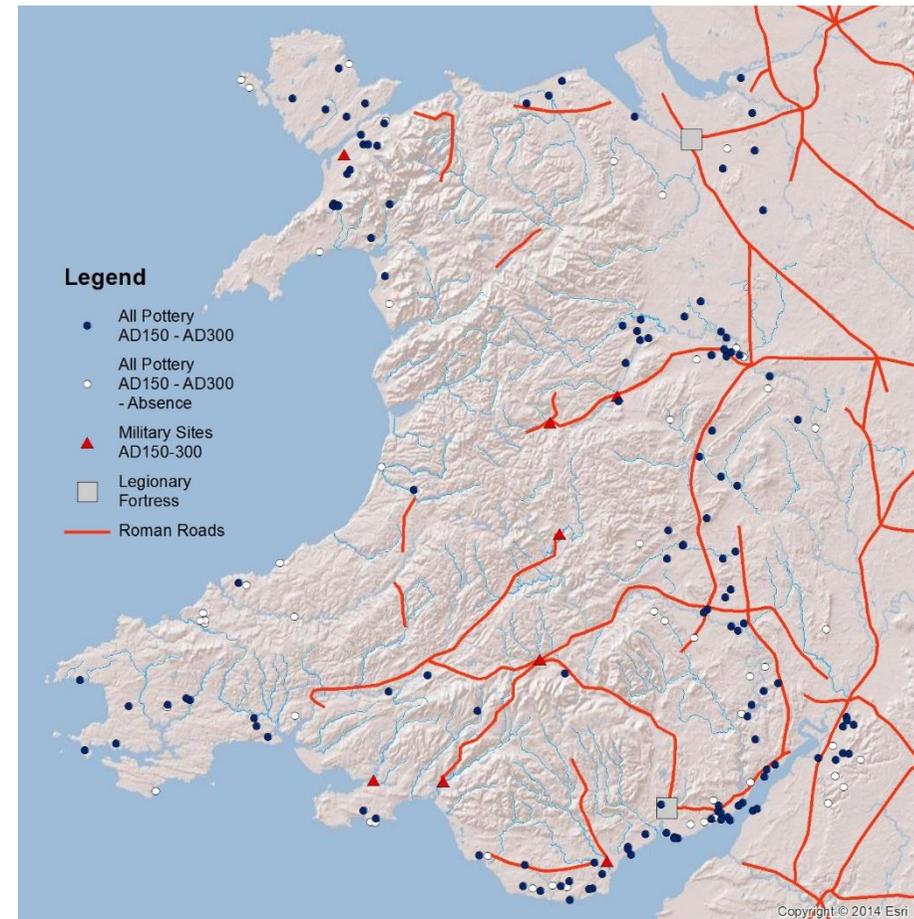
Figure 7.8. Distribution of pottery AD150 – AD300
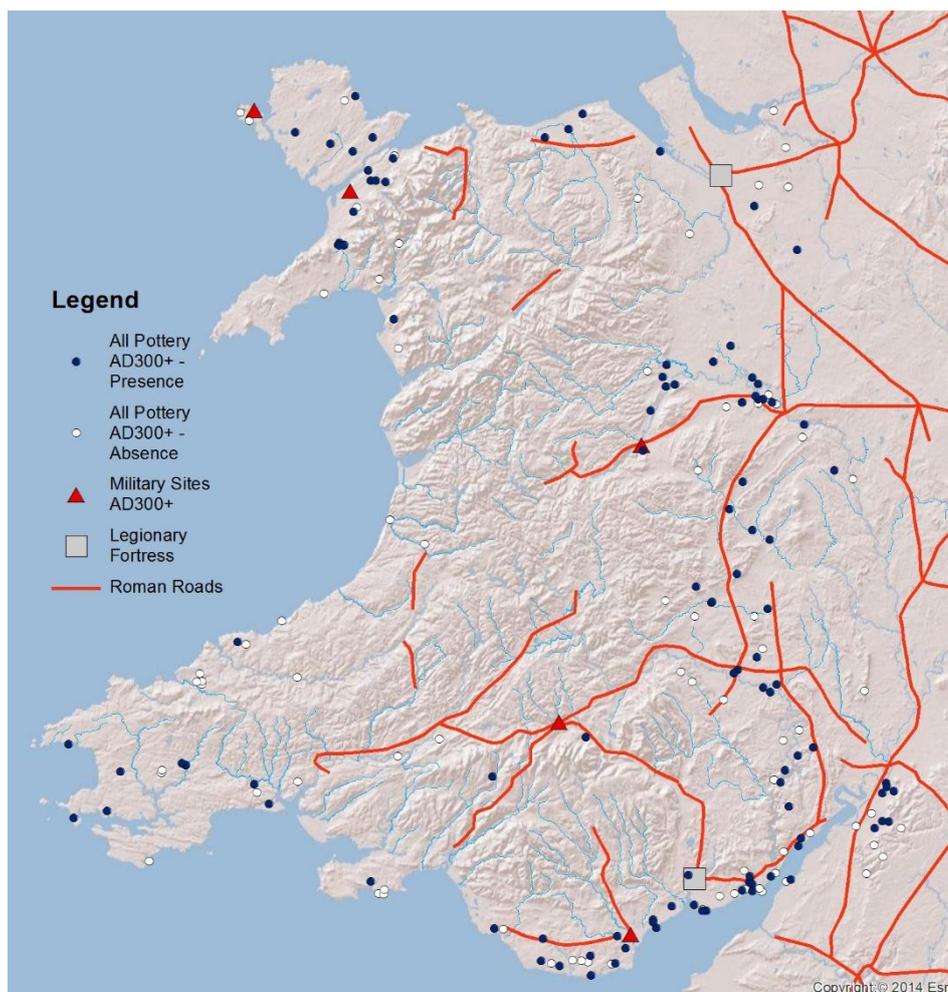
Figure 7.9. Distribution of all pottery AD300+

A constant of ceramic distribution in all periods is the prevalence of the coastal distributions, which suggests that maritime transport was of principal importance in the movement of ceramics (and therefore of other goods). The importance of riverine and coastal trade is highlighted in the number of forts and towns located on estuaries or navigable rivers, though the extent of smaller civilian coastal settlements which may have served as ports is poorly understood (Rippon 2008, 86). The geospatial modelling service ORBIS (Scheidel and Meeks 2012) reinforces the importance of maritime transport routes in saving both time and money. Land transport in the Roman period was slow and expensive, and Greene projects from the Price Edicts of Diocletian that land transport was 28 times more costly than sea transport (Greene 1986, 40). Though the number of sites within the study region available for ORBIS modelling is limited, selecting for a calculation of the fastest route between Caerleon and Chester in summer provides a sea route of 3.8 days (Fig. 7.10). By contrast, modelling for the shortest route (thereby enforcing

land-based transit) using an oxcart as the mode of transport (as the likeliest mode of transport for traded goods such as ceramics) gives a journey time of 20.8 days.
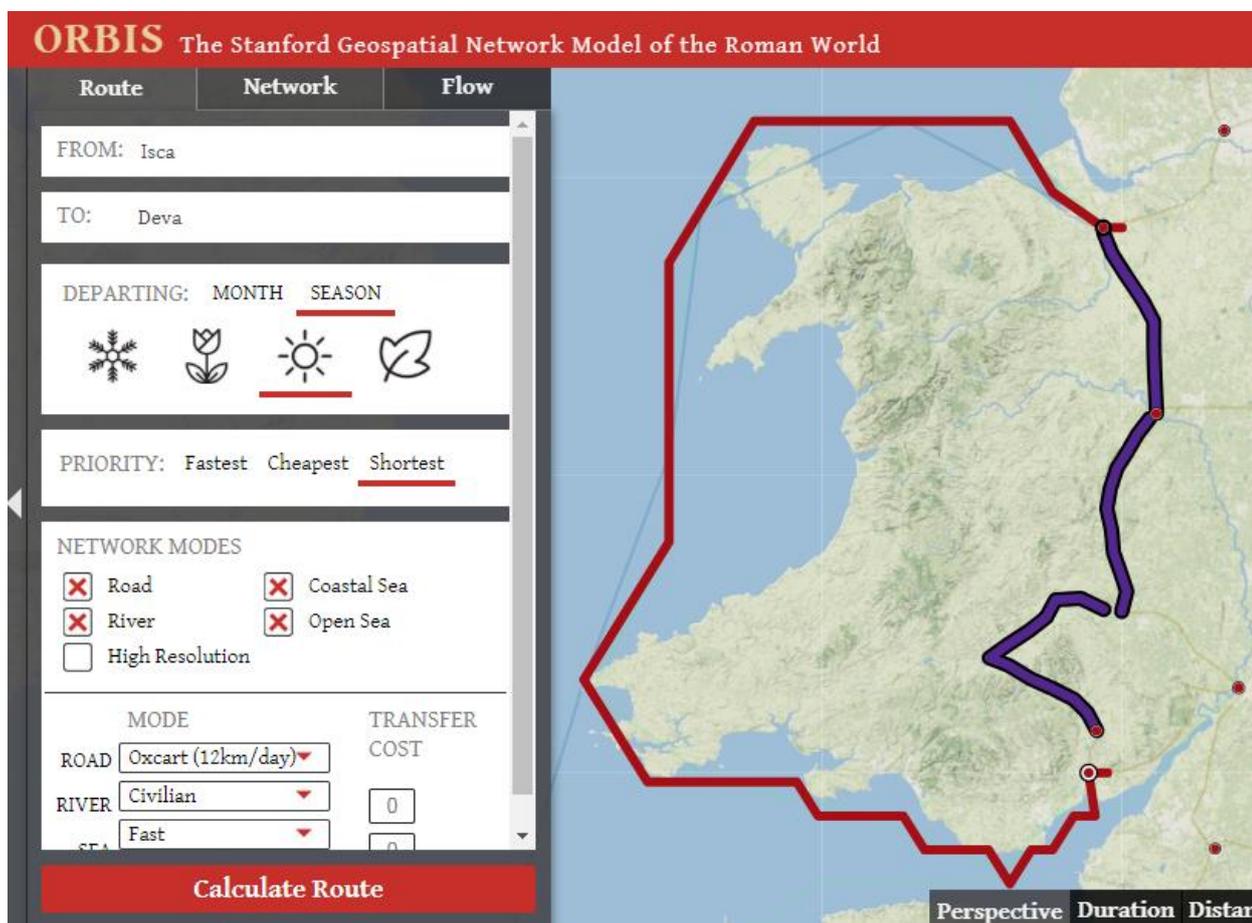
Figure 7.10. Screen capture from ORBIS (Scheidel and Meeks 2012) showing the fastest path between Caerleon (Isca) and Chester (Deva) (red) and the shortest (purple).

The outcome of the ORBIS modelling corresponds very well to the distribution patterns observed above and suggests two major avenues for trade in ceramics (and other goods) within the study region. The primary driver of the coastal route may have been military supply, both of the fort at Segontium (Caernarvon), the legionary fortress at Chester, or further on to the forts of the northern frontier. The land-based route follows the Roman road network which connected forts such as Abergavenny and Brecon Gaer, and further up the settlement at Wroxeter, which was initially a legionary fortress but later developed into the fourth largest town in the province.

The importance of Wroxeter and its impact on the presence of ceramics in the area surrounding the town is noted in field survey as part of the Wroxeter

Hinterland Project (Gaffney et al 2007). The density of surface scatter decreases with distance from Wroxeter itself, with an area of high-density scatter in a 1km radius of the town and of moderate-density scatter stretching up to 5km from the city (Goodchild and Maguire 2007, 241). 93% of non-site material derives from within 5km of the town (*ibid*). The site assemblages of the rural sites identified as part of the same settlement survey are relatively small (Berwick Alkmund Park: MNV 21, Chilton Farm: MNV 17, Whitley Grange: MNV 22) and suggest that material was adopted at rural sites in limited quantities despite the proximity of a large urban centre.

7.3.2 Distribution of Imported and Romano-British Wares

Having explored the general distribution of ceramics throughout the study region, this section will explore the distribution of particular fabrics, including imported and Romano-British fabrics, to identify how far rural settlements were integrated into distribution networks.

Amphorae

Amphorae are closely associated with trade in the Roman world due to their function as containers for perishable commodities including wine, olive oil, and fish products. Their distribution is therefore commonly used as secondary evidence for the trade in food products, but they may also act as indicators of the reach of certain commodities and consequently the integration of rural settlements into wider networks of distribution.

The evidence for amphorae within the study region is fairly limited, and they are not identified in large quantities. A total of MNV 64 is represented in the ceramic database. Within this body of evidence the most commonly identified amphorae form is the Dressel 20 (Table 7.19), with MNV 21 identified and a further four potential Dressel 20 vessels (these are amphorae where the vessel description in the excavation report echoes the typological description of Dressel 20, for example, as 'globular'). The firm identifications and the possible identifications together represent nearly half of the total amphora assemblage. The Dressel 20 was produced in the Guadlaquivir region of Spain, of a form which became established by the Tiberio-Claudian period and continued in production to the

second half of the third century (Tyers 1996). Dressel 20 was the most common amphora in the western provinces during the 1st to 3rd centuries, and its dominance within the ceramic assemblage of Wales and the Marches is therefore consistent with broader patterns both in Roman Britain and the northwestern provinces more generally (Carreras and Ruis 2012, 433).

Dressel 20 were associated with the transport of olive oil (Cool 2006, 136). Olive oil amphorae have been found to be much more common on rural sites throughout Roman Britain than wine amphorae (ibid) and again this indicates that the study region was consistent with broader patterns of trade.

The evidence for amphorae associated with other commodities is more limited and there are few examples of non-Dressel 20 amphorae (Table 7.18). Both Dressel 1 and 2-4 and Gallic amphorae are forms primarily associated with the transportation of wine (Tyers 1996) but are present on only two sites (Frocester (Gloucestershire) and Magna Castra (Herefordshire)). The ribbed and combed amphorae may also be associated with wine transport (University of Southampton 2014). Beltran 2A is associated with the transportation of fish products and is identified at a single site (Magna Castra). However, it should be noted that half of all the instances of amphorae were not identified by type, and that the absence of other identified forms does not necessarily mean that none were present.

Type	MNV
?Dressel 20	4
Beltran 2A	1
Combed	1
Dressel 1	1
Dressel 20	21
Dressel 2-4	2
Gallic	1
Ribbed	1
Unidentified	32
Total	64

Table 7.19. MNV of amphora types

The distribution of amphorae is heavily biased towards the coast. The concentration of sites with amphorae (and of sites with high MNV) is around the Severn Estuary and generally along the south-east coastline, suggesting that maritime trade was the most significant driver of amphorae distribution.

Furthermore, maritime trade along coastal routes would have been significantly easier than transport over land. Where amphorae appear on inland sites, they are in close relationship to the road network or to navigable waterways, such as the River Wye. Very few amphorae are found in the upland interior.

There is also an imbalance in the total MNV within different regions. Nearly half of the total MNV found in the Central Belt region (see Table 7.20). However, a significant quantity are also found in Upland Wales and the Marches, with nearly a third in this region.

Region	MNV
Central Belt	32
Central West	11
Upland Wales and the Marches	21
Total	64

Table 7.20. Regional distribution of amphorae

These figures are skewed somewhat by several large site assemblages. For example, all MNV 11 identified in the Central West region are from a single site: the villa at Magna Castra (Herefordshire). The high numbers of amphorae at this site may be linked to its proximity to the small town at Magnis (Kenchester), as discussed above in relation to agricultural production.

However, the distribution of amphorae at sites in Upland Wales and the Marches is fairly extensive and amphorae are found on a slightly greater number of sites in the Upland Wales and the Marches (12 sites) compared to the Central Belt (11 sites). Though in Upland Wales and the Marches they are usually found as single examples within the site assemblage, with a few exceptions of multiple vessels (such as Cefn Du (Gwynedd): MNV 2, Church Hill Penmaen (Glamorgan-Gwent): MNV 2, and Dinas Emrys (Gwynedd) MNV 7).

The distribution of types of amphorae is unfortunately uninstructive regarding the distribution of their associated contents and the trade in perishable commodities. As discussed above, Dressel 20 olive oil amphorae dominate the assemblage, and the majority of non-Dressel 20 amphorae derive from just two sites, both of which are large villa assemblages (Magna Castra (Herefordshire) and Frocester (Gloucestershire), with a single identified instance of a late combed amphora at Coygan Camp (Dyfed). It is therefore not possible to conduct further analysis of

the distribution of the contents of the amphorae, except to note that the dominance of Dressel 20 in the amphora assemblage suggests a greater demand for and consumption of olive oil perhaps both in the diet and for non-culinary purposes than for other newly-introduced products, such as wine. Wine may therefore have been a more economically (and/or socially) restricted commodity – though as has already been observed, the lack of securely identified amphora types precludes deeper analysis. The social significance of these distributions will be considered in the following chapter.

However, using amphorae as a proxy for trade is problematic in some respects, particularly with regards to commodities. The MNV above demonstrate that amphorae were present in the study region in very small numbers, and amphorae may have been subject to reuse, both as packing containers after their initial use-life for secondary trade, or in modified form for various other purposes (Pena 2007, 61). While the shape of amphorae may have been important in certain markets as an indicator of its contents (Pena 2007, 64), this may have been of less concern in regions without a pre-existing perception of amphorae shapes as they related to contents, or in regions where the level of trade was fairly small – in other words, how far was the association between the form of the vessel and the commodity it contained understood away from primary centres of distribution and exchange, and may this have affected the utility of amphorae presence on rural sites as indicators of its contents? If the link between the form and the content was not strong, it may be that amphorae were reused with different contents, thus complicating the identification of the reach of various commodities at rural sites. The practicality of removing the residues absorbed into the fabric from the primary contents, particularly olive oil and fish products, may not have been prohibitive if the amphorae had an interior coating of pitch or other resin, as evidence suggests was sometimes the case (Pena 2007, 70).

The reuse of amphorae for other purposes is also attested. Pena presents an overview of the evidence for twenty-six amphora reuse applications which include both modified and unmodified amphorae, ranging from reuse as storage containers to gaming pieces to urinals (Pena 2007, 120). These forms of reuse were likely smaller-scale in character and carried out at the level of the individual household rather than at a trade level, as with the reuse described above. Though there is little evidence of this within the study region, an avenue for future study

into amphora use at rural sites may be to look at the levels of fragmentation of amphorae to ascertain whether forms of modification were being carried out. Nevertheless, the possibility should be considered that amphorae were not reaching rural sites solely for their properties as containers of commodities.

Continental Imports

MNV 754 Continental imports are present in the database. Within this category, the largest number of vessels are in samian ware, with MNV 725 samian from 88 sites. Non-samian continental Imports include Gaulish Colour Coats and Trier Black-Slipped Ware. The distribution of Continental imports is widespread but unequal across the region, with concentrations in the south-east and in the north-west, some distribution in the east and isolated occurrences elsewhere, particularly in the south-west and north-east.
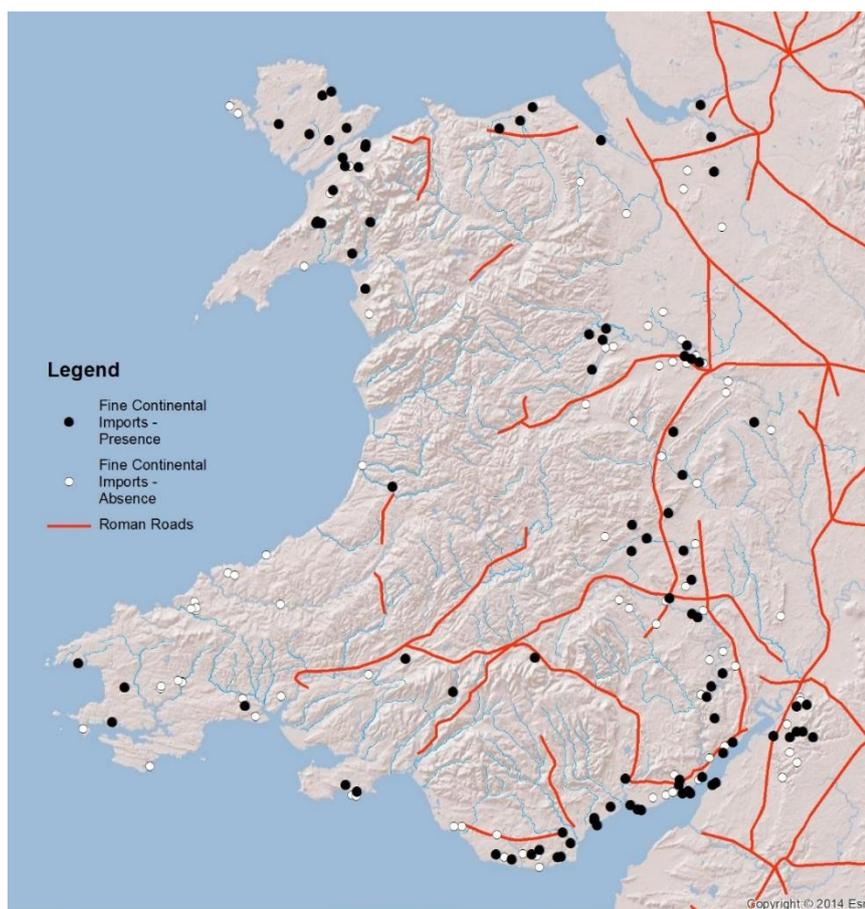
7.11 Distribution of imported Continental finewares.

This echoes the suggestion of a relationship between the distribution of fineware imports and military presence. This is particularly in evidence in the north-west,

where there is an otherwise-isolated cluster of sites with samian present in the assemblage. There was a persistent military presence in this region: the fort at Segontium (Caernarvon) was occupied continually (though with reductions in size and garrison strength) from its construction during the Flavian campaigns to the late 4th century (Casey and Davies 1993). The presence of samian ware at rural sites in the north-west – in an area which was practically aceramic in the pre-Roman Iron Age - may suggest that the presence of the fabric here is linked to markets based in military supply chains rather than civilian supply and demand. However, its presence on rural sites clearly indicates that rural sites had access, albeit limited, to samian and other imported wares.

The lowest incidences of continental imports occur in the north-east and the south-west. In the south-west no forts or roads were known until fairly recently. However, the identification of a Roman fort at Wiston, Pembrokeshire, initially from Lidar survey in 2010 and trial excavation in 2013, has shown that the Roman military and official presence in this part of Wales was significantly greater than had previously been understood (Meek 2017; 2015). This had been suggested by the presence of a road running west from Carmarthen, but the confirmation of Roman military presence in the extreme south-west of the region may offer an explanation for the seemingly isolated occurrences of samian wares and other Romano-British imports at rural sites with a coastal distribution in Pembrokeshire, such as the promontory fort at Porth y Rhaw (Dyfed). The ORBIS model (Fig. 7.10) also indicates that this region was a probable stop on a longer maritime route, perhaps one which utilised the natural harbour of the Milford Haven Waterway, as the Vikings later did (Redknap 2008, 404).

However, the absence of Continental imports from rural sites in the north-east is less easily explained, given the presence of the legionary fortress at Chester and associated civilian settlement. The absence of Continental imports is strongest in the area north of Wroxeter and west of Chester. Continental imports are present in this region at sites such as Prestatyn (Clwyd-Powys), but this site has strong military associations. It has been suggested that areas of the north remained under direct military or procuratorial control as part of a system for controlling the local lead-mining industry (O'Leary 1989, 51). Other regions in Britain with a similar absence of nucleated or high-status settlement, such as Cranbourne Chase and the Fenlands, have been suggested as imperial estates (Collingwood 1936,

224; Potter and Jackson 1982;). The presence of procurators and their staff is attested in Britain on a 3rd century inscription noting the restoration of a procuratorial headquarters at Combe Down (Crawford 1976, 36; RIB 179)

If this region was an imperial estate, there may have been significant controls placed on the local civilian population which could have curbed economic or social engagement with networks of distribution. The Roman state retained a monopoly on metal and mineral resources, and mining operations were sometimes carried out under state control but were more regularly operated in partnership with private contractors. The procurators in charge of mining were able to lease out a range of concessions associated with the mining industry, including the running of bathhouses (Mattingly 2006, 291). Under the Roman empire extractive industries were carried out on a scale previously unknown, to the extent that Greenland ice-cores dated to this period carry evidence of the increased levels of pollution associated with the mining industry (*ibid*). However, the identification of imperial estates is complex, particularly in regions such as Wales and the Marches with a limited epigraphic habit, and there is no epigraphic evidence for imperial estates in Britain.

Region	MNV	Number of Sites
Central Belt	484	39
Central West	110	13
Upland Wales and the Marches	164	40
Total	758	92

Table 7.21. MNV of Continental Imports by region

There is an imbalance between the Minimum Number of Vessels present in each region, with the total assemblage dominated by the Central Belt despite the almost equal numbers of sites with Continental finewares present in the Central Belt and Upland Wales and the Marches (Table 7.21). The imbalance in the MNV is due therefore to several sites with large assemblages of samian ware. Within the Upland Wales and the Marches region single vessels are more common, though it should be noted that the numbers given in this study represent a minimum number and more may have been present.

Samian Supply

The point of origin of samian vessels can also be considered when exploring the supply of pottery to sites within the study region. Samian ware is commonly used in Britain to refer to the specific products of the Gaulish kilns, as opposed to other forms of terra sigillata (such as Arretine wares). However, there were a range of kiln sites which exported samian ware and the dominant centres of production shifted over the course of the period in which the fabric was imported to Britain. These fluctuations in supply can be identified in the archaeological record by tracking the MNV of vessels identified as products of particular kiln sites.
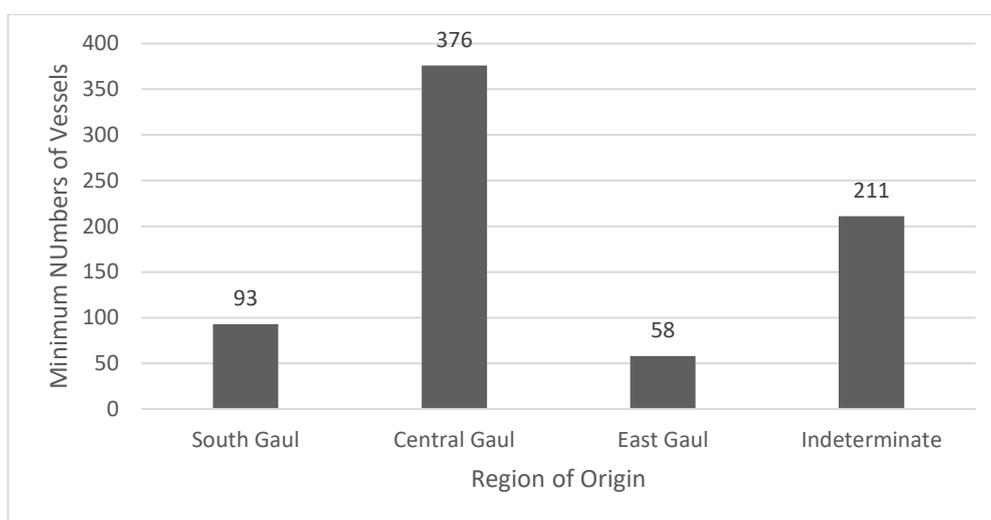
Figure 7.11. Samian MNV by origin

The primary point of origin of samian wares changes over time and examination of the supply can therefore also be used as a proxy for the chronology of supply to the region. The South Gaulish production centres – including La Graufesenque – flourished in the 1st century AD, but underwent a decline in the late 1st and early 2nd centuries, perhaps as a result of the expanding markets in newly-conquered territories such as Gaul, Germany, and Britannia (Webster 1996, 15). Access to the emerging markets may have been logistically easier from the more northerly centres in central Gaul (such as Les Martres-de-Veyre in the period 100-120 and Lezoux from around 120 to the late 2nd century), and this is reflected in the dominance of Central Gaulish products in the ceramic assemblages of the study region (Fig. 7.12).
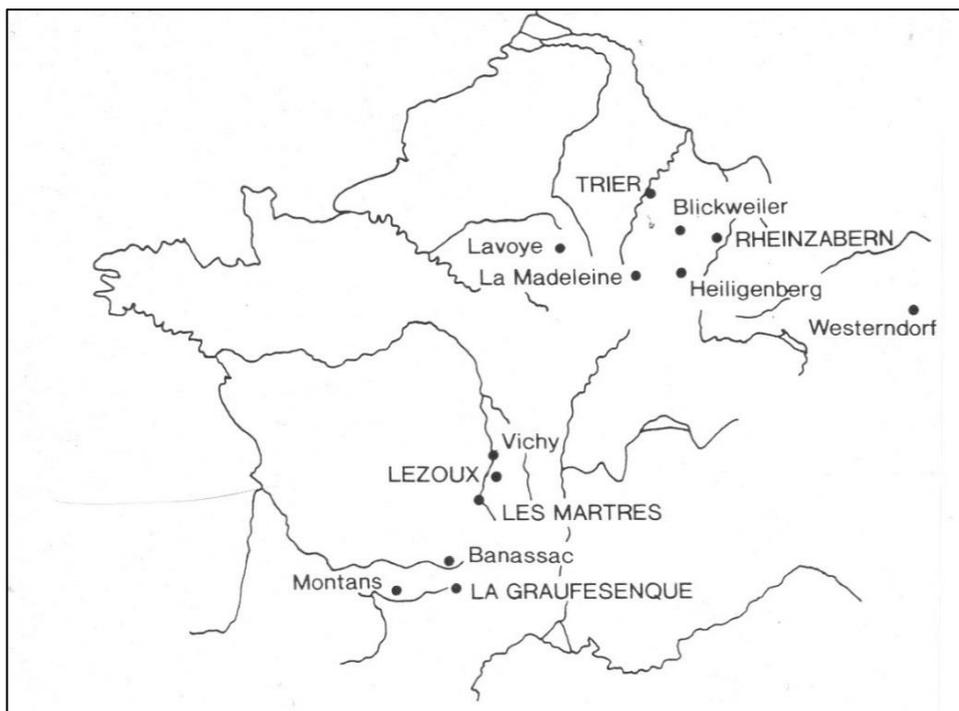
Figure 7.12. Location of primary sources of samian ware in Gaul (Webster 1996, Fig 1)

The distribution maps of the various products by their site of origin indicates that there were some differences in the extent of supply from different centres in Gaul, though clearly caution must be exercised when drawing conclusions as the identification of vessel origin is highly contingent upon post-excavation factors such as the extent of analysis or publication. However, some broad observations can be made. Vessels identified as South Gaulish samian ware (Fig 7.13) are located primarily in the south-east, with an isolated cluster in the north-west. There are no identified instances of the ware in the west or north-east, though of course this does not mean that no examples of the ware were present in these regions or that samian ware was not present during the major period of South Gaulish export (roughly AD40-110 [Tyers 1996, 107]).

Central Gaulish samian wares are most widely distributed across the study region. They are identified at 39 sites in total and also appear in isolated instances in the south-west and north-east of the study region, unlike products of South or East Gaul (Fig. 7.14). They also appear in the highest quantities of all forms of finewares (Table 7.21). This indicates that the distribution of samian ware was at its height during the major period of Central Gaulish export, roughly AD 100-190 (Tyers 1996, 107).

For products of the Central Gaulish kilns, where the individual kiln site has been identified Lezoux products dominate, suggesting that the most widespread access to this class of pottery came in the mid-2nd century - though such conclusions must necessarily be tentative, and as discussed above samian wares are particularly prone to repair and curation (Willis 2004; Evans 2005).
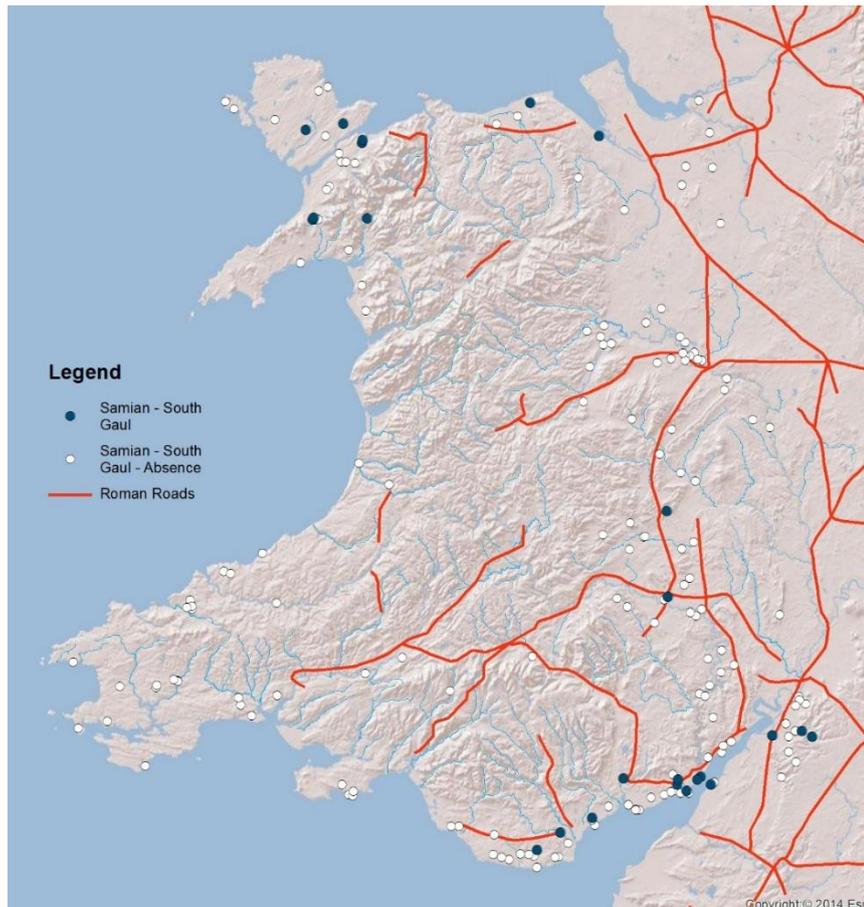
Figure 7.13. Distribution of South Gaulish samian
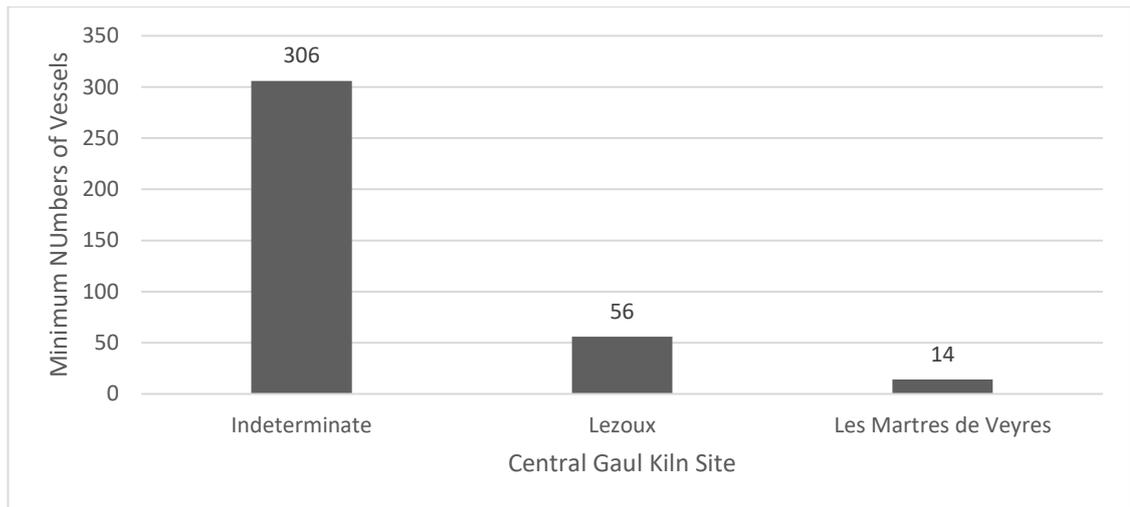
Figure 7.14. Kiln origin of Central Gaulish samian
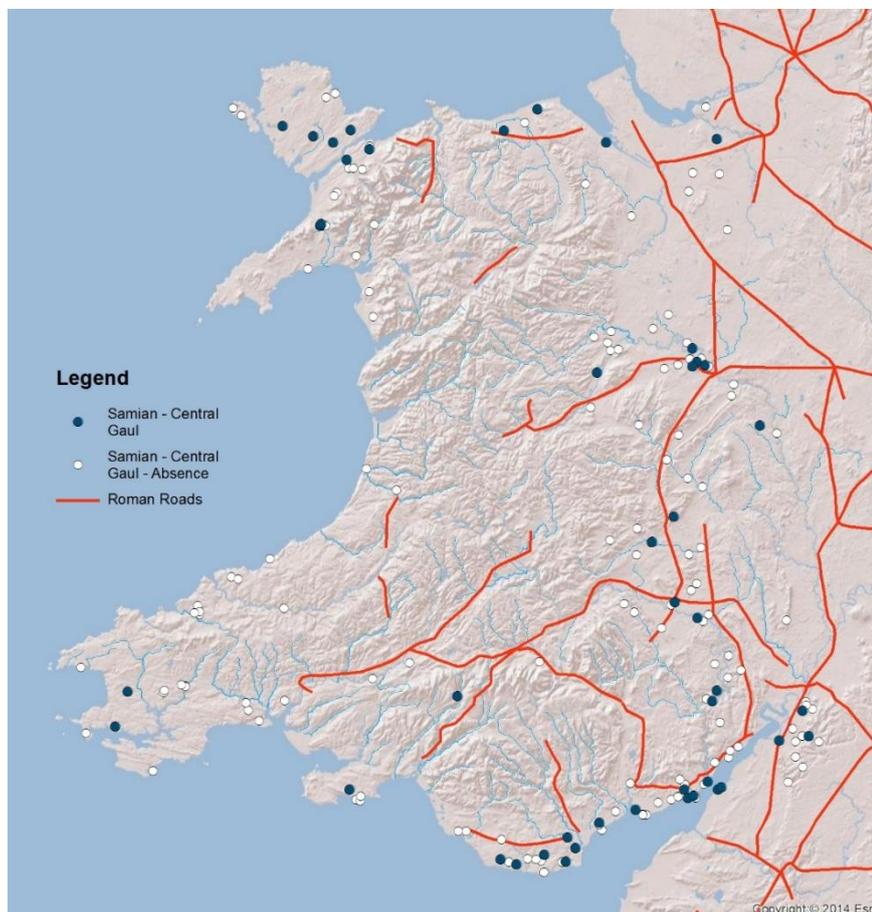
Figure 7.15. Distribution of Central Gaulish samian

Production of East Gaulish samian was established by the mid-1st century, but the major period of export to Britain was from AD120 to AD260, overlapping and subsequently outlasting Central Gaulish products (Tyers 1996, 114). The distribution of East Gaulish samian suggests that samian presence contracted to the south-east and north-west of the study region, perhaps influenced by the continued military presence in the north-west and by the urban centre at Caerwent in the south-east.

The distribution of non-samian Continental Imports is much more limited. They are identified in only five assemblages (Fig. 7.16), of which three lie in the south-east of the region. All sites at which non-samian continental imports appear are villa sites
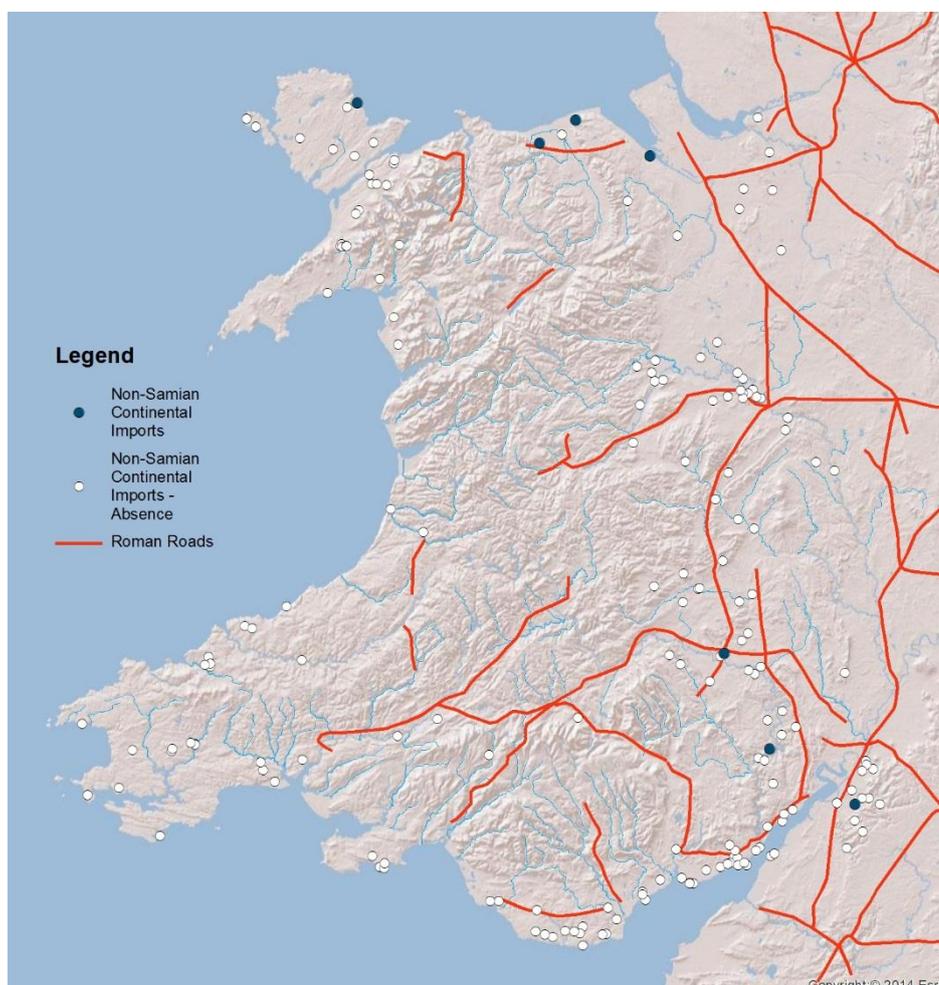
Figure 7.16. Distribution of non-samian imported finewares

Romano-British Pottery

Though Continental imports are important for understanding the economy of the study region, they form a relatively small proportion of the total MNV in the regional assemblage, and it is Romano-British imports which form the majority (Table 7.22). The distribution of the largest categories of these fabrics will be explored below.

Fabric Type	MNV
Black Burnished Ware	1147
Holt	1
Nene Valley Ware	29
New Forest Ware	11
Oxfordshire	173
Savernake Ware	15
Severn Valley Ware	574
South West White Slipped Ware	1
Verulamium Ware	4
Wilderspool	1
Wroxeter	1
Total	1957

Table 7.22. MNV of Romano-British wares

Finewares

Romano-British finewares comprise a small proportion of the total fineware assemblage. The largest category of finewares within the study region are those produced by Oxfordshire kilns (Table 7.22), though small numbers of Nene Valley and New Forest Wares are also present.

Oxfordshire Wares (colour-coated) expanded in the mid-3rd century and continued to be produced until the end of the 4th century (Tyers 1996, 178). Some of the earliest forms derived from East Gaulish prototypes, and this suggests that the fabric may have filled a gap in the market left by the decline of the East Gaulish samian imports (*ibid*). The distribution of this fabric (Fig 7.16) also suggests that the fabric may have been filling a similar role within the trade network, as its distribution overlaps significantly with East Gaulish samian wares. Its distribution is much wider than New Forest colour-coated fineware, though the two fabrics share similar date ranges.

The fact that Romano-British finewares appear in smaller quantities than samian finewares may indicate a shift in consumption patterns in which there was a smaller demand for fine pottery.
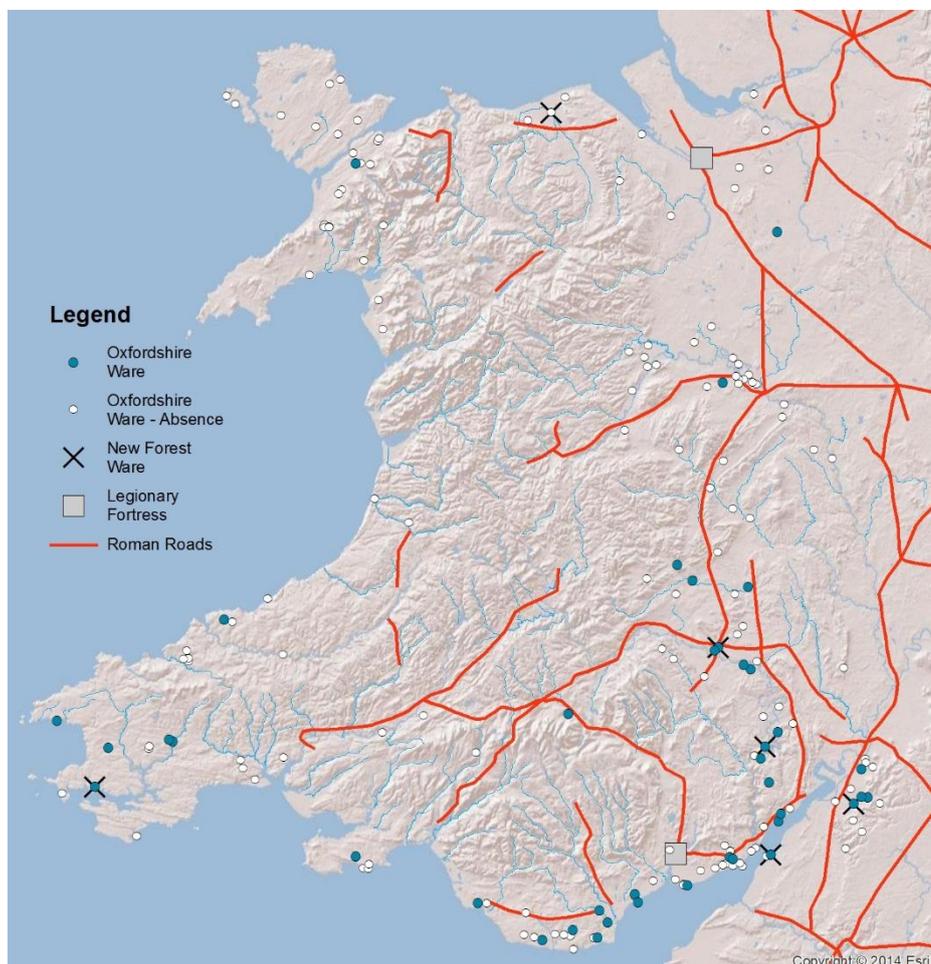
Figure 7.17. Distribution of Oxfordshire Ware and New Forest Ware

Black Burnished Ware

Black Burnished Ware is a form of coarse pottery produced primarily in the Poole Harbour region of South East Dorset (Allen and Fulford 1996, 224). The industry derived from a local Iron Age tradition whose products were often termed Durotrigan Ware (after the Iron Age tribe within whose territory the production centres lay), which produced wheelmade bowls and jars (Jones 2017, 3). Similar forms were produced during the Roman period, and the ware enjoyed a wide distribution following a period of expansion in the 2nd century. Black Burnished Ware 1 is the primary fabric type within this fabric, but the distinction has not

always been made within the pottery reports used to compile the project database and as a result the fabric will be referred to in this thesis only as Black Burnished Ware.

Black Burnished Ware forms the majority of all Romano-British imports within the study region. The distribution of Black Burnished Ware follows the general pattern of distribution for pottery in the region, and as with the majority of other wares there is a significant concentration along the south-east coast and the Severn Estuary, where the line of sites where Black Burnished Ware is present continues upwards along the navigable stretch of the River Wye. There is another cluster along the River Severn in the mid Marches, suggesting again that transport by coastal or riverine distribution formed the primary method of trade, though further up along the Marches there is some correlation between the presence of Black Burnished Ware on rural sites and proximity to the road network.

The patterns of presence within the study region identified through this thesis closely resembles the dispersal patterns identified by Allen and Fulford (1996) for Black Burnished Ware. The distribution also closely resembles that of fine continental imports (Fig. 7.11), and this pattern suggests that the two wares were likely traded in the same manner.

Black Burnished Ware has been associated with military supply networks, particularly in regions in which military presence remained significant and civilian centres did not emerge, such as along the line of Hadrian's Wall (Allen and Fulford, 267). As a fabric which was part of military supply networks, one might expect to see a strong correlation between the presence of Black Burnished Ware at rural sites and proximity to a military installation. The pattern appears to be variable. In the Early period (Fig 7.18) there does appear to be some correlation between the presence of Black Burnished Ware and proximity to a military site. This is not the case in all areas, though the lack of known rural settlements in the interior and on the west coast creates a lacuna. In the Middle period (Fig. 7.19) there appears to be very little correlation between proximity to a military site and the presence of Black Burnished Ware in rural assemblages. The contraction of the military presence may have encouraged alternative modes of distribution. A relationship to the military may be most clearly seen in the Late period (Fig.

7.20), though the military presence had refocused and was concentrated primarily on the coasts, where distribution of the majority of artefacts is concentrated.

However, one region where a continuing link between Black Burnished Ware and the military may be identified is in the north-west, where a persistent cluster of sites at which Black Burnished Ware is present may be linked to the long-lasting military presence at Segontium (Caernarfon).

Within the north-west, a pattern of repair of Black Burnished Ware comparable to and in some cases exceeding the rate of repair of samian ware has been identified at several sites (Evans 2011). At Cefn Cwmwd (Anglesey), a total of 6.7% of the total assemblage showed evidence of repair (9.5% of the samian, 6.9% of the BB1, 21% of Mancetter mortaria). Other sites in north-west Wales which show comparatively high rates of riveting are Bryn Eryr (2.5%), Graeanog (0.6%), and Bush Farm (0.24%), in comparison to the average lowland rate of around 0.1% of assemblages (Evans 2011, 195). On these three sites the riveting was concentrated on the BB1 pottery, whereas riveting is more commonly practiced on samian wares and is held as evidence of the value placed on this fabric. Black Burnished Ware is not generally considered a high-status fabric in this way, and the high rate of repair on vessels in this region may indicate a difficulty in accessing pottery in sufficient quantities, or a difficult in obtaining replacements for broken vessels.
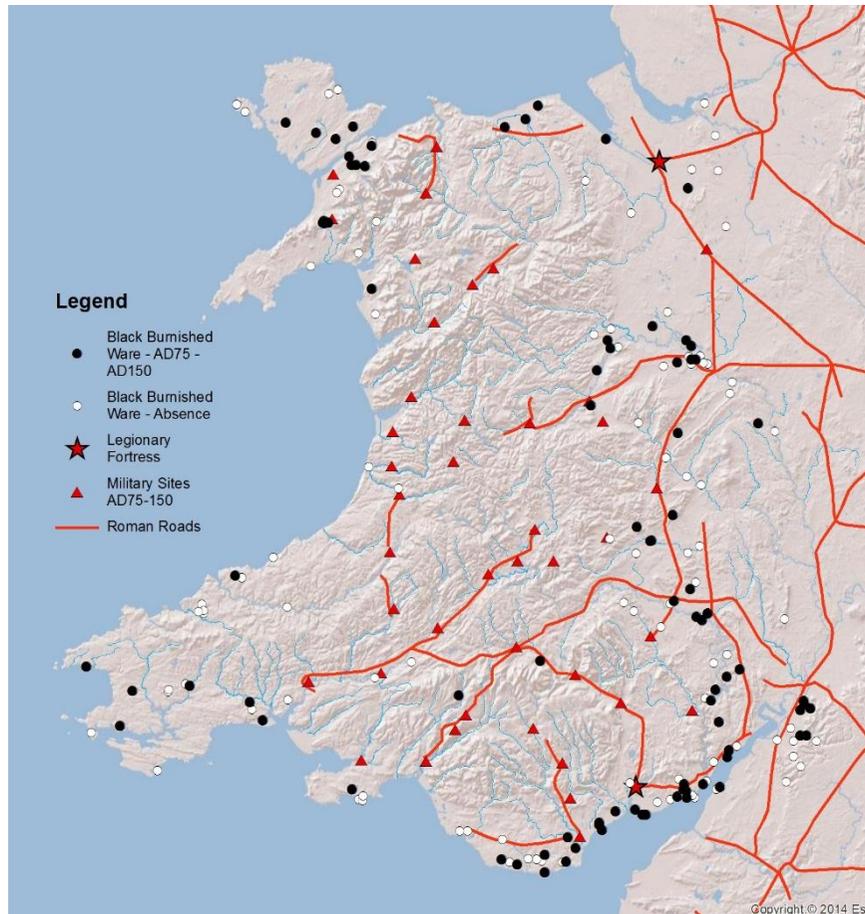
Figure 7.18. Distribution of Black Burnished Ware AD75 – AD150
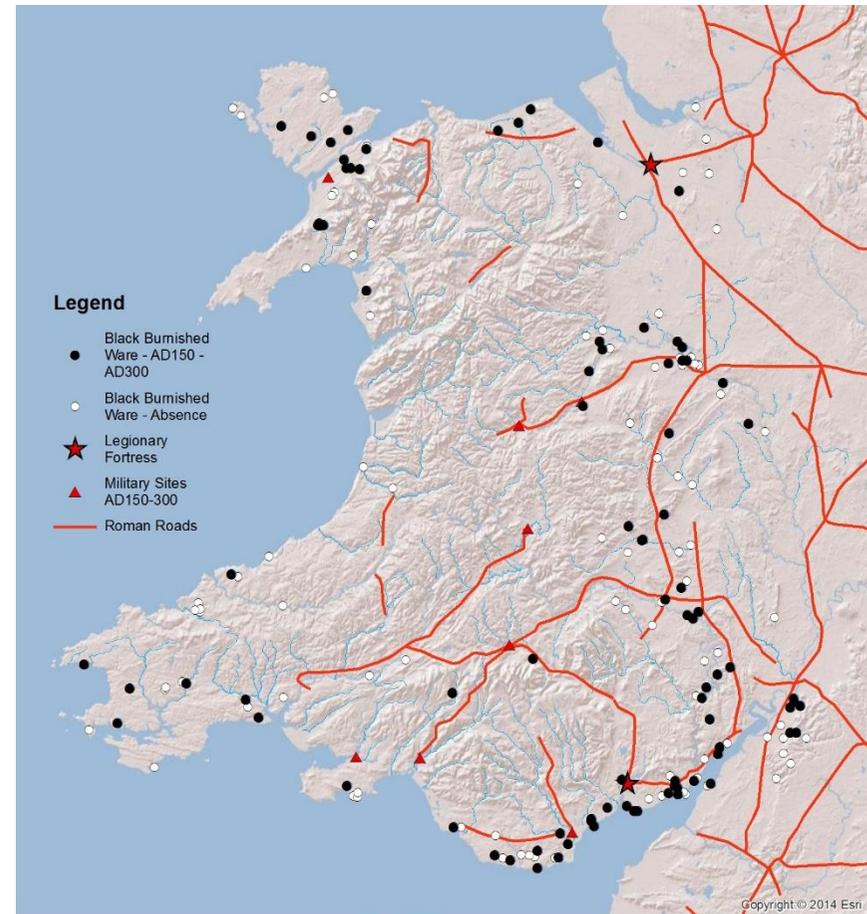
Figure 7.19. Distribution of Black Burnished Ware AD150-300
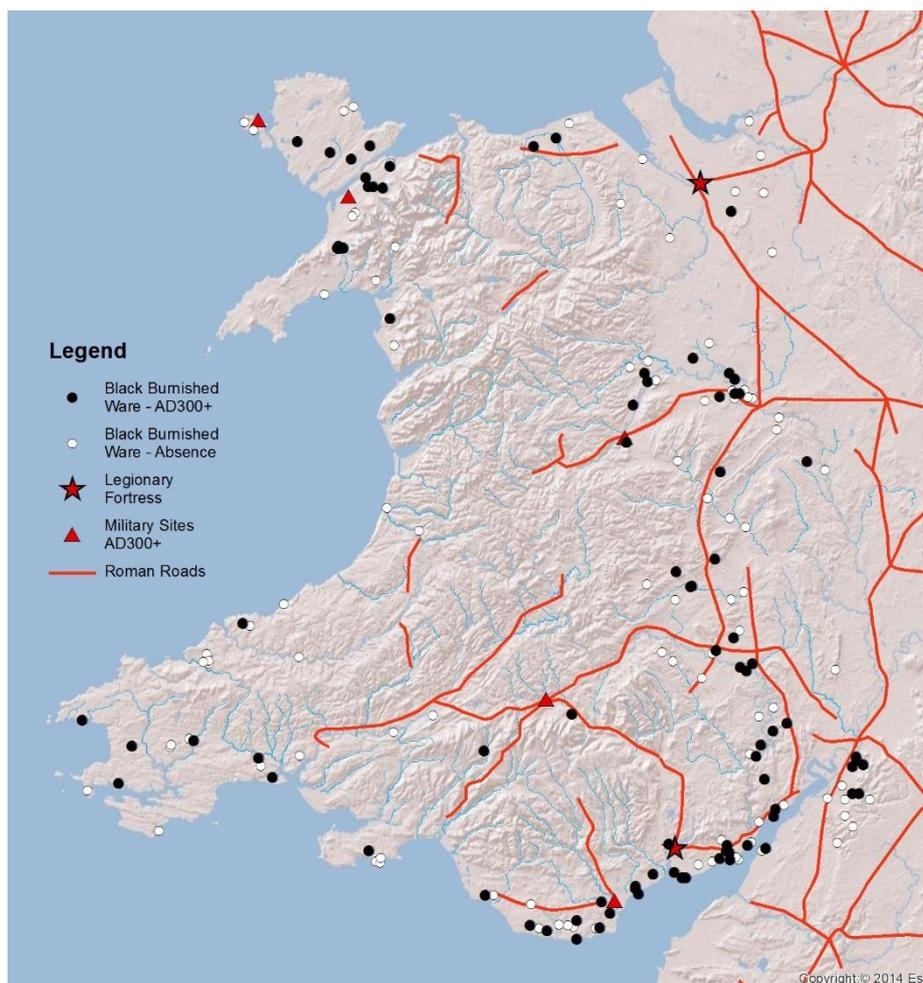
Figure 7.20. Distribution of Black Burnished Ware AD300+

Though there were some changes in distribution, the total proportion of Black Burnished Ware remained fairly steady throughout the Roman occupation, with an increase in the Middle (150-300) period. The MNV used for this graph is regarding those vessels for which an identifiable form could be assigned as part of a dated typology. Though the transposition of these typologies into the broader date ranges used as part of this thesis elides some of the nuances of the chronological distribution, it is still considered valid as a broad overview of distribution within the study region. However, including the vessels for which no identifiable form had been assigned (and which were therefore assigned the full fabric date range) also supports this trend, with a peak MNV in the Middle period and a decline in the Late.
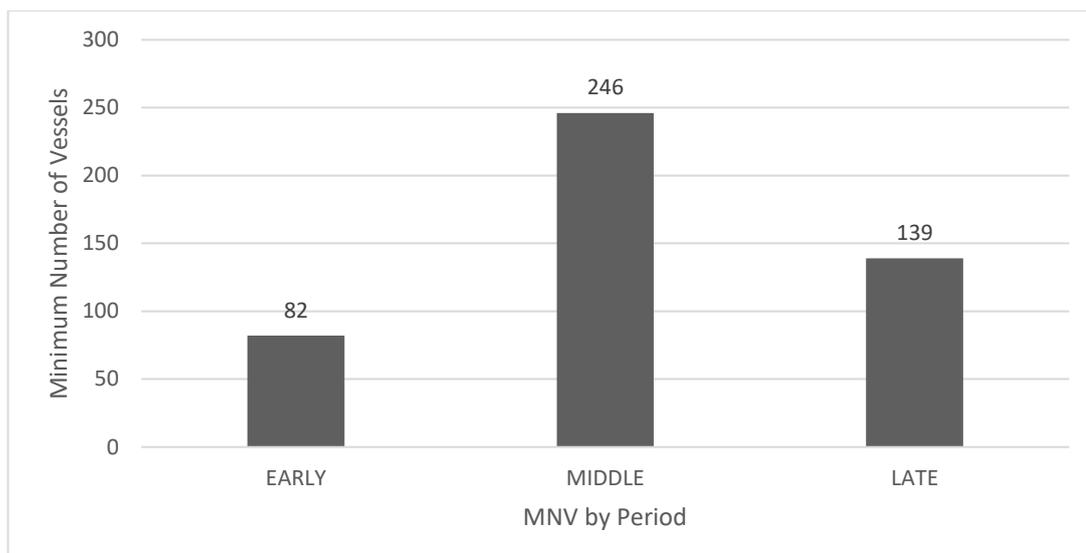
Figure 7.21. Black Burnished Ware MNV by period (where form attributed)

Other Romano-British Wares: Local Distributions

As explored above, the broad distribution of Black Burnished Ware is likely due to military involvement in its trade and movement, and other forms of pottery which were not linked with military supply had much more limited distributions. This can be seen in the distribution of Severn Valley Ware (Fig. 7.22).

Initially the development of Severn Valley Ware was encouraged by the presence of the military at Gloucester, but more recently it has been argued that Severn Valley Ware was a continuation of an Iron Age regional tradition and that the military should be viewed as a major market rather than a major producer (Webster 1976, 42).

Region	MNV
Central Belt	189
Central West	315
Upland Wales and the Marches	69
Total	573

Table 7.23. MNV by region of Severn Valley Ware

With a few exceptions at sites in the south-west of the study region, Severn Valley Ware is not widely distributed away from its kiln sites. Though it is the second-largest category of Romano-British pottery in the regional assemblage, its distribution is much more limited than, for example, Black Burnished Ware.

Site Type	MNV
Farm	520
Hillfort	7
Villa	253

Table 7.24. MNV of Severn Valley Ware by site type

Severn Valley Ware occurs primarily on farm sites, like Black Burnished Ware. The largest numbers of sites with Severn Valley Ware present lie close to civilian nucleated settlements, such as Wroxeter.

South Wales Greyware

As noted elsewhere, South Wales Greyware is a fairly recent identification of a particular form of greyware, and greywares are far more widespread than indicated by Figure 7.22. Two kiln sites for South Wales Greyware are currently known at Caldicot, near the civitas capital at Caerwent, and Llanedeyrn, on the outskirts of modern Cardiff. Both kiln sites produced a fairly limited range of forms, and therefore other kilns which have not yet been identified must also have been in operation (Webster 1992, 119). Though greywares are common, South Wales Greyware in particular is identified as such primarily on sites excavated in the latter half of the 20th century: nine of the 11 sites at which South Wales Greyware is firmly identified were excavated in the 1990s or later, and of the remainder only Ely Villa (Glamorgan-Gwent) was excavated pre-1950, but the pottery data derives from a re-examination of the original excavated material provided by Dr Peter Webster (pers comm). This is an example of how a lack of standardisation in terminology can influence the identification of patterns.

South Wales Greyware forms are primarily kitchen and storage forms, particularly jars. Some forms are copies of Black Burnished Ware forms, and this suggests that the two wares occupied similar positions within the trading networks and met similar demands for local consumers. Perhaps the demand for Black Burnished Ware was fulfilled in some parts by South Wales Greyware copies, such as those produced by the kiln site at Caldicot (Webster 1992, 119).

Site Type	MNV
Farm	137
Hillfort	18
Villa	29

Table 7.25. South Wales Greyware MNV by site type

However, this shows that there were forms of local pottery which were produced to serve local needs and did not travel as extensively as certain other fabrics, such as Black Burnished Ware.
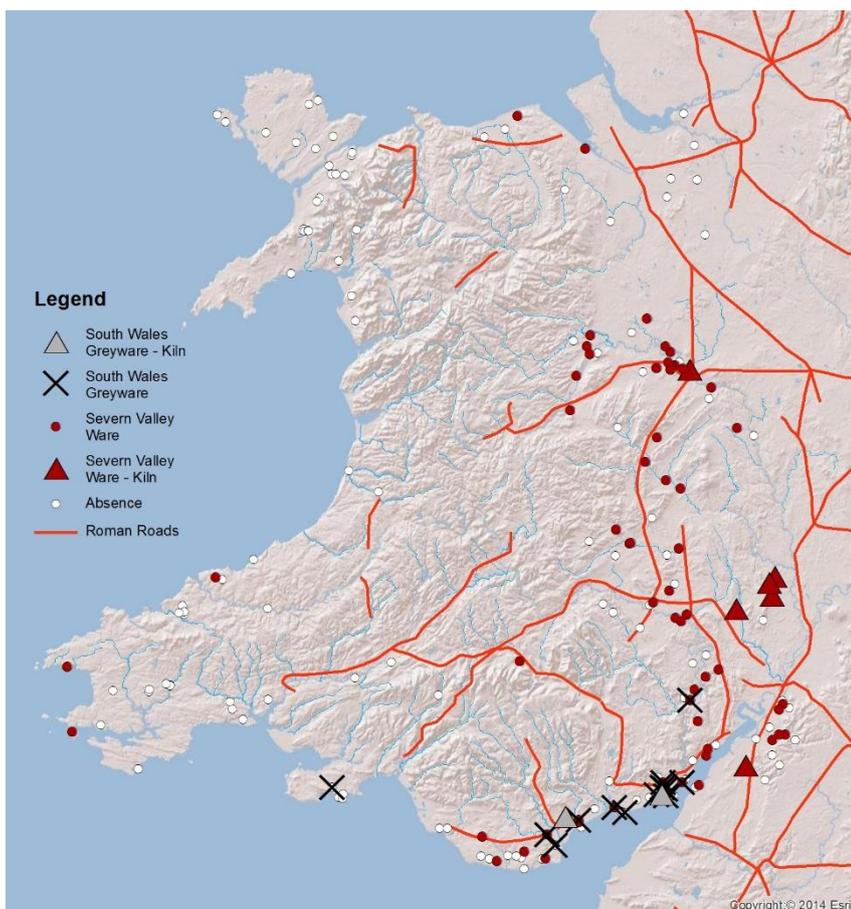
Figure 7.22. Distribution of Severn Valley Ware and South Wales Greyware

7.4 Consumption

The third section of this chapter will consider the evidence for consumption. This will analyse the distribution of coins within the study region in order to identify how far rural settlements became integrated into the wider coin-using Roman economy, and whether the use of coinage was socially or regionally restricted.

7.4.1 Coinage

Monetisation has been viewed as a marker of integration into the Roman empire, almost as a proxy for the process of Romanisation (Aarts 2005, 12). Recent approaches have attempted to bring numismatics towards a more material cultural approach, with a consideration of coins as cultural as well as economic objects (Aarts 2005; Kemmers and Myberg 2011; Howgego 2013).

Though certain areas of the study region had been coin-using before their incorporation into the Roman empire, these coinage systems may not have been operating in the same manner. Howgego tracks changes in Iron Age coinage and appropriation of Roman iconographies of power on coin designs as a process of 'merging of regimes of value' (Howgego 2013, 37), which later facilitated the integration of coin-using regions of Britain within the Roman coinage system. A possible example of the differences in these regimes of value and the multiple roles which coins could play in different social and economic contexts may be seen in the differential distribution of Iron Age gold coins between the Wye and the Severn. Here individual finds of high-value gold coins in possibly ritual deposits and an accompanying absence of silver coins suggests a difference in the construction of their inherent value and in their social and economic significance (Guest 2008, 42).

7.4.2 Distribution and Chronology

The RSRB provides a total of all coins and a breakdown by Reece period, including two further categories for coins which cannot be assigned a close date. Coins which cannot be assigned to a Reece period, and coins which derive from hoards are included in the overall total. However, hoards in particular make a significant contribution to the total number of coins in certain regions. The hoard at Jamesford (Clwyd-Powys) accounts for 85% of all coins in the Upland Wales and the Marches. When these are removed from the total there is a significant imbalance in the numbers of coins found in each region. When considered in this way the Central Belt comprises 87% of the total coin assemblage. This suggests much greater engagement with monetary systems.

Region	All coins	Without hoards/Coins not assigned to period
Central Belt	3881	3254
Central West	130	72
Upland Wales and the Marches	5698	417
Total	9709	3743

Table 7.26. Distribution of coins by region.

Coins appear on a greater number of sites in the Central Belt and as a greater overall percentage of the total number of sites (Table 7.26). This suggests greater access to coinage and a more widespread adoption of coinage within this region, perhaps due to the pre-Roman use of coins.

Region	Sites with coins	Total Number of Sites	%
Central Belt	26	65	40
Central West	11	38	29
Upland Wales and the Marches	16	80	20
Total	53	183	29

Table 7.27. Sites at which coins appear by region and proportion of the total number of sites

Outside these areas coins are relatively few and appear in small quantities. There are regions in which coins appear very rarely at rural settlements, though such sites clearly were engaged in trade and had access to markets in other commodities, as they are included in distributions of other forms of material considered in this chapter, such as pottery.

Coins are one of the only categories of artefact within the RSRB database for which chronology can be plotted with any detail. As stated elsewhere, the RSRB divides the coins into Reece periods, but in order to identify trends at the broadest some of the Reece periods have been amalgamated to bring the divisions in line with periods used elsewhere in this thesis (Table 7.28). Looking at the data in this way demonstrates that there was a significant increase in the number of coins present after the middle of the 2nd century, and that this continued into the 4th century (Fig. 7.23).

Reece Period	Date Range	Broad Period
1	27BC - AD41	EARLY
2	AD41 - 54	
3	AD54 - 69	
4	AD69 - 96	
5	AD96 - 117	
6	AD117 - 138	
7	AD138 - 161	
8	AD161 - 180	MIDDLE
9	AD180 - 193	
10	AD193 - 222	
11	AD222 - 238	
12	AD238 - 260	
13	AD260 - 275	
14	AD275 - 296	
15	AD296 - 317	
16	AD317 - 330	LATE
17	AD330 - 348	
18	AD348 - 364	
19	AD364 - 378	
20	AD378 - 388	
21	AD388 - 402	

Table 7.28. Numismatic Issue Periods aligned with broad periods used elsewhere within this thesis

Numismatic Issue periods can allow a more detailed breakdown of the trends within the distribution of coins during this period (Fig. 7.27). Unlike the broad period breakdown (Fig. 7.23), Figure 7.27 shows that there seem to have been significant fluctuations within the broad trend of increasing coin presence, with the largest numbers of coins deriving from Periods 14 (AD275-296) and 17 (AD330-348). Between these dates there seems to have been a significant drop in the number of coins present. This coincides with the rebellion of Carausius and Allectus and perhaps suggests a restriction in the number of coins which were circulating, or other forms of stress.
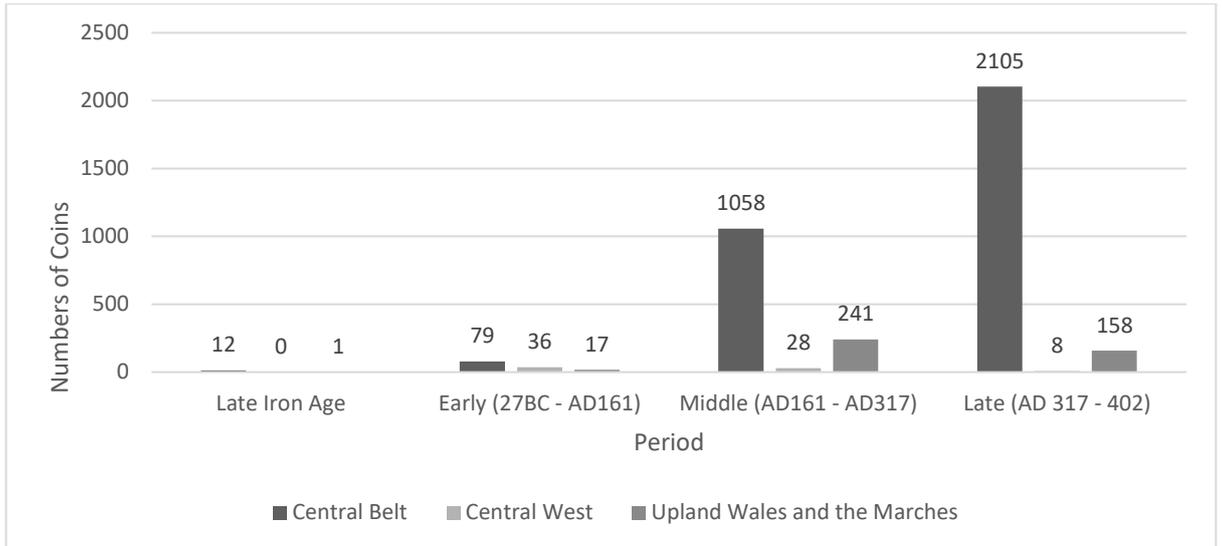
Figure 7.23. Number of coins by region and period
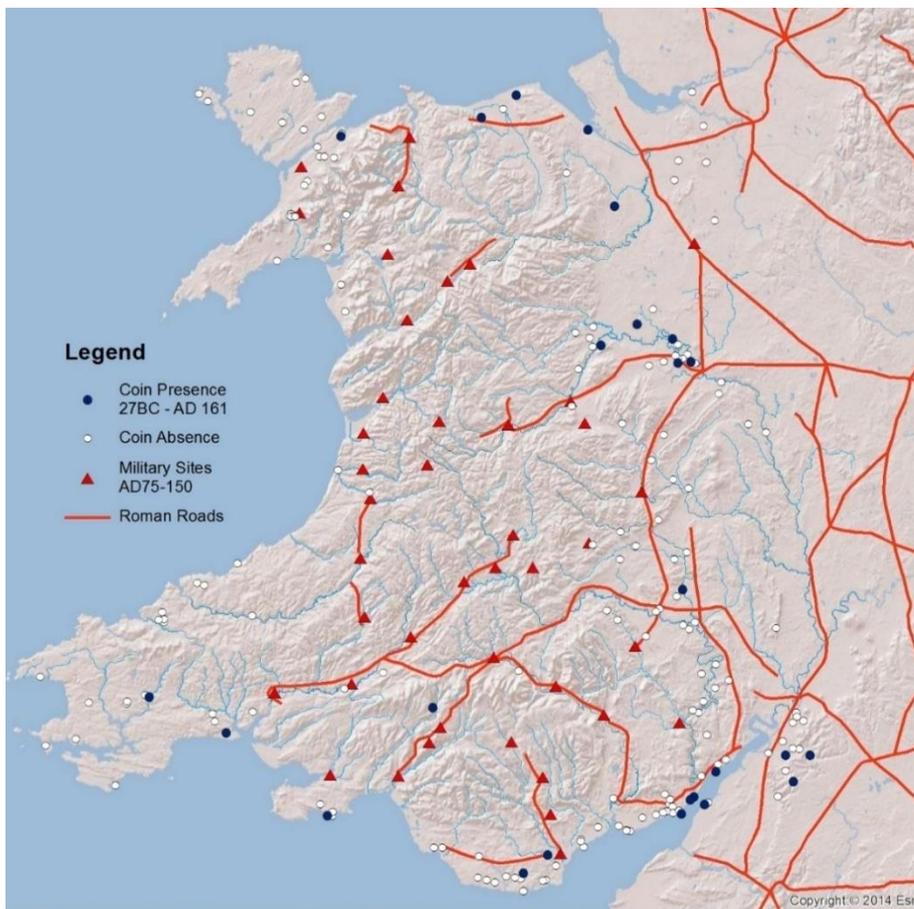
Figure 7.24. Distribution of coins 27BC to AD 161
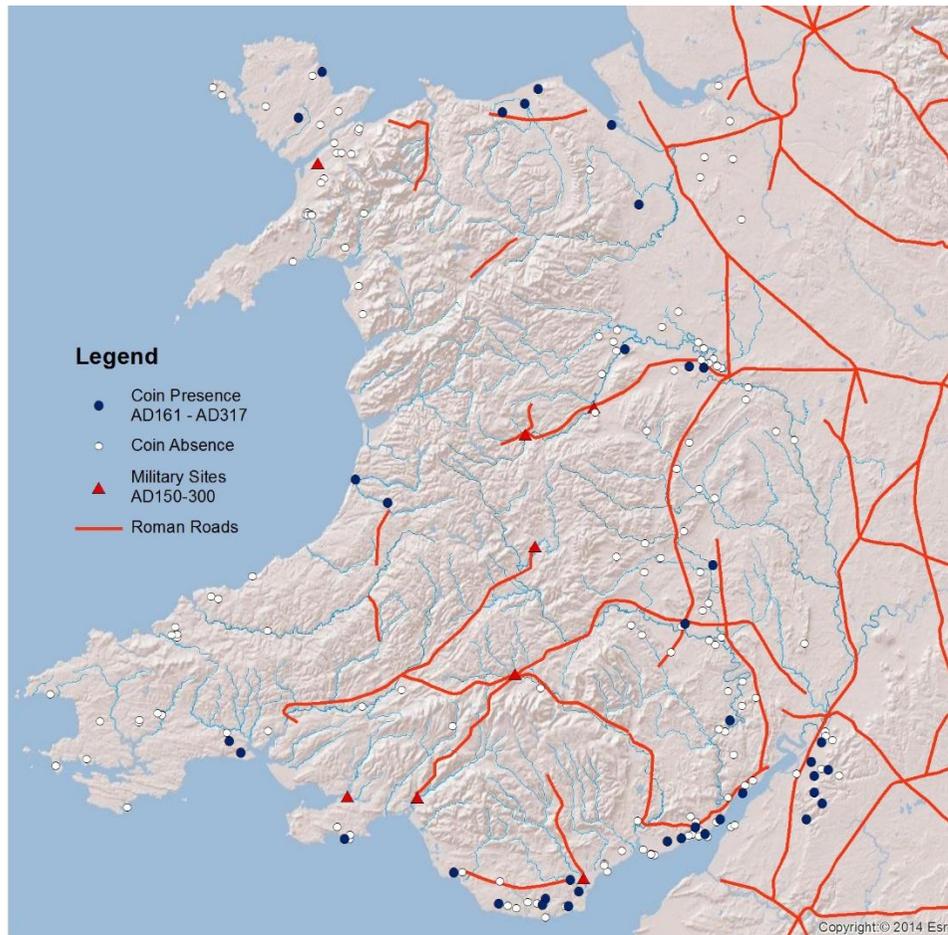
Figure 7.25. Distribution of coins AD 161-317
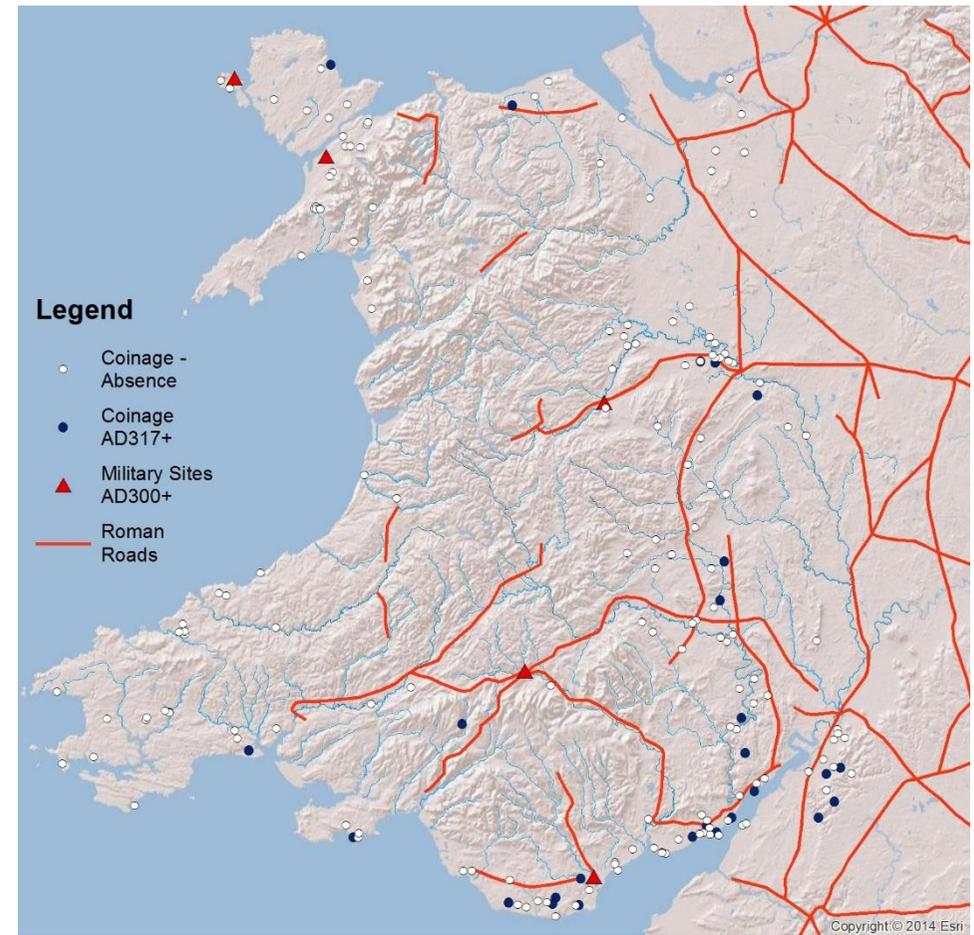
Figure 7.26. Distribution of coins AD317+
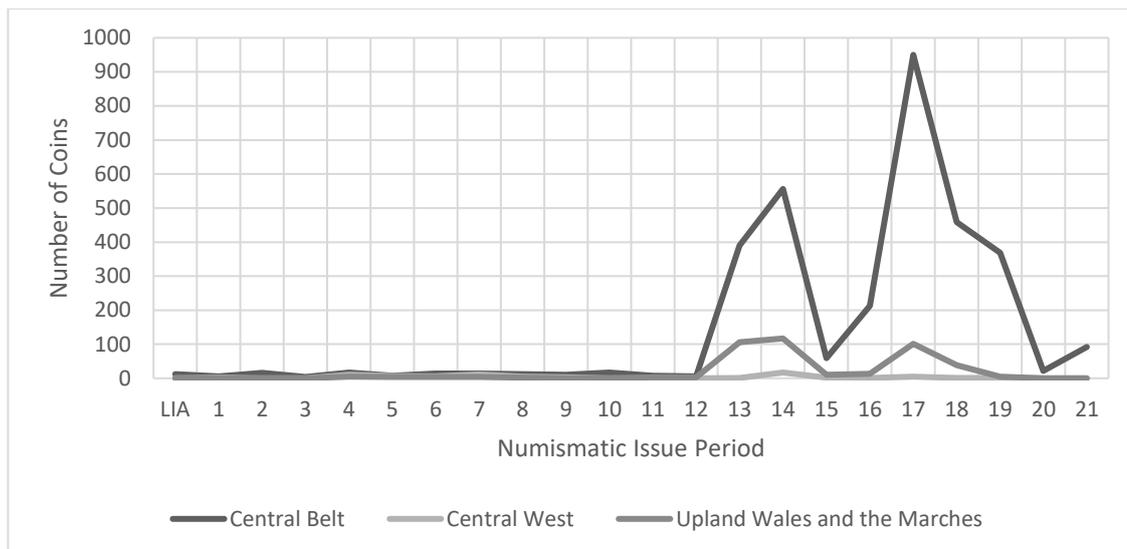
Figure 7.27. Coins by Numismatic Issue Period

However, despite the increase in the number of coins present, there was not a significant increase in the number of sites at which coins appear, nor did the distribution of coinage change significantly. Sites at which coins are present are still primarily located in the south-east, along the coasts, and along the line of the Marches, as explored elsewhere. In particular the Early and Late distributions closely resemble each other and suggest that these regions were the focus of coin use, and that coin-use expanded out from these areas during a the mid-2nd to 3rd centuries. This coincides with the intensification of other material categories considered within this chapter, including the distribution of pottery and of agricultural production.

The lack of Early coins may suggest that rural settlements did not become fully integrated into a coin-using economy until the 3rd century. This pattern holds when data from the Iron Age and Roman Coins in Wales project is similarly plotted (Fig. 7.28). This dataset includes only coins from the area of modern Wales, so large datasets such as Kingscote and Frocester are excluded.
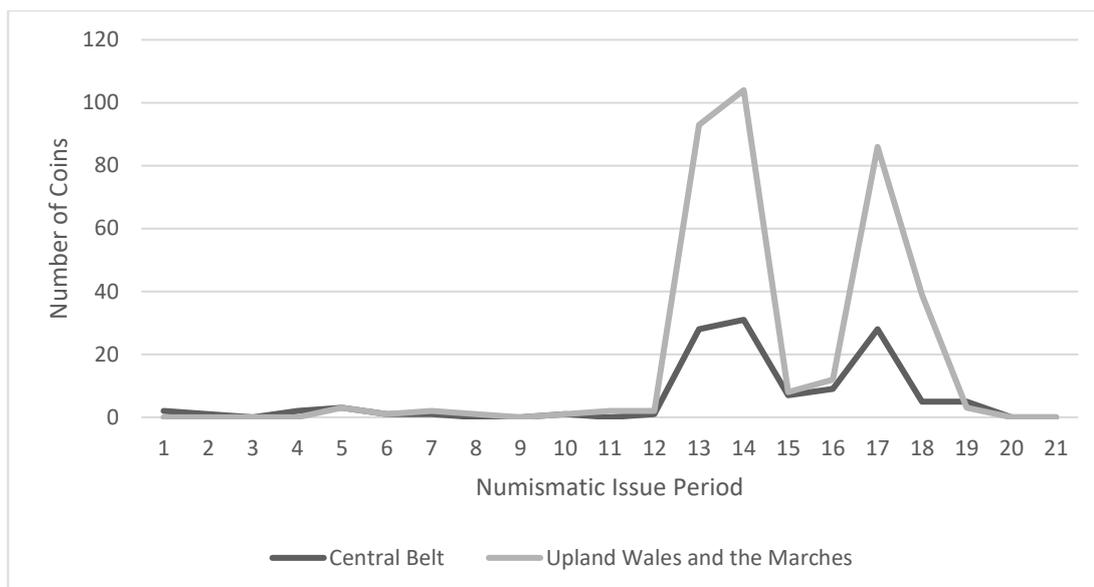
Figure 7.28. Chronology of coins from the IARCW dataset (after Guest and Wells 2008)

There are also some interesting differences in the distribution of coins from different site types. Figure 7.29 shows that the civilian adoption of coinage in the early Roman period was largely confined to vici and urban sites, and that rural settlement and hillforts only begin to approach the levels of coin use seen on these sites in the late 3rd century.
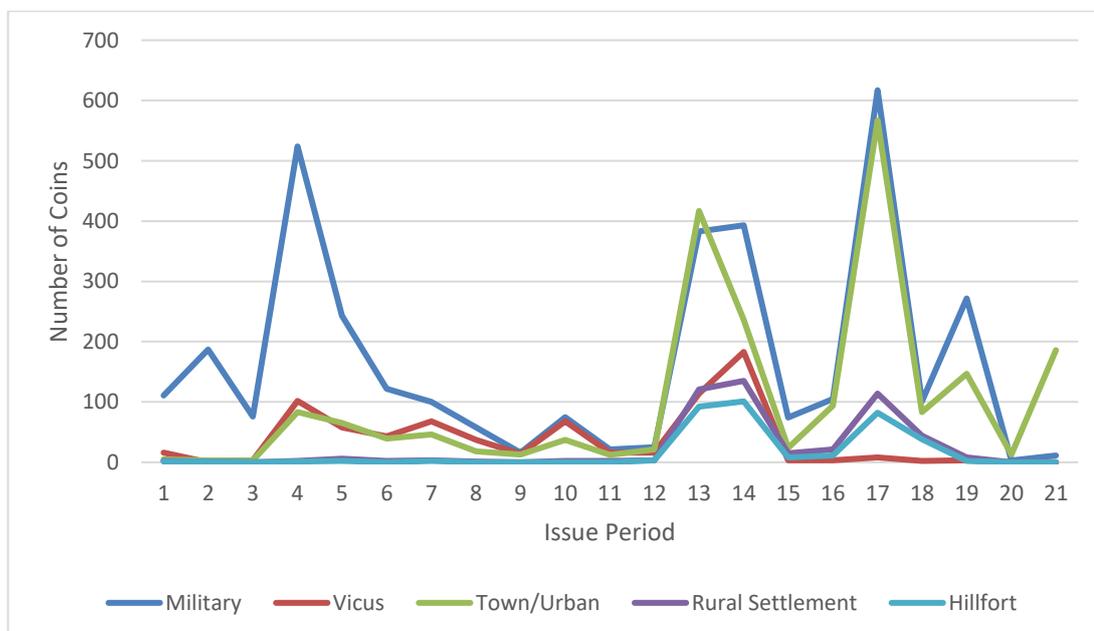
Figure 7.29. Chronology of coinage by site type (after Guest and Wells 2008)

In earlier periods coin circulation at civilian sites seems to have been dominated by vicus and town/urban settlements (Fig. 7.29). It is only in periods 13 and 14 that rural settlements and hillforts begin to come in line with vicus settlements; it is also interesting that this is the period in which urban coin use draws in line with that of the military.

There are also distinctions within the category of rural settlement (Fig. 7.30). Site assemblages are also generally comprised of smaller number of coins, and where the database indicates they appear in greater numbers this is often due to a later, villa phase, for example, at Frocester, where an Iron Age and early Romano-British farm developed into a villa complex during the late C3rd, a development which is mirrored in the greater number of coins from later periods: 17 coins are identified from periods from the Late Iron Age to AD260; the number rises to 171 from AD260 to the C5th (Price 2000). This highlights a problem with the aggregation of coin totals, which do not take into account the transition of sites from one category to another; however, the periodisation applied above counteracts this to some extent.

There is a significant difference between the size of coin assemblages in different categories of rural settlement. Farms produce lower numbers of coins in all periods, despite forming a majority of rural settlements. Villas produce more coins in all periods, and the largest site assemblages belong to villa sites, such as those at Frocester and Kinsgcote as discussed elsewhere. 59% of all villa sites produce coins in some period of occupation, while only 23% of farms produce coins. 28% of hillforts produce coins, but these are usually individual finds related to minor Romano-British reoccupation. The hillfort at Dinorben is unusual in having the third-largest coin assemblage of any rural site within the study region, relating to a period of Roman reoccupation from the mid-3rd century which included a significant quantity of Romano-British ceramics and high-status artefacts (Guilbert 2018).

While the coin assemblage at Dinorben is unusual in the context of hillfort settlement, it does reinforce the link between high-status settlement and coin presence. It further strengthens the argument that coin-use was particularly associated with sites which could serve 'central place' functions. Such sites, including villa sites, seem to have been more closely engaged in (or in some cases

perhaps sites of) monetary exchange. This supports a possible construction of the role within the regional economic system as intermediary nodes, as proposed by Derks and Roymans (2016) for villa settlements in otherwise peripheral regions.
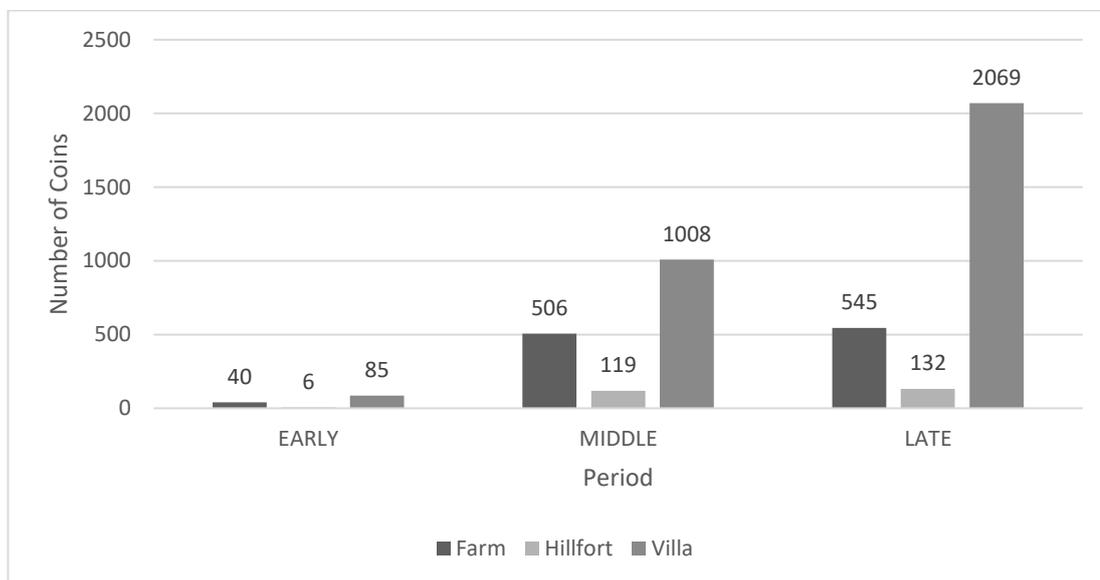
Figure 7.30. Chronology of coinage by site type (RSRB data)

The regional disparity in coin presence and the limited quantities in which coins appear at rural sites in some parts of the study region may suggest that coins were operating in different ways and that in certain subregions coinage may not have been the primary mode of exchange. Coins appear in very low numbers at sites in the south-west and primarily on coastal sites, particularly in the area of Carmarthen Bay (Figs 7.24, 7.25). The north-west also has a very low number of coins present at rural sites. While coins are present at only two sites in Anglesey, the absence of coins at rural settlements is particularly striking on sites in mainland Gwynedd. The presence of imported pottery at rural sites in the north-west (Figs 7.7-7.9) - and particularly of fabrics such as imported finewares and Black Burnished Ware which were distributed through military networks - indicates that trade was conducted between the rural and military communities. The military community presumably conducted trade within the context of a monetary exchange system. The evidence of pottery repair identified at certain rural sites in the north-west (Evans 2011) may tie in with the difficulty that coin-poor rural settlements experienced in accessing markets for certain commodities.

Perhaps even more unusual is the lack of coinage present at sites in the mid-Marches, in the vicinity of the large urban site of Wroxeter.

The absence of coins at rural settlements in certain areas of the study region also has implications for the Roman system of taxation (Guest 2008, 55). Despite the categorisation of Britain as a tax-importing province, where military expense consumed more taxes than could be produced locally (Hopkins 1980, 101), the imposition of a system of taxation was an innovation of the Roman administration within the study region and an obligation which rural settlements would have had to meet. Hopkins suggests that the burden of paying taxes forced rural settlements to intensify production in order to produce a surplus which could be sold to raise money with which to pay tax, but this implies that tax had to be paid in money (Hopkins 1980, 102). If taxes could be paid in kind in certain regions, other forms of exchange may have been conducted without the intermediary use of money as well.

The analysis proposed in this chapter only considers the distribution of coinage from rural sites. The recently-discovered roadside settlement at Tai Cochion (Anglesey) has produced an assemblage of c100 coins, by far the highest number within this region (Hopewell and Smith 2012, 13). The high number of coins at this site in comparison to other rural settlements on Anglesey and in Gwynedd in general (even sites with evidence of high-status occupation produce few or no coins, such as Bryn Eryr), may indicate that the settlement served the function of a market where agricultural surplus could be traded and thereby converted into money, which could in turn be used to pay tax, in a similar way to that suggested for vicus sites in upland regions (Guest 2008, 57). Tai Cochion, located on the Menai Strait, was ideally situated to facilitate trade and thereby mediate exchange between communities. This raises the possibility that the civilian and military economies of the region were conducted on a parallel basis.

7.4.3 Denomination

The extent to which rural sites were integrated into a coin-using economy may also be indicated by the denominations present at rural sites. For example, the presence of lower denominations may indicate that coins were used for smaller-scale, daily transactions. Crawford (1970) states that for a system of coinage to be functional as a means of exchange it had to be both stable and consist of a wide range of denominations, some of which had to be suitable for small scale

transactions (Crawford 1970, 41). The greater detail of the IACRW dataset allows for analysis of the denominations which were in widest circulation in the study region.

A small range of denominations are found on excavated rural settlements and hillforts (Table 7.29). Radiates form 52% of the total regional assemblage and nummi 40%. This suggests that low-value coins were preferred. These may have been used for daily transactions, but the fact that they do not appear until later in the period suggests that the use of coins in small transactions did not take hold until after the reforms of Diocletian.

Denomination	Early	Middle	Late
As	5	1	0
Denarius	6	3	0
Dupondius	3	2	0
Sestertius	4	0	0
Radiate	0	77	0
Nummus	0	8	55
Total	18	91	55

Table 7.29. Denomination by broad period

The majority of coins from rural and hillfort sites are also of low-value metal. 97% of all coins from excavated rural and hillfort sites are copper alloy, with very small amounts of billon and silver coins. Silver coins are identified at only a few sites in the south-east of the study region and primarily at villa sites, including Caldicot, Ely Villa, and Whitton. Silver coins are also found at Bulmore, a possible veteran settlement close to the legionary fortress at Caerleon.

The overall picture of coin-use within the study region is of a fragmented response to the introduction of coinage. The regional distribution patterns identified are more pronounced than those identified for the use of ceramics. Coin-use is strongly focused in the Central Belt, in the south-east of the study region. This was a region with a pre-Roman tradition of coin use and while the extent to which the two systems resembled each other is uncertain, the existence of a pre-Roman coinage system likely predisposed the population of this region to adopt Roman coinage. The higher number of coins in this sub-region and the denominations which were present suggest that these sites used coins transactionally rather than solely for the material storage of wealth. The higher

numbers of coins at villa settlements support the hypothesis that these sites either gained capital through the sale of surplus production, or perhaps served as economic intermediaries within the wider social and economic regional network.

Period	Metal	Number of Coins
Early	Copper Alloy	21
	Silver	6
Middle	Billon	4
	Copper Alloy	294
	Silver	3
Late	Copper Alloy	197

Table 7.30. Coin metal by broad period.

Outside the Central Belt coin presence is much lower, indicating that these regions did not become fully integrated into a coin-using economy. Coins do not appear at rural sites in any quantities in these regions until the mid-3rd century, and never in significant quantities.

7.5 Discussion

This chapter has examined the evidence for the rural economy of the study region during the Roman period and has produced evidence of highly regional responses. The evidence suggests that different regions and sites operated at different levels of interaction and integration with the wider economy.

Evidence suggests that the Central Belt underwent the greatest economic intensification during the Roman period. Sites in this region show evidence of increased production both through structural and artefactual material, and the presence of coinage in large quantities and from an earlier period suggests engagement with Roman networks. The fact that the majority of villa settlements are located in this region is a further indication of the general heightened economic activity within this region in comparison to other parts of the study region.

A consistent thread across all material categories considered within this chapter is the distinctiveness of villa sites within the regional settlement context. Such sites display the highest numbers of ceramics and coins and show evidence of agricultural production on a larger scale than non-villa sites, with the presence of

indicators of large-scale processing such as corndriers and millstones present at a greater proportion of villa sites. While archaeologists must be wary of projecting a modern capitalist framework onto the ancient world, it is possible that the intensification of production and the sale of surpluses allowed for the accumulation of capital which could be invested structurally (in the form of villa buildings or corndriers) or in the form of high-status goods such as imported finewares.

An unusual regional pattern may be seen in the different levels of ceramics and coinage at sites in the north-west. The presence of ceramics at a number of sites in this region shows engagement with the military-driven trade networks through which both Black Burnished Wares and continental imports such as samian were distributed, and while the absence of coinage in a region might in some cases indicate a rejection of Roman systems of value the adoption of distinctively Roman cultural material – in particular samian wares – suggests that the reaction of rural settlements cannot be characterised so simplistically. The presence of Roman material on rural sites does not suggest a bar on access to the material (though a level of scarcity may be indicated by repair patterns, as discussed above). The disparity may instead suggest that the rural and military economies were conducted on a somewhat parallel basis, and perhaps that interactions were mediated, perhaps through sites such as Tai Cochion (Anglesey).

8. Personal Identities and Socio-Cultural Practices

8.1 Introduction

This chapter will explore the material culture of the study region in order to understand the ways in which the personal and wider social identities of the inhabitants of rural settlements were constructed during the Roman period, how this may have changed over time, and whether these changes were driven by internal or external pressures.

The Roman conquest and its aftermath was a period of enormous change within the study region. Previous chapters have explored this change on a macro-scale through an exploration of settlement patterning and economic activity. However, within colonial contexts large-scale changes are often mediated at the micro-scale through much smaller and more intimate choices such as the presentation and care of the body (Hill 1996), or the preparation and consumption of food. Within Romano-British studies these questions have often been explored in artefact-rich regions such as south-east England; however, the study region of this thesis was subject to similar pressures and circumstances as other parts of Britain.

The first part of this chapter will explore the regional and social distribution of various categories of artefacts relating to the self. The term personal presentation has been preferred here as it allows for the incorporation not only of objects of personal adornment and ornamentation, but also artefact categories such as cosmetic implements, hairpins, and other 'technologies of the self' (Crummy and Eckardt 2003). These objects will be analysed in order to identify changes in the ways in which personal and social identities were constructed during the Roman period through dress and appearance.

The second part of this chapter will analyse the regional ceramic assemblage to explore food preparation and consumption throughout the region, and how this may offer insight into what was eaten and how this may have changed throughout the study period, and whether this was done in response to Roman cultural influence.

8.2 Personal Presentation

This section will focus particularly on small finds related to the body and to personal adornment as a means of exploring the construction and presentation of personal identity. The importance of objects in the creation of identity has been increasingly noted within Romano-British archaeology. This derives from the more nuanced understanding of identity which has emerged in recent scholarship. Identity is now considered to be fluid and multiple, the various aspects of a person's identity – regional grouping, gender, age, sex – may be expressed in different ways (Eckardt 2014, 6-7).

As discussed above and in previous chapters, material culture plays a central role in the study of identity, and such studies have often focused on objects of personal adornment or those related to the care of the body (Hill 1997; Eckardt 2005; Eckardt and Crummy 2008; Swift 2012). The construction of the body and its appearance through personal care, clothing, hair, and jewellery reflects ideas about the self and therefore about the broader society against which these practices are conducted (Hill 1997). Dress and appearance can be read as signifiers of who the person is and what their role is in society, but also of how they wished to be presented.

8.2.1 The Body

The body has been increasingly recognised as an important site for study within archaeology, and particularly that of the Romano-British period. Because of their function as ways of preparing the appearance, studies of the body have often focused on toilet implements (Hill 1997; Crummy and Eckardt 2003).

Toilet sets included nail cleaners, tweezers, and ear-scoops. While some of these objects (particularly nail-cleaners) had an Iron Age precedent their distribution was primarily in south-east Britain (Eckardt and Crummy 2003, 51)). Toilet implements become widespread in settlement contexts after the conquest and Eckardt and Crummy's study shows that, despite the perception of these objects as indicative of Roman-style grooming practices, they were in fact more prevalent on 'native' sites such as small towns and rural settlements, indicating that the

adoption of the practices which these implements indicate were not restricted to elite society (Eckardt and Crummy 2003, 59).

In the 2nd century toilet sets were sometimes worn together as chatelaine brooches, thus clearly incorporating an element of display into the practice of bodily care (Eckardt and Crummy 2003, 48). These brooches had a very limited distribution and none are present within the study region. In the majority of cases toilet implements are basic and appear well-used, and therefore seem to have been incorporated into daily practice; in this case it was the effect of the implements which was the intended display, rather than the objects.

Distribution

Toilet and cosmetic implements have a very limited distribution at rural sites within the study region and appear at only 21 sites (Fig. 8.1). Though the RSRB database does not distinguish between object types, examination of the site reports finds that nail cleaners and tweezers are the most common form of personal care items within the study region, as they are generally throughout Roman Britain. Nail cleaners are present at six sites, and tweezers at eight, though this may also be due to the different levels of preservation or recognition of particular instruments. Roman tweezers resemble their modern counterparts and may therefore be readily identified if the preservation allows. Some forms of nail cleaners also belong to distinct and readily identifiable 'types' (Crummy and Eckardt 2003, Illus 2 and 3). Other forms of toilet implements, as ear-scoops, if damaged may appear only as strips of metal of indeterminate purpose and are therefore less easily recognised. There is no significant pattern in the distribution of the different kinds of artefact throughout the region.

The distribution of toilet implements lies primarily within the Central Belt, where they appear at 14 sites, eight of which are villa sites. Villa sites make up 93% of the total assemblage of the study region (83% of objects derive from the villas at Kingscote and Frocester alone), suggesting a strong connection between high-status settlement and objects associated with personal care. Three further sites in the Central Belt at which toilet implements appear are hillforts (Castle Ditches, Llanmelin, Sudbrook Camp), though at these sites the toilet instruments come from Iron Age or early Roman contexts (continuous occupation past the 1st century

AD does not seem to have taken place at any of these sites) and may suggest a Iron Age local tradition of the care of the self. This leaves only three farm sites within the Central Belt at which toilet implements are present: Thornwell Farm (Glamorgan-Gwent), Sudbrook Road (Glamorgan-Gwent), and Rodborough Common (Gloucestershire).
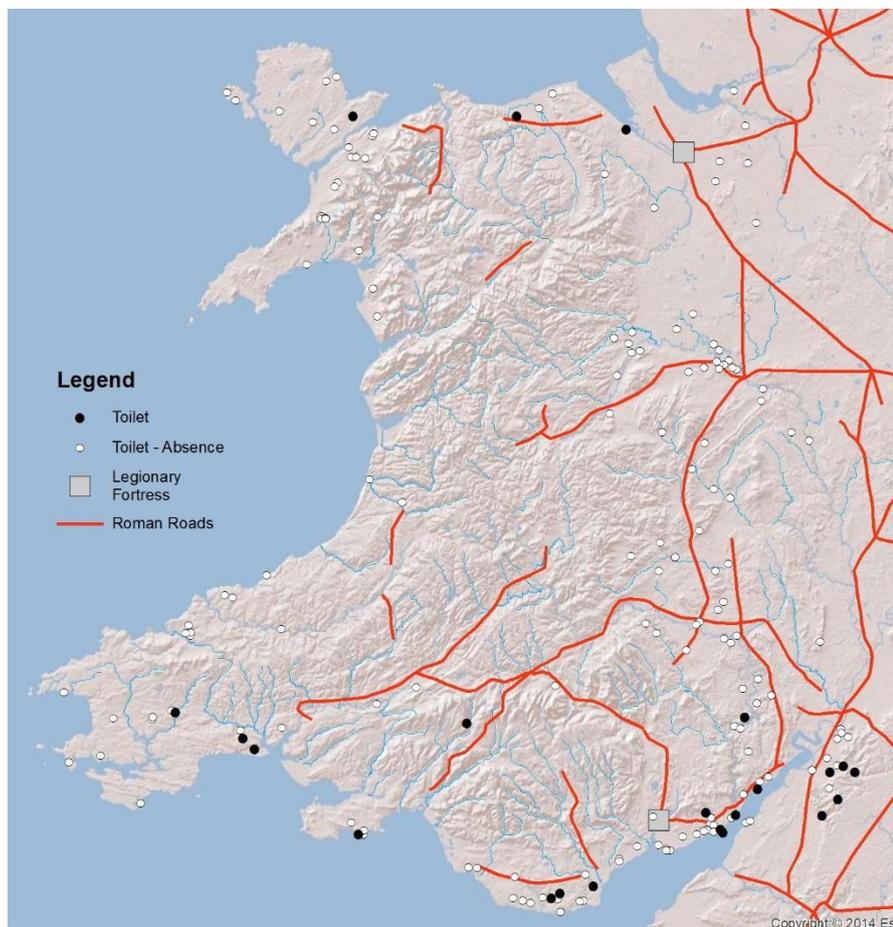
Figure 8.1. Distribution of sites with cosmetic/toilet items.

Toilet implements are present at seven sites in Upland Wales and the Marches. The majority of the implements come from the cave sites at Minchin Hole (5 objects) and Ogof-yr-Esgyrn (2 objects) and suggest that these objects were considered appropriate as grave goods or ritual depositions, perhaps because of their close association with the person. If these objects were closely associated with the person of the deceased, this has implications for the significance of these objects for the identity of the living.

Within settlement contexts toilet implements are also present at two hillfort sites within the Upland Wales and the Marches (Coygan Camp, Dinorben), though unlike

the Central Belt examples here the cosmetic objects belong to 3rd century Roman reoccupation and at both sites the composition of the Roman-period assemblages suggests high-status occupation (Wainwright 1967; Gardner and Savory 1964). Toilet instruments are also present at the villa site of Cwmbrwyn and the high-status roundhouse settlement at Bryn Eryr (Anglesey) (though here the object is fragmentary and has been only tentatively assigned this description [Longley et al 1998, 227]). Apart from Bryn Eryr, the enclosed settlement at Dan-y-Coed (Dyfed) is the only farm site in Upland Wales and the Marches where toilet implements are present.

Region	Number of Objects	Number of Sites
Central Belt	116	14
Central West	0	
Upland Wales and the Marches	12	7
Total	128	183

Table 8.1. Number of cosmetic/toilet objects by region

Summary

The dominance of high-status sites in the distribution of toilet and cosmetic implements strongly suggests an association between high status sites and certain ways of presenting the body. Only four of the 21 sites at which toilet implements appear are farm sites. In the Central Belt toilet implements are primarily associated with villa settlement and this indicates that these practices were associated with a broader suite of material culture introductions that together represented new social practices and ways of presenting the body, which in turn suggest new ways of presentation and ways of living. Elsewhere in the region, where villa settlement is scarce, toilet implements are concentrated on sites with a non-Roman architectural presentation, such as reoccupied hillforts (Coygan Camp, Dinorben) or roundhouse settlements (Bryn Eryr), but where the other material culture (such as ceramics) indicates high-status settlement. The question is whether the associations of these toilet and cosmetic implements were the same within both contexts or whether the use of toilet instruments within an 'Roman' context was different to that of one in which the inhabitants continued to present in a non-Roman manner.

If toilet and cosmetic implements are linked with elite status, then certain presentations of the body might have been used to visually communicate this status. Toilet and cosmetic implements may have been associated with a lifestyle which afforded enough leisure time for the care of the body, a form of 'conspicuous consumption of leisure' (Swift 2011, 208). The presentation of the body in a certain way – for example, clean nails and groomed facial and body hair (Aldhouse-Green 2004) - may therefore have been tied up in other ways of demonstrating elite status, perhaps distancing from the appearance of an agricultural worker. Other evidence of the regional approach towards bodily presentation may be seen in the comparative distribution of toilet implements and bath-houses (Fig. 8.2). Of the 21 sites at which toilet implements are present, six also have bathhouses and of these six, four are located in the Central Belt. All are villa sites. This suggests that in the Central Belt villa sites were strongly connected with new ways of bodily presentation, and that toilet implements and bathhouses may together have afforded new expressions of bodily care.
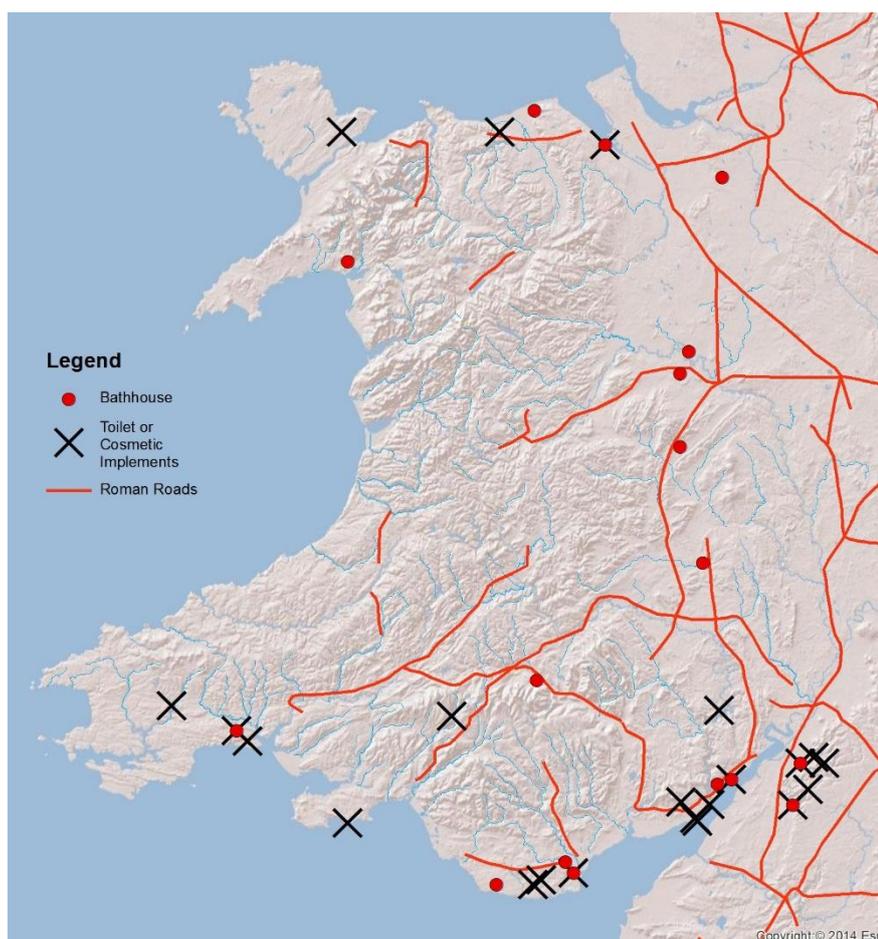
Figure 8.2. The distribution of bathhouses and toilet implements

The lack of toilet implements at farm sites – only four of the total of 21 sites at which toilet implements appear are farms - suggests that practices of bodily care did not become widespread at rural sites. This is in contrast with the picture elsewhere in Roman Britain, where toilet instruments are particularly associated with 'native' style settlement. The pattern observed in Wales and the Marches therefore suggests that different processes were at work, with different ways of presenting the body and bodily identity preferred.

8.2.2 Dress

While dress may be understood as a practical response to external conditions, it also acts as a series of signifiers regarding a person's social role and identity. Literary and legal sources attest to the symbolic importance of dress in Roman society: at the elite end of the spectrum sumptuary laws attest to the importance of maintaining control of the manner in which certain social classes could display their status through their clothing; the very existence of the laws implies the transgression which made them necessary (Olson 2008). While such a rigid codification of dress should not be expected for the study region, it does show the level of significance which could be attached to clothing in certain social contexts.

Additionally, comparisons with modern ethnographic studies of dress have also shown that dress is sensitive to colonial forces, such as the development of the sari and salwar kameez as pan-Indian garments. These developed within the context of British imperial rule as a result of the increasing mobility and expansion of the female sphere of activity outside the local; however, the persistence of non-Western dress demonstrates that changes can be driven by internal agency even when the catalyst is external, and the processes by which change in dress occur cannot therefore be defined simplistically (Rothe 2012). Romano-British dress may therefore be understood to be sensitive to the changing context of Roman occupation but need not be as simple as exchanging native dress for the toga.

Dress has been described as a 'nonverbal language' (Rothe 2012, 235), and while much of the vocabulary of that language – such as fabric, colour, texture - survives very rarely in the archaeological record, metal artefacts associated with

dress (such as brooches) can offer some insight into the styles of clothing which were adopted during the study period. Brooches are the most numerous category of artefact in the RSRB dataset after ceramics and coins. They are also one of the few categories for which chronological change can be roughly approximated, though brooches may be expected to have had long use-lives and their findspots will not necessarily reflect the date of brooch manufacture (Cool and Baxter 2016, 76)

While the primary function of brooches was to fasten clothing, the prominence of the positions in which they performed this role (at the shoulder or chest level) and the elaboration of many examples speaks to their secondary function as decorative objects (Ivleva 2017, 70). In this way they may be doubly useful as indicating both the practical details of dress and also how the wearer wished to be perceived.

While both male and female costume required the use of brooches to fasten items such as cloaks, early forms of female dress required the use of two or three brooches. They can therefore be understood in part as gendered artefacts. Pre-Roman dress in the north-west provinces resembled what is sometimes referred to as 'Menimane's costume', for the woman on whose funerary sculpture the dress is depicted (Cool 2014, 413). This dress comprises a long-sleeved inner tunic with a loose, probably belted tunic over it and required brooches to fasten the tunic and the cloak which was worn over the whole (Rothe 2012, 237). Brooches with headloops – such as trumpet and headstud brooches – could be linked together by a chain so that they could be worn in a pair and used to fasten the inner tunic or the outer cloak (*ibid*). These were sometimes very elaborate, such as the parcel-gilt trumpet brooch from Carmarthen (Boon and Savory 1975). This brooch, dated to the Roman period but incorporating Celtic decorative motifs, shows the way in which apparently contradictory identities could be expressed through objects of personal ornament (Johns 1996, 163), thus complicating the binary opposition between 'Roman' and 'native' styles (Jundi and Hill 1998,134)

Male dress took the form of the 'Gallic coat', a wide-fitting tunic with a hooded cape over the top (Wild 2003, 299). The evidence from funerary sculpture suggests that this garment was the standard form of male dress throughout the Roman period. From around the 2nd century AD a longer version of this garment

appears to have been adopted as standard female dress. As the Gallic cloak ensemble did not require brooches to fasten, this has been linked with the 'Fibula Abandonment Horizon' (Cool 2016, 415), the sharp decline in brooch use identified from the end of the 2nd century.

Distribution

A total of 534 brooches are known from the study region from 61 sites (Table 8.2). While initially this suggests an enormous imbalance between the regions, the villa sites at Frocester (Gloucestershire) and Kingscote (Gloucestershire) together comprise 58% of the total regional assemblage and while the imbalance between the Central Belt and the other regions is significant, it is less wide than these sites would indicate. However, there is a strong regional difference in both the numbers of brooches and the proportion of sites at which they appear. Brooches appear at 49% of rural sites in the Central Belt but just 16% of Central West sites, and 29% of Upland Wales and the Marches sites.

Region	Number of Brooches	Without Kingscote and Frocester
Central Belt	428	224
Central West	19	19
Upland Wales and the Marches	87	87
Total	534	330

Table 8.2. Numbers of brooches by region

The absence of brooches may be as important as the presence (Fig. 8.3). Brooches are almost entirely absent from sites in the south west and central west regions and appear at a limited number of sites in the north. In the north east they are present primarily at sites with military connections or otherwise ambiguous settlement biographies (such as Prestatyn).
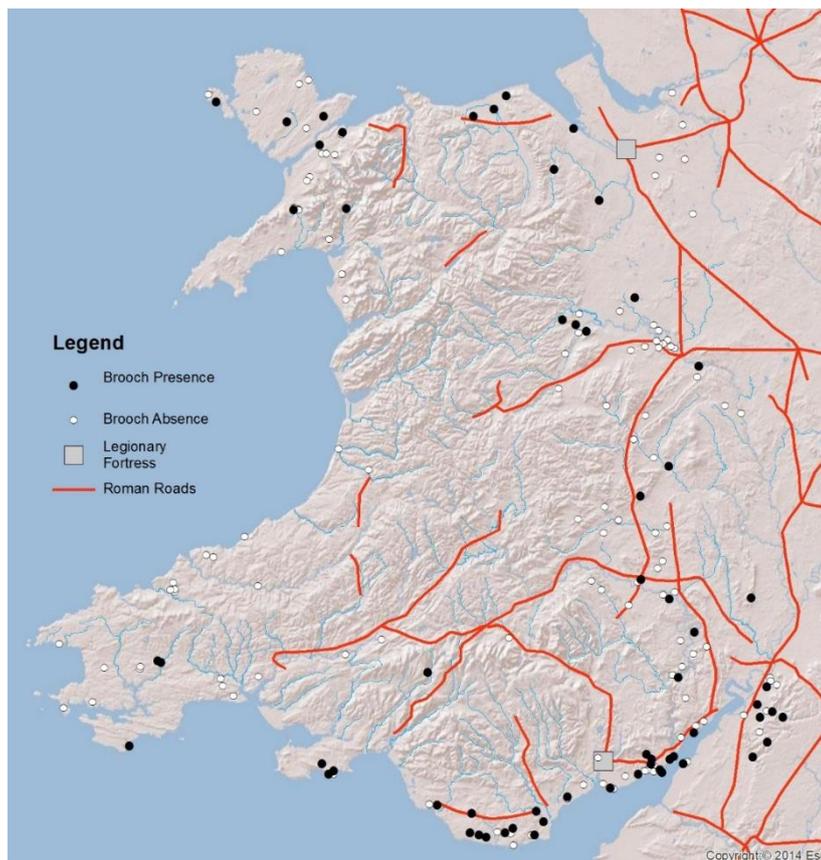
Figure 8.3. Distribution of all brooches at rural sites within the study region

Though mapping the distribution of all brooches within the study region may be expected to give a biased view, distribution of PAS finds confirms the patterns identified from the RSRB and suggest that the lack of brooches from the western areas of the study region signify a real disengagement with the use of brooches. Whether this is due to personal preference in dress or some form of restriction is uncertain. Though the town of Carmarthen would seem to represent a ready market for brooches and a means for their diffusion into the surrounding rural areas, brooches do not seem to have been widely adopted within the town itself (James 2003, 290). Carmarthen's 'idiosyncratic' presentation (Holbrook 2005, 517) may indicate the continuation of strong regional preferences in dress and lifestyle which meant that brooches were not widely adopted.
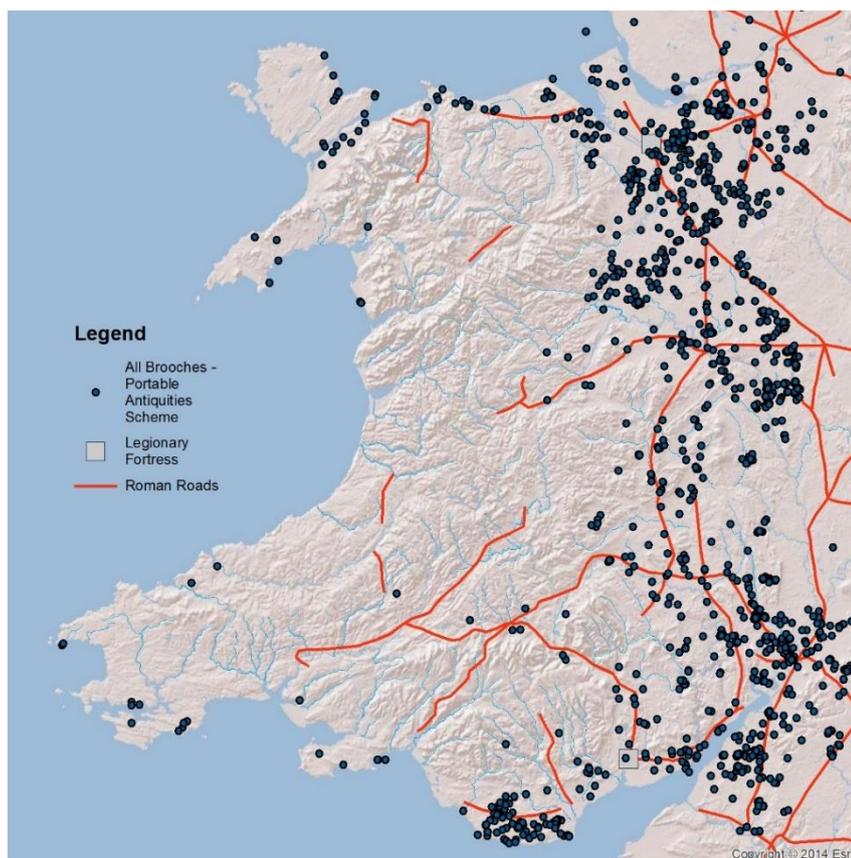
Figure 8.4. Distribution of brooches from the Portable Antiquities Scheme throughout the study region (data from Portable Antiquities Scheme)

There is also a difference in the numbers of brooches by site type which suggests that brooches were more common on villa sites than farms. The changes in dress practice which the increase in brooches suggests may therefore have been limited to sites at which a different way of living was emerging. Despite accounting for a small proportion of the total number of sites at which brooches are present, villas account for the majority of the brooches. This strongly suggests that brooch use was concentrated at these sites.

Site Type	Brooches	Number of Sites
Farm	273	137
Hillfort	27	18
Villa	364	29

Table 8.3. Numbers of brooches by site type and number of sites at which they appear

The proliferation of Late Iron Age brooch use was primarily focused in the south-east of Britain, and this is borne out by the distribution from the study region (Fig. 8.5). Within the dataset Late Iron Age brooch use at rural sites is limited to the south-east, with a single isolated example within the Marches at the Berth (Shropshire); a total of only 12 La Tene brooches are known from the RSRB database. Other early and Continental types, including Nauheim Derivatives and Thistle-Rosette brooches, have a similarly limited distribution towards the south and east, with a single example at Prestatyn (Gwynedd) (though this brooch is fragmentary [Blockley 1989, 99] and the unusual nature of occupation at this site has been noted elsewhere). This suggests a style of dress which did not require the use of brooches, and a continuation of Iron Age ways of dressing and presenting the self.
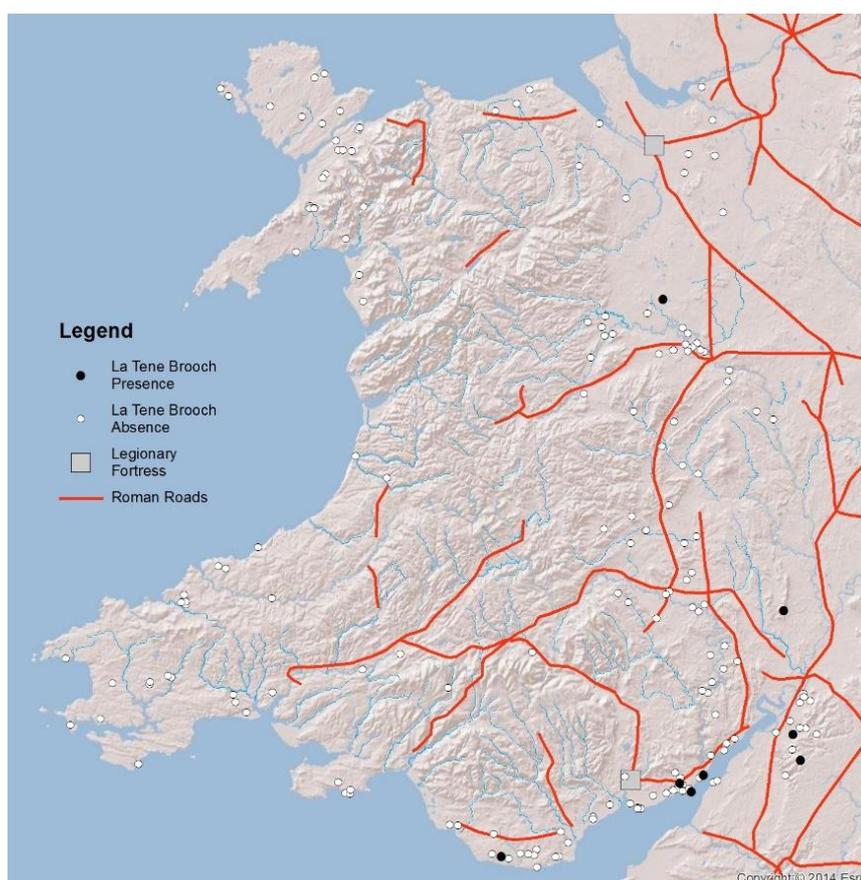
Figure 8.5. Distribution of La Tene brooches

The higher numbers of Colchester Derivative brooches and Polden Hill types suggests an increase of brooch use from in the 1st century. Colchester brooches themselves have a very restricted distribution and appear at only two sites in the

region. While this may be partly due to the chronology of their introduction, it has also been suggested that the metal composition of the different kinds of brooches may have played a role. Metallurgical analysis of brooches from Richborough and Nornour shows that different brooches had different compositions (Bayley and Butcher 1981). Imported brooches of the 1st century were primarily made in brass, as were just over half of the analysed initial Colchester types which were produced in Britain in the 1st century (Bayley and Butcher 1981, 32). However, the later Colchester Derivatives and Polden Hill brooch forms which were developed in the late 1st century were found to be of a new, high lead-content copper alloy (*ibid*).The change from brass to leaded bronze was likely due to a range of factors – such as the technological affordances of certain alloy types, or perhaps the stricter control of certain metals by Roman authorities – but would also have changed the colour of the brooch (Carr 2001, 118), and it is possible that the colour of the brooch held some significance. Gwilt notes that in south-east Wales the increase in brooch use may be termed a 'brass or bronze event horizon' (Gwilt 2007, 303), referring to the apparent preference for iron brooches over copper alloy in this region during the Iron Age.
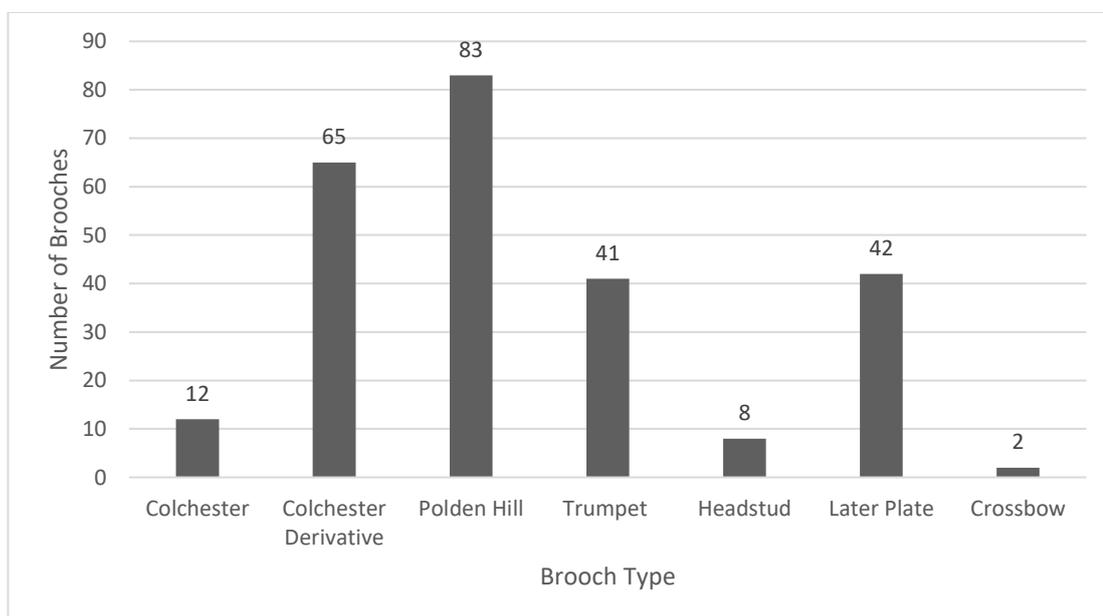
Figure 8.6. Numbers of brooches of the types discussed in this chapter

Site Type	Colchester	Colchester Derivative	Polden Hill
Farm	7	15	41
Hillfort	0	5	5
Villa	10	53	53

Table 8.4. Numbers of brooches by site type
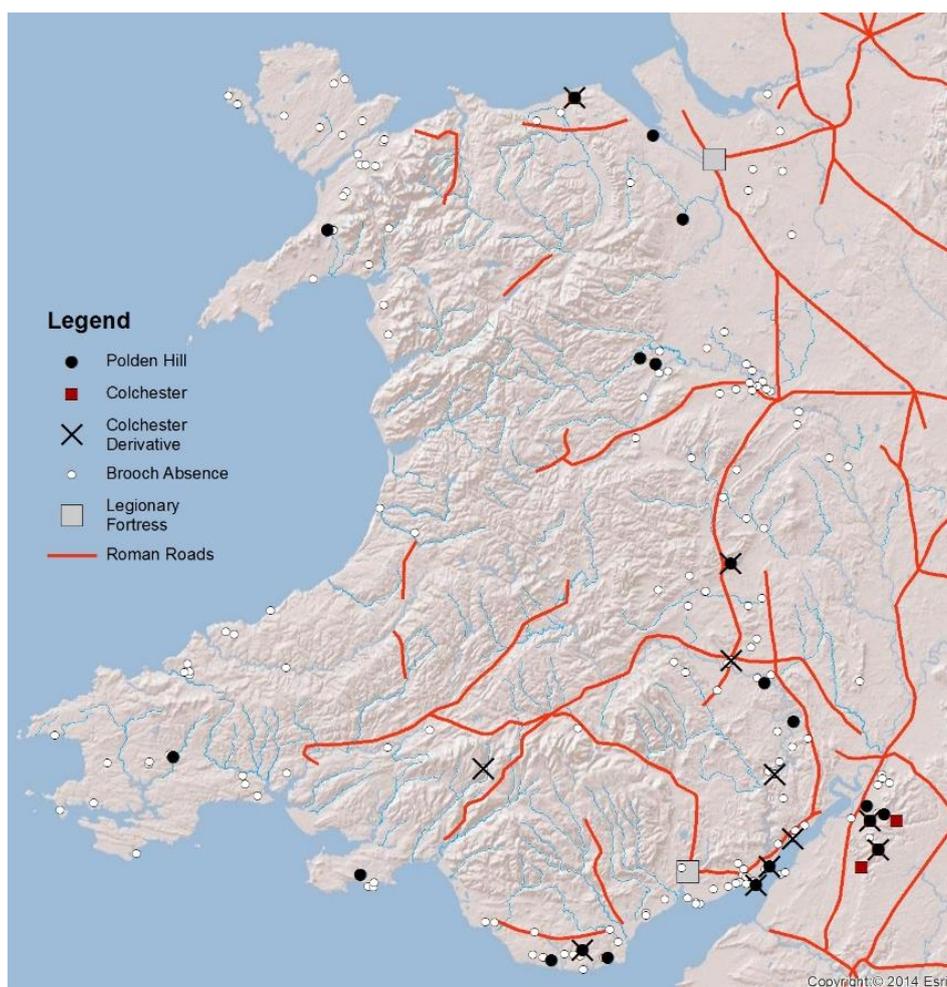
Figure 8.7. Distribution of Colchester, Colchester Derivative, and Polden Hill brooches

Other British types which emerged in the 1st century and continued into the late 2nd century are trumpet and headstud brooches. These brooch forms could be linked with a chain and were likely used in the kinds of dress associated with the early periods as described above, perhaps to fasten female dress at the neck. These forms appear in smaller numbers but have a similar distribution to the Polden Hill forms, suggesting that the areas in which these brooches appear were most receptive to changes in dress behaviour and presentation (Fig. 8.7). A

particular cluster of trumpet brooches at Prestatyn (Clwyd-Powys) is explained by the presence of moulds for the production of trumpet brooches present within this site assemblage (Blockley 1989, 223).

Headstud brooches are also found on two rural sites in the north-west, at Bush Farm (Gwynedd) and Bryn Eryr (Gwynedd). The material culture of Bryn Eryr in particular has been interpreted as that of as a high-status site, and the presence of brooches may represent the adoption of a particular form of dress which was linked to status display, perhaps in an attempt to visually display difference from the neighbouring population.

Site Type	Trumpet Derived	Headstud
Farm	19	7
Hillfort	1	0
Villa	29	4

Table 8.5. Trumpet and Headstud brooches by site type

The 'Fibula Abandonment Horizon', a phenomenon which describes the decline in brooch presence in the archaeological record after the proliferation of the 2nd century (Cool and Baxter 2016, 98) seems to hold within the study region. Later brooches, such as Knee, Crossbow, or Later Plate brooches appear in far smaller numbers, which suggests another shift in dress away from styles requiring brooches (Fig. 8.7).
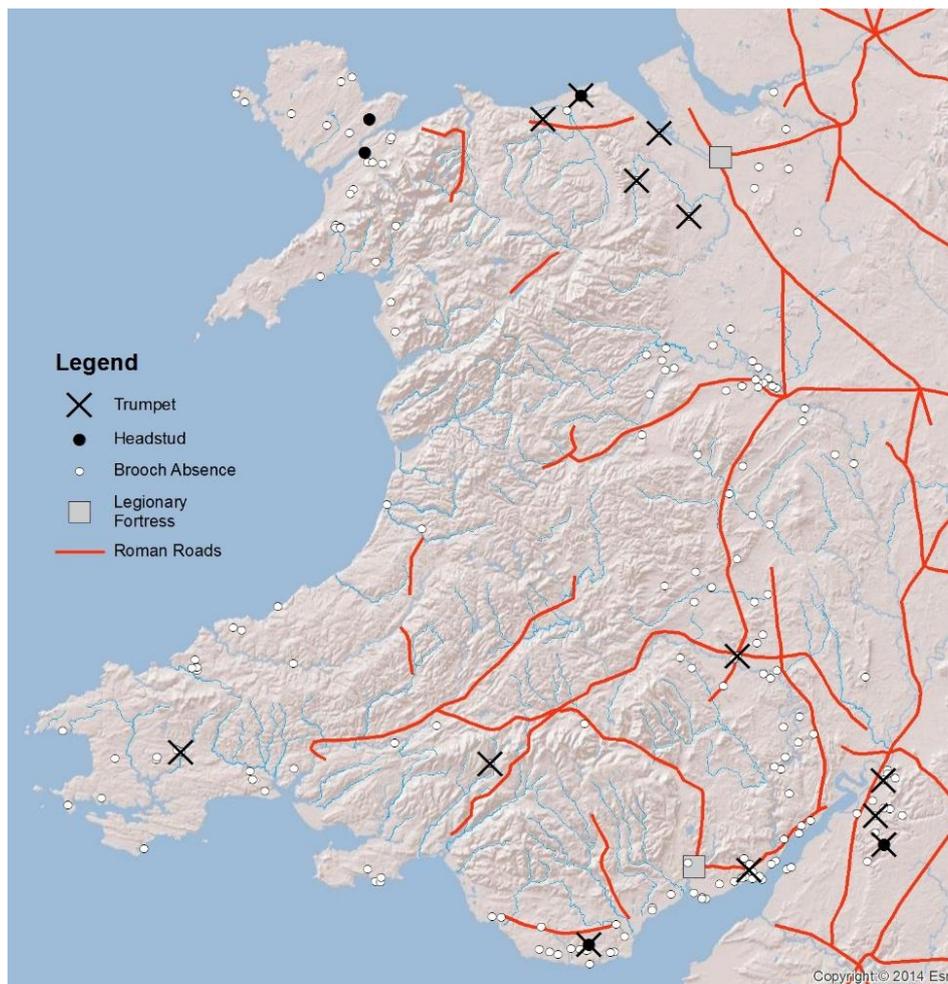
Figure 8.8. Distribution of trumpet and headstud brooches

Crossbow and knee brooches are primarily associated with male dress behaviour, and also had strong associations with the military. This is particularly the case with crossbow brooches, which may initially have served as indicators of rank within the military hierarchy (Swift 2011, 212). The extent to which they are found in civilian contexts suggests that they became associated with a late Roman identity in which the markers of 'being Roman' were taken from a military, rather than civil, cultural context. However, the distribution of crossbow brooches across the north-west provinces (Fig 8.9) shows that the type appeared in only very limited numbers in Wales and the Marches and at sites with military or urban characteristics. Crossbow brooches appear at only two rural sites within the study region, and it may be significant that these are also the only two sites at which late Roman Hawkes-Dunning strap-ends also appear in the assemblage (Kingscote (Gloucestershire), Wortley (Gloucestershire)). These items are also often closely associated with late Roman military identities. Both these sites are villas, and the presence of these brooches may indicate a continuing identification with Roman

forms of presentation. Knee brooches have a similarly limited distribution and are present in the assemblages of only two sites, Kingscote and Whitton (Glamorgan-Gwent) – again, both villa sites, continuing the elite connection.
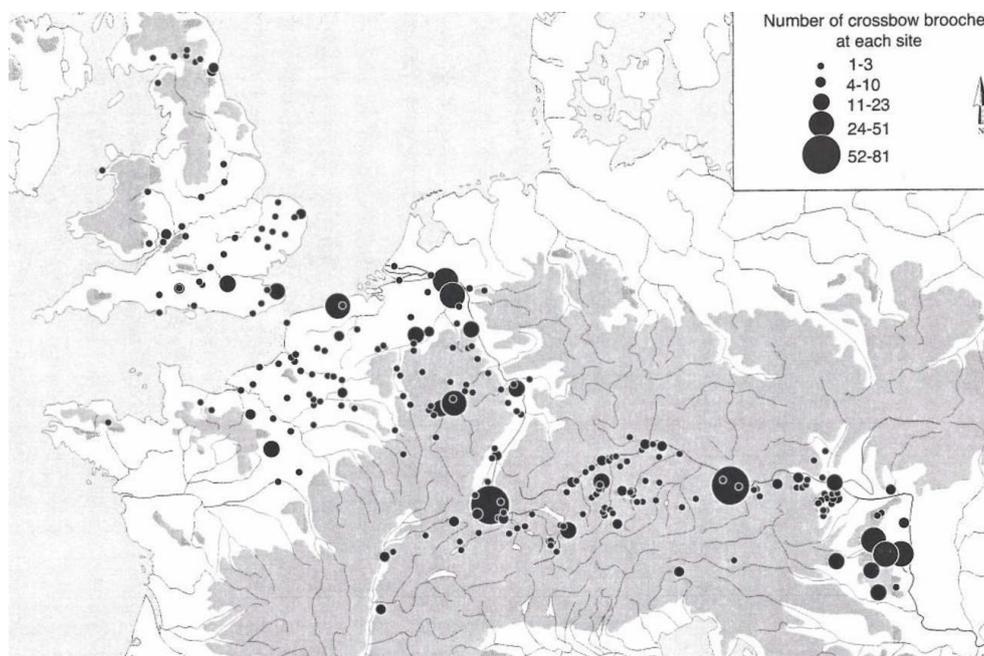
Figure 8.9. Distribution of crossbow brooches (Swift 2000, 28 Figure 13)

The absence of crossbow and knee brooches from rural assemblages may suggest that the military and civilian communities were dressing and constructing their identities in different ways. Might this suggest a disconnect between the two communities, despite the military's longstanding presence in certain parts of the region? Crossbow brooches also do not appear to have radiated out into the countryside from their military or contexts, though crossbow brooches and other late Roman military equipment is known from the urban sites at Caerwent and Wroxeter. Though access to this material may have been socially or economically restricted, a further possibility is that the rural population either did not seek to identify themselves in the same way. Later Plate brooches had a wider distribution, primarily at villa sites, so certain forms of dress which required brooches did persist.

Site Type	Crossbow	Knee	Later Plate
Farm	0	2	14
Hillfort	0	0	1

Villa	2	3	33

Table 8.6. Number of crossbow, knee, and later plate brooches by site type
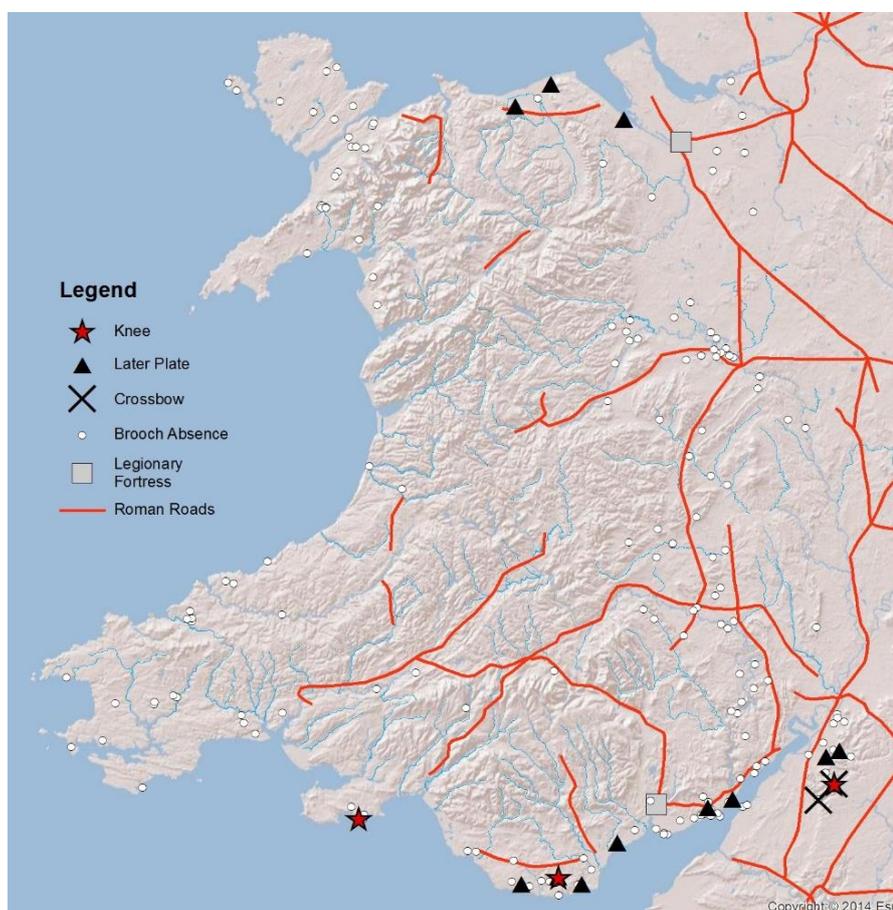
Figure 8.10. Distribution of Knee, Crossbow, and Later Plate brooches

The analysis of chronological change is complicated by brooches which have a long-use life, such as penannular brooches. These span the full range of the study period from the Iron Age to the post-Roman. However, the distribution of these brooches and others where the typology is only broadly assigned rather confirms the distribution bias of those types which can be more finely identified. While the data does show that brooches were not entirely absent from the north and south-west, their distribution suggests that brooch use was concentrated in the south-east and at sites with a broadly coastal distribution.

Site Type	Penannular	Unclass Bow	Unclass Plate
Farm	40	15	1
Hillfort	4	3	0

| Villa | 41 | 17 | 1 |

Table 8.7. Numbers of penannular, unclassified bow, and unclassified plate brooches by site type
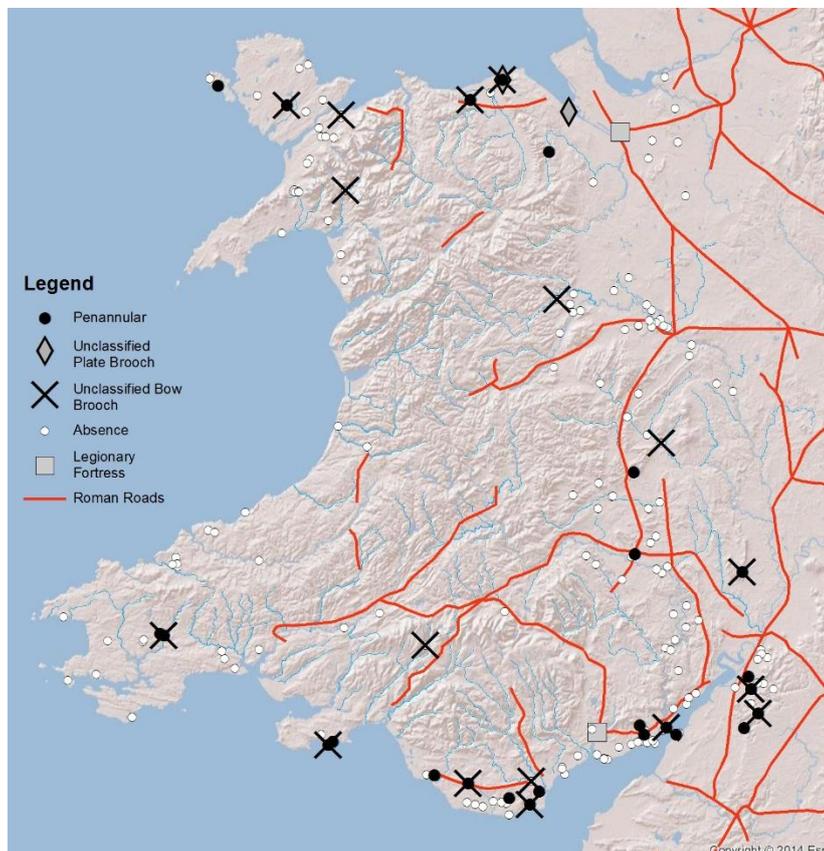
Figure 8.11. Distribution of penannular and unclassified bow and plate brooches

Summary

The distribution of the various types of brooches analysed above suggest shifting patterns of usage which indicate changes in dress style. While the use of imported brooches is low, the increased distribution of Romano-British brooches such as the Colchester Derivatives and the Polden Hill form indicates the adoption of a form of dress in which brooches were used from about the mid-2nd century; these objects may also have had particular associations due to their colour, metal content, or networks of distribution, and though they should not be thought of simplistically as badges of identity they may have been used to convey messages surrounding the wearer's identity and social status. The association of brooches with villa settlements may indicate that certain styles of dress or display were

socially restricted. Conversely, the lack of certain brooch styles such as the later Roman Crossbow and Dragonesque brooches suggest a lack of engagement with certain forms of presentation. The military associations of the Crossbow form seem to have been popular within an urban Romano-British context and may indicate a desire to maintain a Roman identity which had become inextricably associated with the increasing 'Germanisation' of the army. The rural population, meanwhile, does not seem to have engaged with this dress behaviour, though whether this is due to some form of social restriction on the purchase and wearing of the crossbow brooch or due to a desire to present a different form of identity is unclear.

Though the overall numbers of brooches in the region are low there is evidence that brooches were significant objects within the study region. The number of brooches in deposits from cave contexts are well above the usual number for rural sites (e.g. Ogof yr Esgyrn: 7; Minchin Hole Cave, Gower: 11) and likely represent ritual or funerary depositions. A comparison for the ritual deposition of brooches may be found at Nor'nour in the Scilly Isles (Dudley 1967). Brooches also occurred in inhumation burials more commonly at rural sites than urban or military burials, suggesting that brooches were significant objects for the rural population (Pollock 2006). A brooch also forms part of a possible foundation deposit in a posthole of the 1st century Roundhouse D2 at Whitton (Pudney 2011). The comparative scarcity of brooches may have increased their symbolic importance.

8.2.3 Hair

Hair also formed an important part of the appearance, particularly for women, and Roman elite hairstyles were often elaborate as exemplified by Roman imperial portraiture. Traditionally it was thought that these styles were achieved through the use of hairpieces, but recent work has shown that even the most elaborate could be accomplished with a woman's own hair using advanced styling techniques such as hair sewing (Stephens 2008,121). This was labour intensive and usually required a second person to achieve; the adoption of such styles could therefore indicate not only Roman styles of presentation but a display of the wealth required to employ (or more likely own) the help required to achieve them (Stephens 2008, 131). Hairpins are used as the principal evidence of the adoption

of Roman hair styles. However, hairpins are present at only 23 sites, just 12% of the regional total.

Region	Hairpins	Sites
Central Belt	510	13
Central West	13	2
Upland Wales and the Marches	30	8
Total	553	23

Table 8.8. Regional distribution of hairpins and number of sites at which they appear

While the regional assemblage of hairpins is unequally distributed and, at a glance, might indicate far greater adoption of the use of hairpins within the Central Belt (Table 8.8), the imbalance is partly caused by the large number of objects from both Frocester (141) and Kingscote (306). Removing these large datasets reduces the Central Belt total to just 63 objects. Furthermore hairpins are present in very small numbers at most sites. In the Central Belt only four sites have more than three hairpins present (the two named above, and Whitton (Glamorgan-Gwent): 25, Wortley (Gloucestershire): 22). These are all villas and may indicate a link between villa settlement and the presence of larger numbers of hairpins. In the Central West hairpins are present at only two sites, and the villa at Magna Castra represents 11 of the 13 known objects. In Upland Wales and the Marches Prestatyn represents just over a third of the total number of hairpins (11).

At all other sites hairpins appear in very low numbers: 60% of sites with hairpins have fewer than five. This does not suggest the adoption of the kinds of elaborate hairstyling known from Roman portraiture, but some other way of dressing the hair which was more suited to the rural lifestyle. Higher numbers of hairpins occur at villa sites

8.2.4 Personal Ornament

The RSRB counts two further categories of items of personal ornament: bracelets and finger rings. These share similar distributions, with some evidence of regional difference. In the north-west, for example, bracelets seem to have been more widely adopted than rings.

Distribution

Items of personal ornament appear in greater numbers in the Central Belt, though again the distortion of the large assemblages at Frocester and Kingscote must be taken into account. In the case of Frocester the large assemblage appears to relate to the production of bracelets at the site.

Region	Finger Rings	Sites	Bracelets	Sites
Central Belt	106	13	294	16
Central West	2	2	14	3
Upland Wales and the Marches	24	11	38	14
Total	132	26	346	33

Table 8.9. Regional distribution of finger rings and bracelets by region and number of sites

Distribution of these items is primarily coastal, though for inland sites the road network appears significant. There are large areas of the study region in which very few items of personal ornament are present (Fig 8.12). While this may partially relate to the circumstances of excavation, the lack of this form of material culture does not seem to be mirrored in the distribution of other forms, such as pottery (see section 7.3) or even brooches (Fig 8.3). This seems unusual and may indicate a regional preference in personal presentation in which these objects were not deemed necessary or desirable.
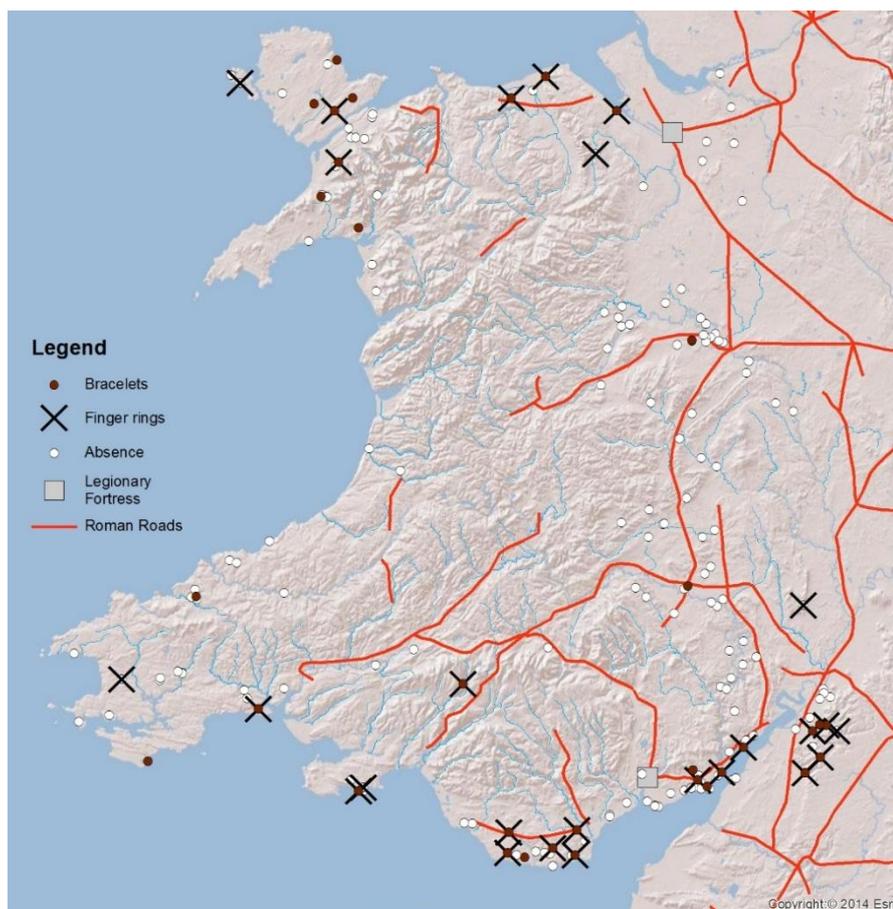
Figure 8.12. Distribution of bracelets and finger rings

Finger rings were relatively unknown in the pre-Roman Iron Age but became widespread in the Roman period (Johns 1996, 41), and this seems to have been the case in the study region, though the numbers of finger rings as a whole are lower than of bracelets. The presence of both bracelets and finger rings is strongly associated with high-status settlement (Table 8.10). The numbers of objects of both types are higher at villa sites despite the issues associated with sites of multiple phases. Despite this the map shows that the objects had a broad distribution throughout the study period, though finger-rings are less strongly distributed in the north-west. It may be that the novelty of finger rings meant that they were not as readily accepted into the repertoire of personal ornament, while jewellery worn on the arm had a longer pedigree and was therefore viewed as a continuation of a previous tradition and more readily incorporated into Romano-British presentation (Johns 1996, 108).

Again, the total numbers of objects are skewed by Kingscote and Frocester. The potential manufacturing site at Frocester causes particular distortion.

Site Type	Bracelets	Finger Rings
Farm	186	60
Hillfort	13	5
Villa	286	95

Table 8.10. Number of objects by site type

Different Materials

Though copper alloys form the majority of the objects under the category of personal ornament, other materials are also represented and show some interesting patterns of distribution. Precious metals such as gold and silver are very rare; a single gold finger/earring is present at the villa site of Wortley (Gloucestershire), and a gold hairpin at Kingscote (Gloucestershire). Silver finger rings are also present at Wortley and Llantwit Major (Glamorgan-Gwent). Precious metals therefore appear to have been rare and restricted to villa sites, though it should be noted that 12 gold studs and a gold-plated bronze bar were among the assemblage at the Late Roman site of Dinas Emrys. Precious metals are also more likely to have been retained or recycled and are therefore likely underrepresented in the archaeological record.

Materials such as jet, shale, and glass are also represented. Jet, shale, and glass objects are counted separately within the RSRB dataset (Table 8.11) and while not all of the objects within these categories are related to personal ornament, and some are too fragmentary to be sure of their category, the objects which can be identified as items of personal ornament can be identified from the site reports.

Region	Glass	Shale	Jet
Central Belt	197	68	14
Central West	19	13	0
Upland Wales and the Marches	347	27	5
Total	563	108	19

Table 8.11. Numbers of objects of glass, shale, and jet

A category of artefact within the broader category of personal ornament which show some interesting patterns of distribution are bracelets and armlets, particularly in the materials outlined above (Fig. 8.13).

Material	Bracelet	Armlet
Shale	70	6
Jet	5	0
Glass	2	2

Table 8.12. Numbers of bracelets and armlets of shale, jet, and glass

Glass

In the first and second centuries glass bracelets emerged as a popular artefact type. This was a distinctly Romano-British artefact type which is not found on the Continent (Croom 2010, 290). However, their popularity does not seem to extend to Wales and the Marches (Stevenson 1976, 50). While beads appear on a large number of sites and are widely distributed throughout the study region, other glass bracelets appear at only two sites within the study region: Dinorben (Clwyd-Powys) and Prestatyn (Clwyd-Powys). Glass armlets also appear at just two sites: Bryn Eryr (Gwynedd) and Cefn Graeanog (Gwynedd).

Glass is a recyclable material, and this may account for the lack of glass objects in the archaeological record. However, it is also possible that the limited distribution of glass bracelets represents a genuine preference for other materials, particularly as there is possible evidence of glass bracelet manufacture at the hillfort site of Bryn y Castell (Gwynedd), an iron-working settlement where 25 glass bracelets were found. The limited presence of these objects on rural sites may indicate that the glass bracelets were being produced for a military market, whose tastes and manner of presentation differed from the neighbouring rural population (Ivleva 2018).

Jet and shale

Jet and shale objects of personal ornament are also particularly Romano-British and appear only rarely on the Continent. Though formed from different geological processes, after polishing the materials appear indistinguishable and Roman authors do not appear to have understood the material difference between jet, shale, or other black materials such as cannel coal (Allason-Jones 2001, 237-8).

However, while the experiential knowledge of the craftworker leaves no archaeological trace there must have been an appreciation of the properties between materials which affected the way that the material could be worked, and there is some evidence of distinction in the kinds of objects which were produced in each, such as a bias towards making pins from jet and armlets, trays, and tables from shale (Allason-Jones 2016, 127). Though it is not possible to determine from the RSRB the date of these objects, across Roman Britain there was an increasing demand for jet jewellery in the later period which may have extended to all forms of black jewellery. Jet objects of personal ornament are limited.
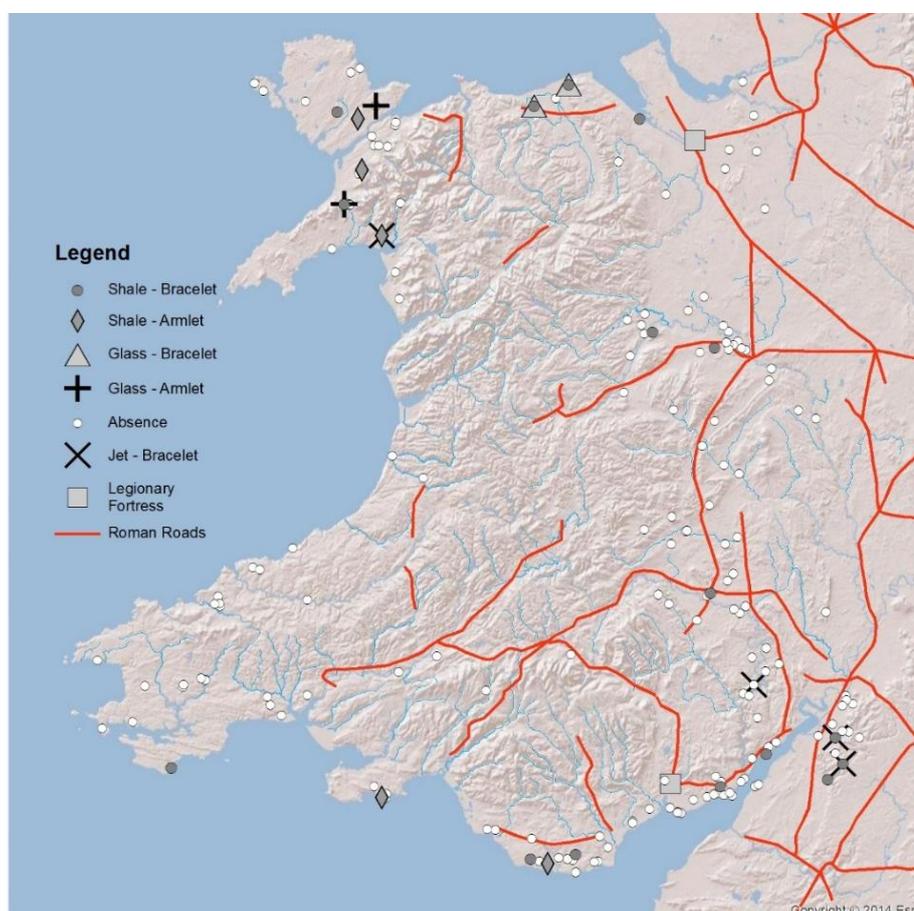
Figure 8.13. Distribution of shale, glass, and jet bracelets and armlets

Shale objects are more numerous than jet within the study region, and there seems to have been a distinct preference for bracelets and armlets made from this material. In particular a cluster of sites in the north-west at which jet, shale, and glass bracelets and armlets are present seems to indicate a regional preference in personal ornament. Jet objects had been traded into the region

since the Bronze Age (Waddington 2013, 11) and were included in two Bronze Age hoards in Anglesey at Llangwyllog (Lynch 1991) and Ty Mawr (*ibid*). The importance of shale armlets and bracelets in south-east Wales has also been noted in the Late Iron Age (Gwilt 2007, 308), and shale objects do appear at sites in this region in the Roman period. The persistence of bracelets and armlets in shale and other black materials may therefore represent a continuing value of these materials. The properties of the material may have played an important role in this, with the black, glossy finish of both jet and shale marking objects made from these materials as particularly attractive. Jet may also have had magical significance due to its unusual properties and was used as a material for protective amulets elsewhere in Roman Britain (Eckardt 2014, 112) – though shale lacks the 'magical' properties associated with jet (e.g. electrostatics), as black lithic materials almost indistinguishable from jet without scientific analysis (Allason-Jones and Jones 2001) it likely shared some of the same associations. Provenance of the material may have played a role in its distribution: jet is usually derived from Whitby, Yorkshire, while shale is primarily derived from Kimmeridge, Dorset.

Shale discs are also noted at several sites, such as at Din Lligwy where two perforated shale discs were found (Baynes 1930, 381). Perforated shale discs are sometimes associated with the manufacture of armlets, so it may be that a small-scale production was also taking place at certain sites in the region (Allason-Jones 2016), though it is also possible that these could represent spindlewhorls.

Summary

The distribution of bracelets and finger rings show that they became widely adopted throughout the study region, though a concentration within the assemblages of high-status, usually villa settlements suggests that they were particularly associated with elite presentation and were perhaps associated with Roman self-presentation. This may be particularly the case with finger-rings, which were an item unknown in the pre-Roman Iron Age.

There appears to have been a regional preference for certain forms in certain materials, as demonstrated by the cluster of jet and shale bracelets and armlets in the north-west, which may represent a continued tradition of personal

presentation which had deep roots in the region, as evidenced by the inclusion of jet and shale in Bronze and Iron Age ritual deposits.

Regional patterning does not just highlight the presence of objects at certain sites, but their absence in others. Figure 8.12 shows a striking absence of finger-rings and bracelets from rural assemblages in the mid-Marches, from the head of the Severn Estuary to the Dee Estuary. While this absence may be partially due to depositional or taphonomic factors, it is unlikely that this issue should affect the region so completely and so the absence must in part derive from a genuine disinclination towards these items of personal ornament. These sites do produce other forms of material culture, such as pottery, and even brooches, and as discussed in the previous chapter this line of the Marches formed one of the most important inland trade routes in the region for items such as pottery. Additionally, the small town at Kenchester (Herefordshire) and industrial settlements such as Ariconium (Herefordshire) likely served as market centres where such goods could be procured.

8.2.5 Summary

Overall, the distribution of small finds related to the person and to the body suggest that the response to the introduction of most objects of personal ornament was regional, and that there were differences in the ways in which rural people cared for and presented their bodies and appearances.

Though chronology is difficult to ascertain for most artefact groups, the fluctuations in the number of brooches suggest that the greatest period of change in dress and self-presentation came in the second century. Given the protracted period of conquest it is not surprising to note an absence of early brooch types, and brooches never appear in large numbers outside of the south-east Central Belt, a region which seems to have been most receptive to other innovations in presentation such as the use of toilet instruments and perhaps the adoption of Romano-British hair styles at certain sites.

The association of particular forms of self-presentation with high-status sites is a constant in all categories of artefact. While the largest number of objects of all categories occur at villa settlement, other forms of settlement also possess

material associated with high status, such as the hillforts of Dinorben and Coygan Camp. Hillfort sites with high-status material culture occur in the south-west and north, outside areas which developed civilian governance. The regional social context of these sites may play an important role, suggesting an articulation of power that incorporated new signifiers of status into existing social contexts. Ways of presenting the body and objects of personal ornament are categorised as 'display', but in that case for whom were these displays being made? Display requires an audience, and symbols require the understanding of their audience in order for the message to be conveyed. Objects were likely being used in different ways to convey meanings which were appropriate in different regions. In the north-west in particular there appears to be a disconnect between the ways in which the military and the civilian populations articulated their identities; on the part of the native sites this may have been in active opposition, perhaps as a reaction to the continued of military control in the region.

Though emphasis is naturally given to the presence of objects at certain sites and in certain regions, absence can equally be an indicator of particular practices. The absence of almost all objects which fall within the category of personal presentation at rural sites along the line of the Marches from the Severn to the Dee Estuaries is striking. Toilet implements, hairpins, and items of personal ornament such as bracelets and finger-rings are almost entirely absent from sites in this region. Brooches do occur at some sites, though almost always at those which lie very close to the road networks, particularly at the southern end of this distribution pattern. Pottery is likewise present at some sites in this region, and together this suggests that it was not simply lack of access or poverty which accounts for the absence, but a regional preference in the care of the body and its presentation which differed from those to the south and did not widely incorporate items of personal ornament. It is more difficult to extrapolate from absence, but it may be that this was a region in which social stratification was less sharply defined, or in which it was less common to visually differentiate oneself by other aspects of identity such as gender or age.

8.3 Food and Drink

If personal ornament allows people to mediate their identities through their bodies through bodily care and by visual markers of identity such as personal ornament, food and drink are even more intimate ways in which changes in culture and society can be mediated through the person. Dietler describes food as 'embodied material culture' (Dietler 2010, 184), which has close links with the construction and expression of identities but also ties the participant into broader relations of production and exchange in a way that links the domestic with the political (p. 185). Archaeologists increasingly explore the importance of food beyond the processual focus on subsistence to emphasise on how food intersects with status, ethnicity, and gender (Twiss 2012, 357-8).

While archaeobotanical and zooarchaeological assemblages and associated studies (such as isotope analysis) have been significant in the study of the Roman diet in Britain, as explained in previous chapters as this thesis is focused on the regional material culture it will not consider these datasets directly (though the RSRB includes data on both) and will instead use the regional ceramic assemblages as a means of exploring foodways. You are not only what you eat, but how you eat it: this section will use the evidence of the ceramic assemblage assembled as part of the methodology introduced in Chapter 4 to explore how the ceramic assemblage can illuminate these issues by using approaches such as the comparative distribution between amphorae and mortaria, or beakers and tankards, in order to explore what was eaten and drunk in the study region during this period, and what that suggests about rural society during the Roman period.

8.3.1 New Introductions: Amphorae and Mortaria

While the distribution of amphorae as a proxy for trade has been discussed in the previous chapter, amphorae can also be a valuable category for analysis regarding the introduction of new commodities into the regional diet.

Amphorae are most closely associated with olive oil, wine, and fish products, all of which were new introductions into the regional diet. As discussed in the previous chapter, amphorae associated with olive oil amphorae are the most widespread form identified within the study region (see previous chapter, Table 7.18). Olive oil had wider uses than simply cooking (for example: lighting, bathing), but the primary use will have been culinary (Cool 2006, 63) and lamps

are present at only three sites in the study region. Though the presence of olive oil amphorae at rural sites suggests that the use of olive oil did spread into the rural diet, the limited pattern of distribution suggests that its adoption was not widespread.

Fish product amphorae are relatively rare on rural sites throughout Roman Britain (Cool 2006, 62) and this pattern is reflected within the study region. Strong evidence for the consumption of fish sauces is largely found on urban and military sites, including possible local industries identified at London and York (Alcock 1998, 31). Only one fish-sauce amphora is identified within the study area at the villa site of Magna Castra (Herefordshire). This may indicate that the incorporation of fish sauces into the diet was linked with other ways of performing Roman identity, such as urban living, and did not spread to the rural population.

It is also possible that fish products conflicted with a cultural taboo regarding the consumption of fish. The existence of such a taboo has been suggested for other parts of England to explain an almost complete absence of fish remains within archaeological assemblages of the Iron Age (Dobney and Ervynck 2007, 403), and in a survey of the evidence for Wales Caseldine also notes the absence of fish from assemblages at the coastal Iron Age site of Goldcliff (Glamorgan-Gwent) and Stackpole Warren (Dyfed) (Caseldine 2018, 4). In the Romano-British period fish remains are primarily located in urban and military contexts (Cool 2006, 106). Taste and preference are boundary-marking, and the absence of fish sauces from the rural diet may be evidence of the maintenance of a culinary cultural boundary (Dietler 2010, 186) which had eroded elsewhere due to prolonged interaction with a culture in which no such prohibition existed.

	Farm		Villa	
	Sites	MNV	Sites	MNV
Central Belt	9	27	5	15
Central West	1	11	1	11
Upland Wales and the Marches	9	19	1	1
Total	19	57	7	27

Table 8.13. The distribution of amphorae at farm and villa sites by region

Amphorae are uncommon on all rural settlements, though they are more likely to be present in villa assemblages than farm assemblages (Table 8.13). Though the number of farm sites at which amphorae are identified is higher than that of villa

sites, the imbalance is linked to the higher numbers of farm sites in general, and amphorae are present on a higher proportion of villa sites. In the Central Belt amphorae are present at just over a third of the total number of villa sites and just under a fifth (19%) of the total number of farm sites. By contrast, they are present at 17% of villa sites in Upland Wales and the Marches, and 15% of farm sites. The distribution of amphorae in general is strongly associated with coasts and with the road and river networks (Fig 8.14), which suggests that they were not widely distributed away from primary distribution centres. If the contents of amphorae spread further inland it was in ways that are archaeologically invisible, perhaps decanted into smaller or organic containers (Cool 2006, 19).
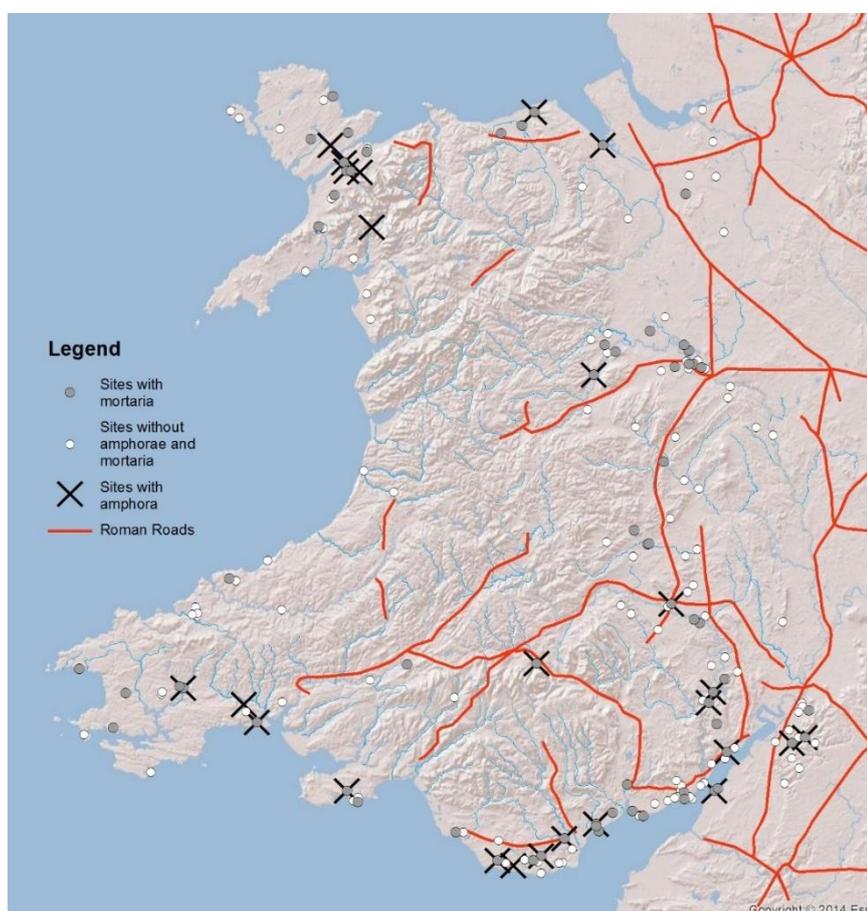
Figure 8.14. Distribution of mortaria and all amphorae

Mortaria

While amphorae are associated with the transport of new foods into the study region, the mortarium is associated with their preparation. The form was almost unknown in pre-Roman Britain outside of a small number of elite sites in the

south-east, and their appearance in the archaeological record is often used as evidence of a change in cooking and eating habits after the Roman conquest (Cool 2006, 45). The mortarium has been attributed a range of functions by various scholars but is now understood as a vessel for grinding food ingredients for sauces or other preparations. This is due in part to its physical characteristics (such as the spout for pouring and the trituration grits embedded in the inner surface) and also to Roman sources on food preparation which contain recipes that call for the grinding and mixing of ingredients (Apicius, *De Re Coquinaria*; Symonds 2012). A study of organic residues from mortaria from seven English site assemblages (Cramp et al 2011) found that mortaria often contained residue from both plant and animal lipids – sometimes within the same vessel - suggesting that the use of mortaria was not limited to a single food preparation, but that they were used to process a range of commodities (Cramp et al 2011, 1347).

Mortaria are represented within the assemblages of 64 sites in the study region, with a fairly even distribution between the subregions: they are present at 26 sites in the Central Belt, 11 in Central West, and 27 in Upland Wales and the Marches (Table 8.14). This lack of imbalance between subregions suggests that access to mortaria was not restricted, and furthermore that there was a demand and a market for their use even in regions which have traditionally been regarded as disengaged with Roman material culture, such as the north-west (Fig. 8.14). There does not appear to be regional patterning among those sites at which mortaria are not present.

Region	MNV	No of Sites
Central Belt	116	26
Central West	58	11
Upland Wales and the Marches	129	27
Total	303	64

Table 8.14. Mortaria MNV by region and number of sites at which mortaria occur

The distribution of mortaria at different sites within the regional settlement hierarchy is also comparatively well-balanced, with mortaria present on both villa and farm sites. Mortaria are present at 42% of villa sites and 42% of farm sites in the Central Belt. This equality of distribution is consistent across regions, with mortaria present at 33% of villa sites and 35% of farm sites in the Upland Wales

and the Marches. In the Central West mortaria are present at 38% of both farm and villa sites. This suggests that the adoption of mortaria was not limited by the social status of a site or its inhabitants, and though it should be noted that mortaria do tend to occur in greater quantities within villa assemblages this is true of almost all ceramic categories: villas sites were in general much higher consumers of ceramics.

Though the presence of mortaria within a site's ceramic assemblage has traditionally been considered an indicator of the adoption of Roman-style food practice, Cool notes that among the Roman provinces Britain was an unusually heavy consumer of mortaria, and that in fact the vessel form was comparatively rare in Italy where one would expect greater material evidence of classical Roman cooking (Cool 2006, 45). Though mortaria were imported from the continent, Romano-British industries were quickly established and the majority of the vessels within the regional assemblage are Romano-British. In the majority of vessels from the ceramic database the fabric has not been identified (MNV 162) but in those where the fabric has been identified examples the largest categories are Oxfordshire (MNV 79) and Mancetter-Hartshill (MNV 28). Both industries begin production in around AD100 and ceased in the 4th century, so it is difficult to identify chronological patterns in the distribution of each fabric. There are very few identified imports within the database, and though more may be present and unidentified this strongly suggests that the widespread adoption of the mortarium within the region came once the Romano-British industries were established at least at the beginning of the 2nd century.

In the study of organic residues referenced above, a comparison of the Romano-British results to that of Iron Age cooking pot assemblages found a similar level of plant residues, which suggested that the mortarium did not represent entirely new dietary practices (Cramp et al, 1349). The adoption of the mortarium may therefore have been less an engagement with Roman cultural practice than with a hybrid Romano-British practice which reflexively incorporated new artefacts into existing practices, perhaps as an example of what Dietler calls 'structured improvisation', meaning the process by which colonised peoples practice selective adoption and integration of new food and practices (Dietler 2010, 187). The relative abundance and wide distribution of mortaria, both regionally and within the settlement hierarchy, suggests that it was not rigidly associated with a

specific set of food practices. Produced in British (though often non-local) fabrics and widely distributed across the region, the mortarium may not even have had the associations with Roman culture that modern scholars ascribe to it, and could instead have been considered a British product, particularly if it was not being used for the kinds of Roman sauces with which it has traditionally been linked. The absence of olive oil amphorae from rural assemblages certainly suggests that the preparation of cooking sauces was not widespread.

Region	Farm		Villa	
	MNV	No of Sites	MNV	No of Sites
Central Belt	94	20	70	6
Central West	55	10	45	3
Upland Wales and the Marches	118	22	5	2
Total	267	52	120	11

Figure 8.15. MNV of mortaria by region and number of sites at which mortaria appear based on settlement type

Summary

While both amphorae and mortaria have been traditionally associated with the introduction and adoption of foods and methods of food preparation which were culturally Roman, the difference between the distribution of both suggests that mortaria were far more widely adopted within the study region. This suggests a demand and a market for their use even in regions which have traditionally been regarded as disengaged with Roman material culture, such as the north-west, and a distribution along the settlement hierarchy which indicates that the adoption of these objects was not restricted by the social status of a site and its inhabitants. Whether this represents a closer engagement with Roman food culture than has previously been understood is debatable, given the growing evidence for the particularly Romano-British adoption of the mortarium and the uses to which it could be put which fitted in with a pre-existing tradition of food preparation. The growing evidence for the use of mortaria suggests instead that the new introductions of the Roman period were selectively incorporated into the rural diet. This suggests a level of agency involved in the adoption of material culture relating to food. The mortarium may have become more integrated into rural practice because it fitted within an existing tradition of food preparation or could be used to prepare foods which were already part of the rural culinary repertoire.

Conversely, the commodities contained within amphorae belonged to a separate tradition of food culture and may not have been accepted so readily, whether due to taste or cultural taboo.

8.3.2 Ways of Cooking and Eating

Traditionally, cooking is a skill which is learned in the home through observation and passed down familiarly, usually from mother to daughter (Hawkes 2002, 48). Ways of cooking are therefore reproduced generationally and strongly linked to the household and family relationships, thereby creating an inherent conservatism and a strong link between food and identity. We might therefore expect changes in the kinds of foods being cooked and eaten to represent a significant change in identities.

Different vessel forms enable different ways of both preparing and eating food, and the analysis of ceramic forms can therefore offer insight into what people were eating and how. Bowls and jars are suitable for cooking and serving foods such as stews in which all ingredients are mixed during the cooking process. These are relatively low-labour intensity preparations which could also be prepared and reheated as needed (Hill 2002,148). Shallow forms such as plates and platters are less suitable for these styles of food preparation and lend themselves to foods which are more 'intact' (*ibid*), whose separate elements are prepared and presented individually – for example, an element and its accompanying sauce (Cool 2006, 165). This may suggest an approach in which the cooking and serving elements of the food preparation process become increasingly separated and formalised (Hill 2002, 148). This might in turn suggest the development of a differentiated food culture, in which different kinds of food and food preparation and the way in which food is served are socially meaningful and convey messages about the consumer and their place in society (Cool 2006).

Ways of cooking are also suggested by residues on vessels, in particular soot adhesions on the walls of some vessels. Sooting is primarily identified on jars (MNV 11), though it is also noted on several coarseware dishes and bowls, which indicates that the ways in which these vessels were used was less prescriptive than modern definitions may suggest. Sooting at the rim could be caused by the vessels being bedded within a hearth with the upper parts exposed to the heat of

the fire (Cool 2006, 39). Within the ceramic database of this thesis the exact location of the sooting was only noted on MNV 6 jars from a single site (Llandough [Glamorgan-Gwent]), but the sooting was indeed located at the vessel rim. However, the limited evidence suggests that sooting is not routinely recorded, and any conclusions must therefore be tentative. However, cooking with the heat distributed in this way suggests stewing or slow baking, as discussed above. These foods were particularly suitable for consumption within a context in which multiple people were present, perhaps eating communally (either from the same vessel or decanted into individual servings) or perhaps entering and leaving the household at different times (for example, as and when household or agricultural tasks permitted).

Jars have the highest MNV of any vessel type within the database and likely performed a range of functions, though as explained within the methodology (Chapter Four) for the purposes of this study the term 'Jar' has been used as an umbrella term for a wide variety of subforms.

Vessel Type	Site Type	MNV	Number of Sites
Jar	Farm	1188	50
	Villa	665	9
Bowl	Farm	787	66
	Villa	463	13

Table 8.15. Distribution of jars and bowls by site type

Assemblages with a high proportion of jars have sometimes been understood as evidence of a retention of Iron Age character, in conjunction with the continued use of architectural forms such as roundhouses or minimal engagement with other forms of material culture (Perring and Pitts 2013; Evans 2001). Jar-dominated assemblages are therefore understood as a continuation of Iron Age cooking and eating practice, while bowl-dominated assemblages are understood in part as a sign of the adoption of Roman practices of eating – the move towards individual servings, for example (Table 8.15). However, there does not appear to be significant patterning within the study region and there is little difference in the distribution of jar- or –bowl dominated assemblages by site type (Table 8.16). However, for 55 sites it was not possible to judge whether the total assemblage was jar- or bowl-dominated, therefore it is unlikely that the regional pattern can be fully understood without reanalysis of the assemblages themselves.

Site Type	Bowl-dominated	Jar-dominated
Farm	19	50
Villa	4	9

Table 8.16. Number of sites with bowl-dominated and jar-dominated assemblages
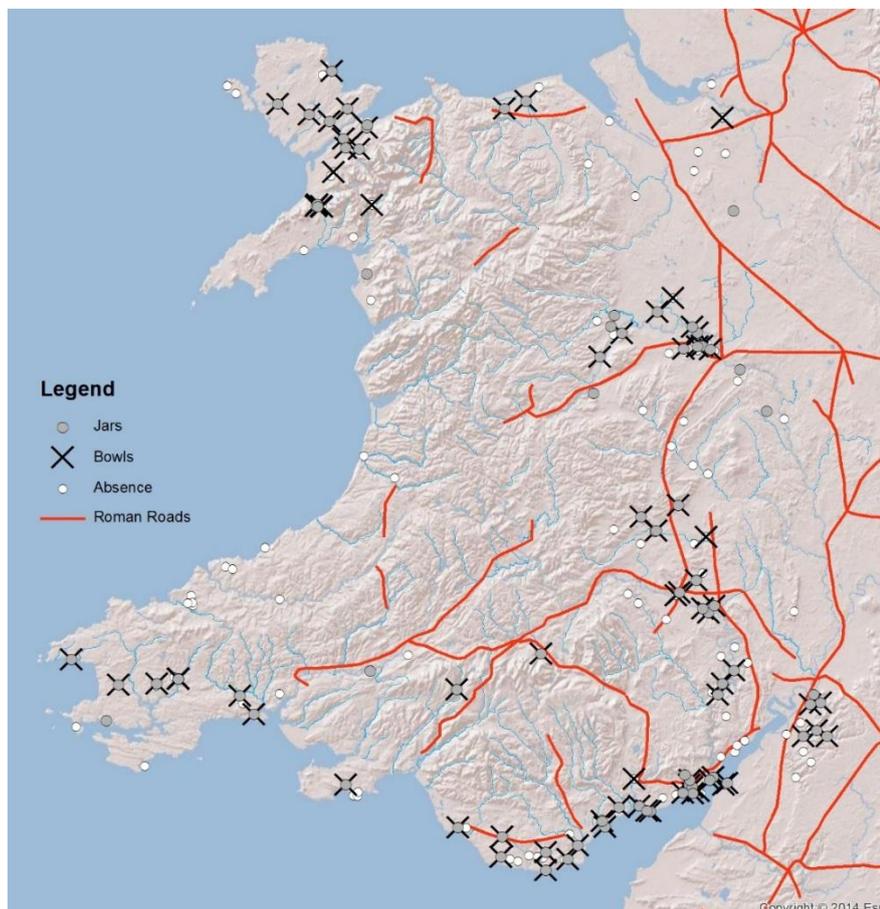
Figure 8.15. Distribution of jars and bowls

Though there is little difference in distribution between jar and bowl forms, it is striking that together they vastly outnumber shallower forms such as plates, and platters. Plates appear on only 14 sites in the study region and are focused in the south-east and Central Belt, appearing on only a few sites in the north-west throughout the study period (Figs. 8.16-8.18). The similarly shallow, presentational platter form occurs at only eight sites within the study region, with a total of MNV 13; their distribution is also focused in the south-east Central Belt and at villa sites. Plates appear almost exclusively in samian ware, with the exception of a small assemblage of MNV 8 from the Upland Wales and the Marches site of Caerau, categorised as 'Other' (these are described in the excavation report as 'black ware', though the site was excavated in the 1930s and it is not

possible to judge whether this may be an identification of Black Burnished Ware or local dark grey ware, or a misidentification of another shallow form [O'Neill 1936]). The chronology of plates is limited to the Early and Middle periods, which is due to the cessation of samian importation in the 3rd century. Plates were not produced in Romano-British finewares.
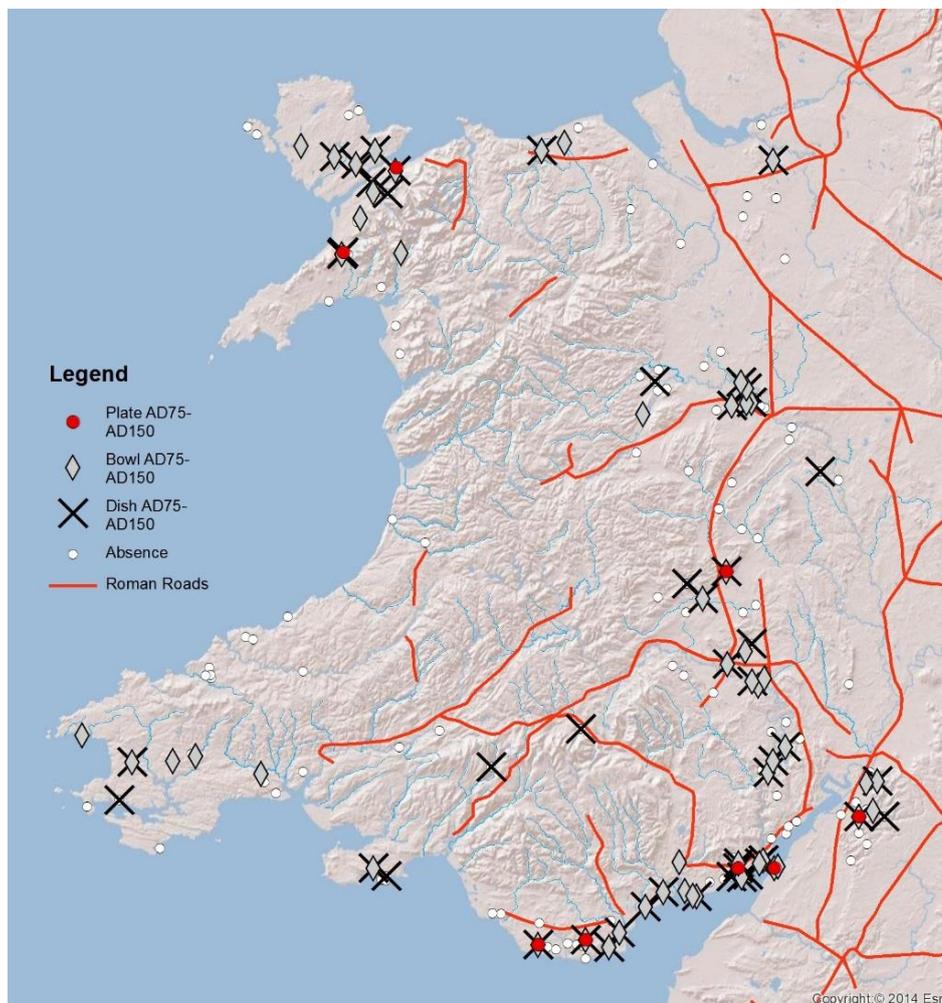
Figure 8.16. Distribution of Tableware forms AD 75-AD150

The distribution of forms also differs by site type. While the numbers of platters are too low for patterns to be discerned, plates appear on proportionally more villas than farms, which suggests that the form of food and serving which made use of plates – a food culture in which 'intact' foods are served separately as described above - were more closely linked to these sites. This represents a significant break with the previous dominant food culture. Other shallower forms such as dishes and the samian dish/shallow bowl forms also appear in proportionally greater quantities at villa sites (Table 8.17).
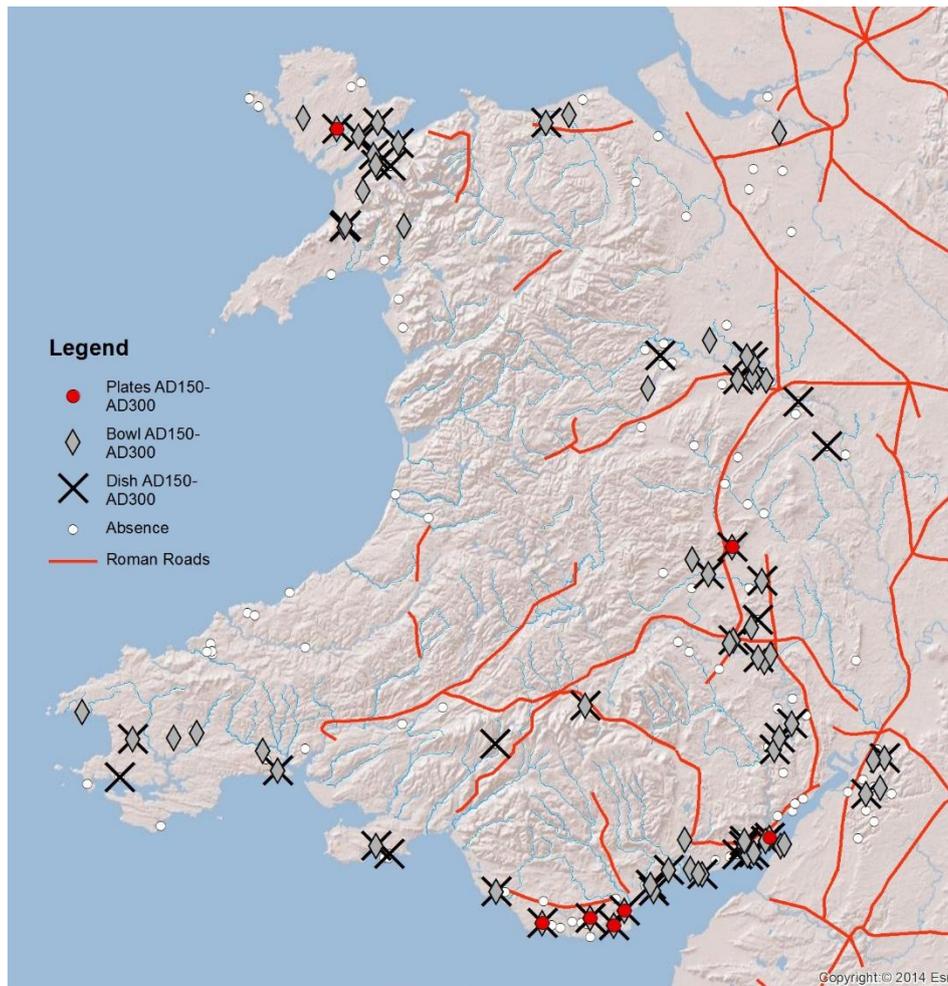
Figure 8.17. Distribution of Tableware forms AD150 – AD300

Vessel Type	Site Type	MNV	Number of Sites
Plate	Farm	41	13
	Villa	24	4
Platter	Farm	13	8
	Villa	4	2
Dish and Dish/Shallow Bowl	Farm	400	49
	Villa	230	12

Table 8.17. Distribution of shallow forms by site type
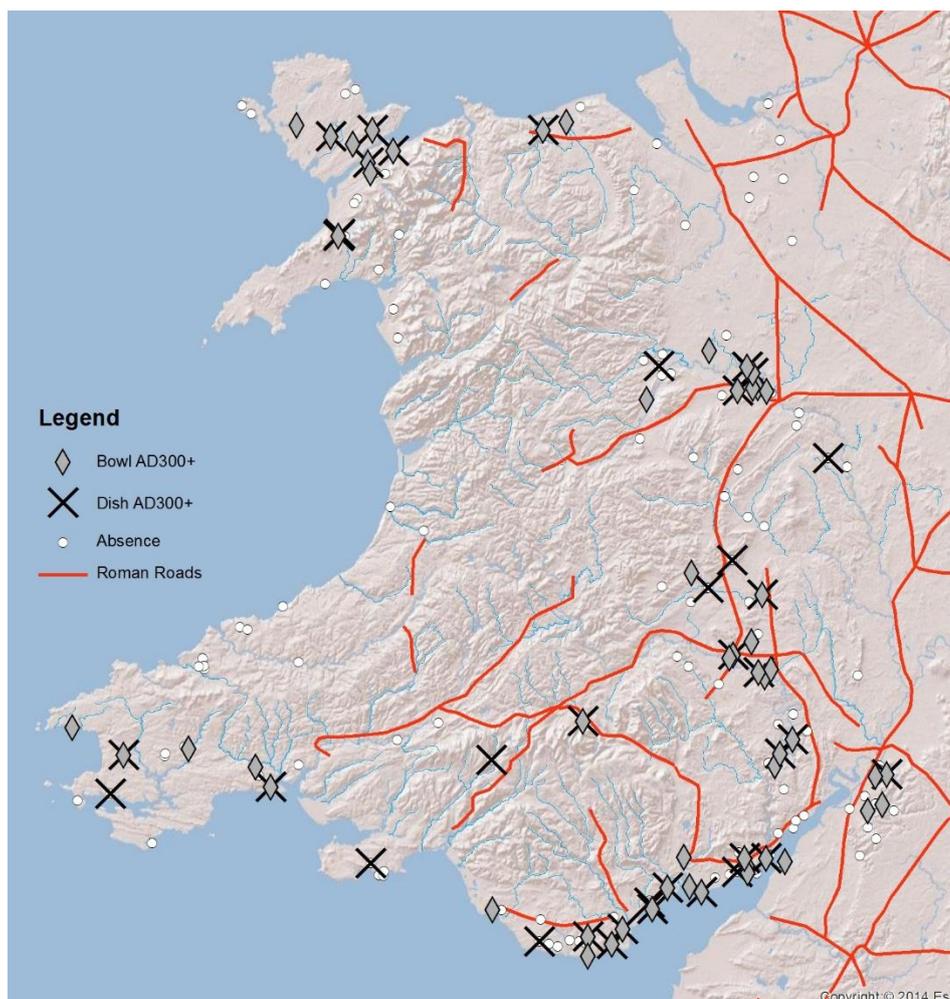
Figure 8.18. Distribution of Tableware forms AD300+

The distribution of jars and bowls shows that proportionally more vessels appear at farm sites for all categories. The preference for bowls – and to a lesser extent dishes - over shallower forms such as plates and platters is in keeping with a regional assemblage dominated by jars and bowls, and that consequently there seems to have been a continuing preference at most sites for the kinds of foods which could be prepared and served in these vessels. The adoption of Roman-style dining practice therefore appears to have been limited throughout the region and largely restricted to villa sites. The food culture seems to have been resistant to change, but this need not have been active resistance – as discussed above, the inherent conservatism of the way in which traditions of food preparation are reproduced generationally (Hawkes 2002, 48) means that changes in food practice usually require external stimuli. Villas represent breaks in the regional tradition on multiple axes, including architecture and material culture, and may therefore

have been sites at which social practices were more fluid and receptive to change.

8.3.3 Fabric

Though we must avoid projecting modern conceptions of the appropriateness of certain vessels for certain tasks, fabric can also play a role in examining the way in which vessels were used, and therefore of dining practice (Table 8.18). Certain vessel types are overwhelmingly produced in coarse or fine fabrics (Fig. 8.19): for example, jars are overwhelmingly produced in coarse fabrics and where the fabric has been identified they are primarily consumed in Grey Wares (MNV 494), Black Burnished Ware (MNV 312), and Severn Valley Ware (MNV 208). This suggests that they were in daily use for tasks which required fabrics that could withstand wear and tear and were therefore particularly suited for cooking and eating.

Additionally, the prevalence of fabrics which had distributions centred on the regions in which they were produced, such as local greywares and Severn Valley Ware, suggests that these fabrics were suitable for vessels which were likely to be broken in the course of use and could be replaced more easily. The situation is different with Black Burnished Ware because of its mechanism of distribution, in which the military was the primary driver of trade and the fabric's reach was therefore necessarily wider (see previous chapter for a fuller discussion). Black Burnished Ware is therefore present throughout the study region.
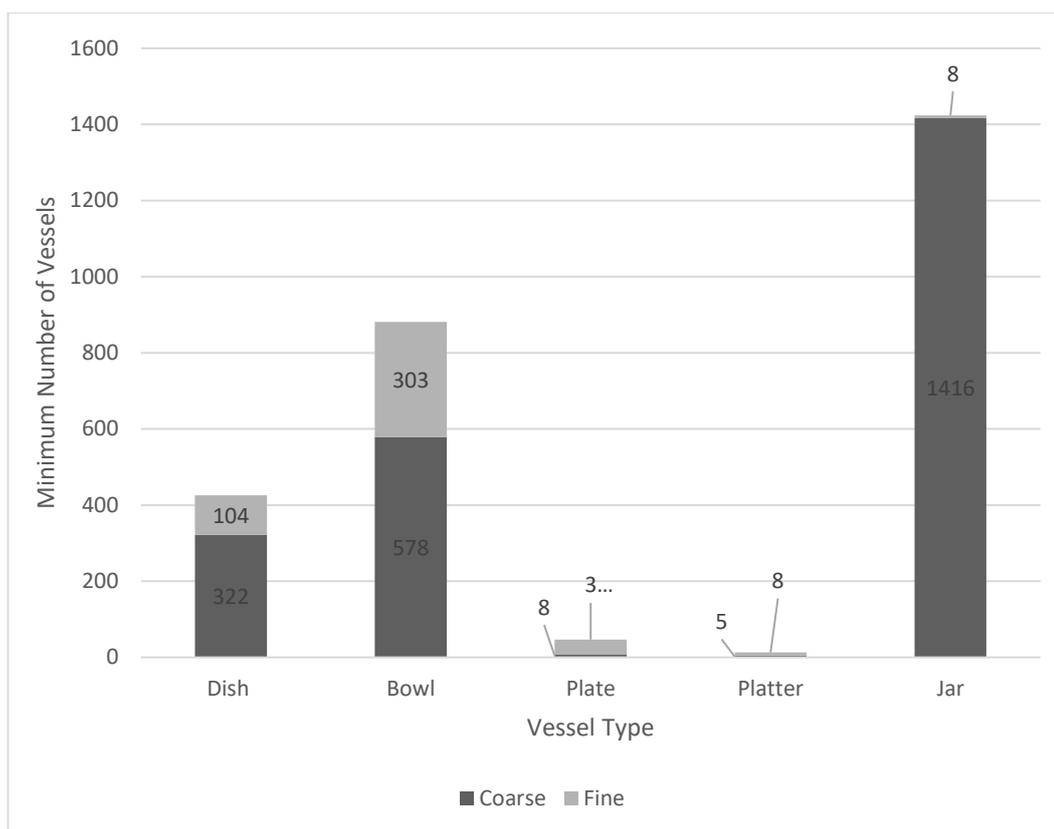
Figure 8.19. Vessel types by coarse/fine fabric

Fabric Type	Site Type	MNV	No of Sites
Coarse	Farm	3634	98
	Villa	1696	16
Fine	Farm	840	79
	Villa	491	21

Table 8.18. MNV of all vessels by Coarse/Fine fabric and site type

Fabrics imported from greater distances, such as continental finewares, were more difficult to obtain and replace and therefore likely had different associations. Finewares – in particular samian ware – are repaired at higher rates than coarsewares, which speaks both to their inherent value and to the difficulty of replacing them, whether due to prohibitive cost or lack of supply (Willis 2005, 11.7)

One way in which this can be explored is through a particular class of fine vessels, such as bowls.
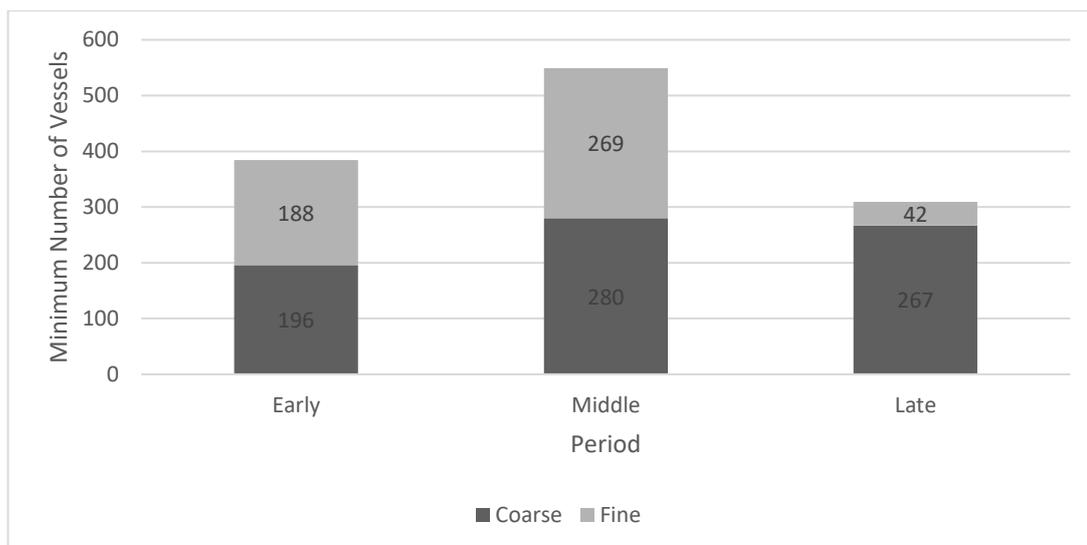
Figure 8.20. Number of bowls in coarse and fine fabrics by period

Fine samian bowls in particular are viewed as high-status objects. The total MNV of samian bowls is largely divided between the undecorated Dragendorff 31 (MNV 79) and the decorated Dragendorff 37 (MNV 76). The two forms are fairly equal in terms of overall numbers, which is perhaps surprising given the general view that decorated samian forms were more expensive than plain forms. For example, graffiti on a Dr 37 from Lincoln gave a vessel price of 20 *asses*, about one day's pay for a soldier (Willis 2011, 171). One might therefore expect the distribution of samian bowls to be restricted to the materially wealthy villa sites of the south-east, but Figure 8.21 shows that this is not the case. Willis' survey of samian ware found that rural sites tend to have unusually high numbers of decorated forms, particularly bowls, though this is a phenomenon which emerges in the post-conquest period and is less prevalent by the 2nd century (Willis 2011 p. 207). This may be due to the novelty of the vessel form.

The regional distribution of decorated and plain bowls (Fig 8.20) also shows an interesting imbalance in the MNV of decorated and plain forms between regions: though overall more decorated bowls are present within the Central Belt, it appears that decorated were preferred to plain in the Central West and in the north-west of Upland Wales and the Marches. In the Central West this disparity may be explained by the large assemblage of decorated bowls from the large villa site of Magna Castra (Herefordshire). However, Upland Wales and the Marches has a generally lower level of material culture, and the decorated bowls are all present within the assemblages of non-villa sites (though there are only six villa

sites within this region). This is a region which shows few other signs of material wealth; for example, this region had a very low incidence of coin presence at rural sites (see previous chapter), particularly in the Early period, suggesting that such sites were not fully integrated into a transactional economy. Were the decorated samian bowls therefore aspirational objects?
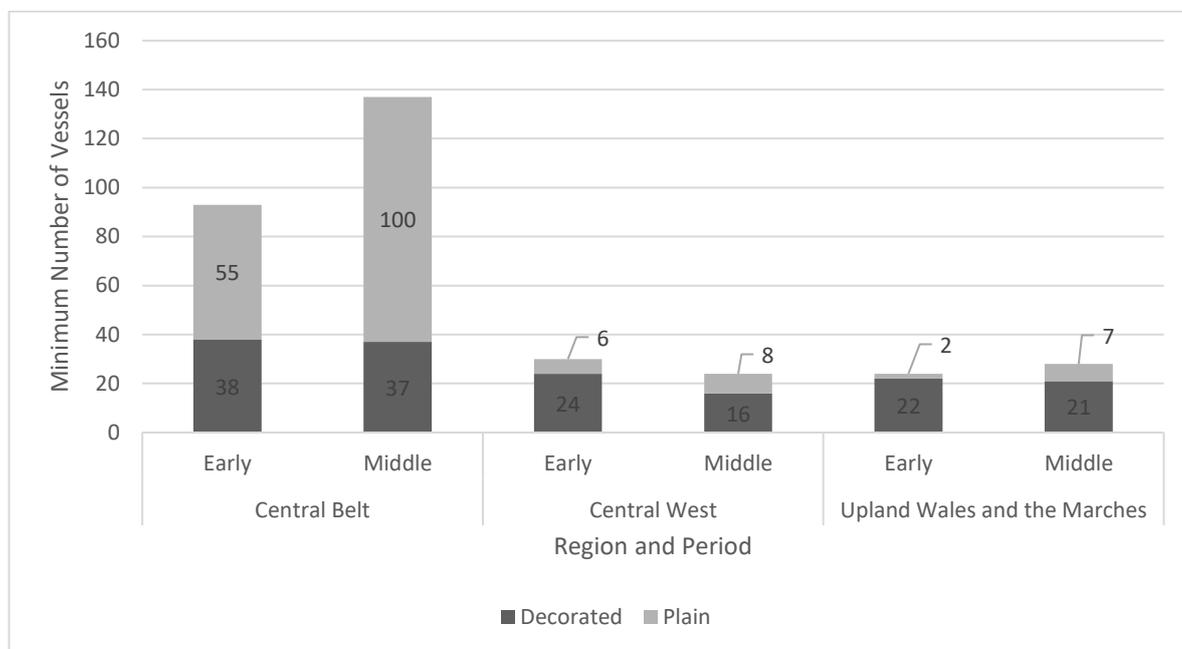
Figure 8.21. Samian bowls by period and region

Samian ware is sometimes conceptualised as particularly emblematic of 'Romanness'; of having, as Willis states, a 'certain magic' (Willis 2004). Though there is evidence that samian ware was treated in ways which reflect its high value, the 'magic' of samian ware does not necessarily need to derive from its associations with 'Romanness'. Samian wares were visually different from both local and imported Iron Age ceramics or from the organic vessels which may have been used in aceramic regions, such as the north-west: this may have been enough to render it a desirable object. The popularity of large, open forms may reflect a continuation of the importance of the communal vessels which have been identified within Iron Age contexts, such as buckets, cauldrons, and other communal feasting vessels (Gwilt and Davies 2010). The preference for large open forms has also been noted in rural settlements in other frontier provinces: a study of dining practice in the early Roman Upper Rhine region also found that where Roman vessels were adopted, there was a tendency towards the use of larger and possibly communal vessels (Okun 1989, 123; Meadows 1994, 137). The Dragendorff 37 may have represented an alternative to metal vessels, with the use of Roman-

style cultural material within a pe-existing social context, incorporating new material culture in hybrid forms of food practice and status display.
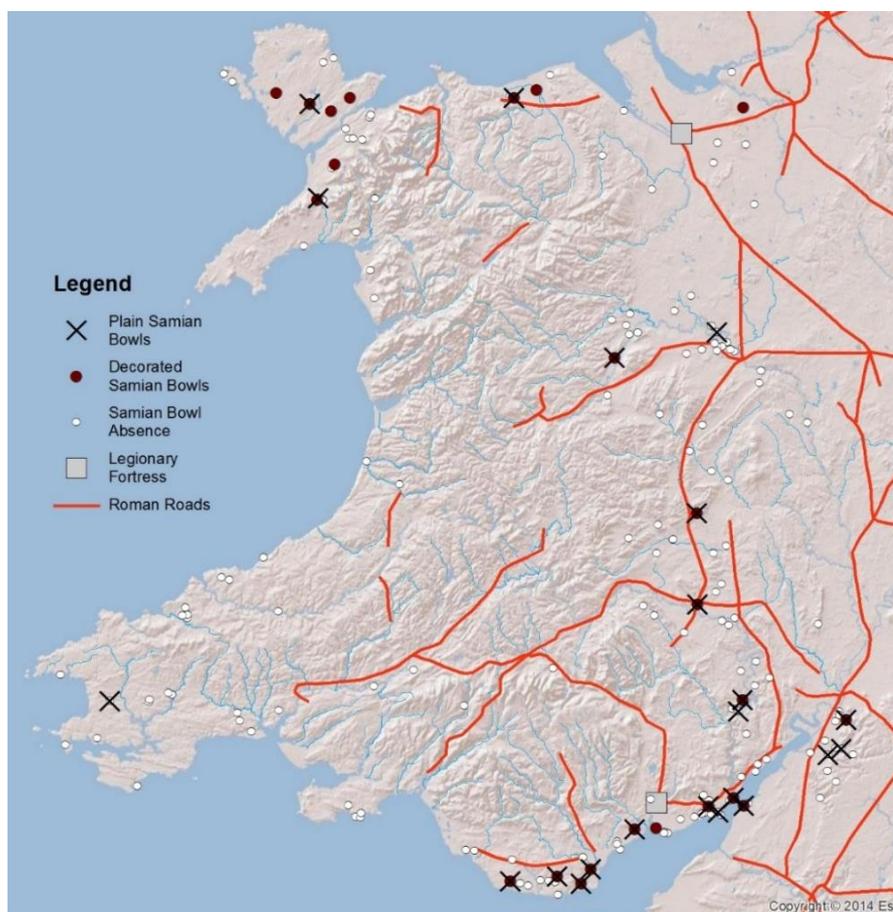
Figure 8.21. Distribution of plain and decorated samian bowls

8.3.4 Drinking Vessels

Food is only one part of dining practice, and the importance of drinking should not be underestimated. The importance of alcohol and drinking in combination with feasting in the Iron Age has been emphasised (Dietler 1990; Arnold 1999; Pitts 2005) and drinking as a significant ritual practice in the study region during the Iron Age is suggested by the deposition of items such as tankards (Gwilt 2012).

Three forms comprise the majority of drinking vessels: Cups (MNV 105), Beakers (MNV 162), and Tankards (MNV 91). There are some differences between these vessel forms, particularly in the fabrics in which they were made (Figure 8.22). Beakers and tankards are overwhelmingly consumed in coarse fabrics, while cups are overwhelmingly in fine fabrics. Tankards are exclusively consumed in coarse

fabrics. This may suggest that they were used in different ways and perhaps in association with different contents. This is also suggested by the capacities of the various forms – beakers and tankards generally hold greater volumes than pottery cups (Cool 2006, 149).
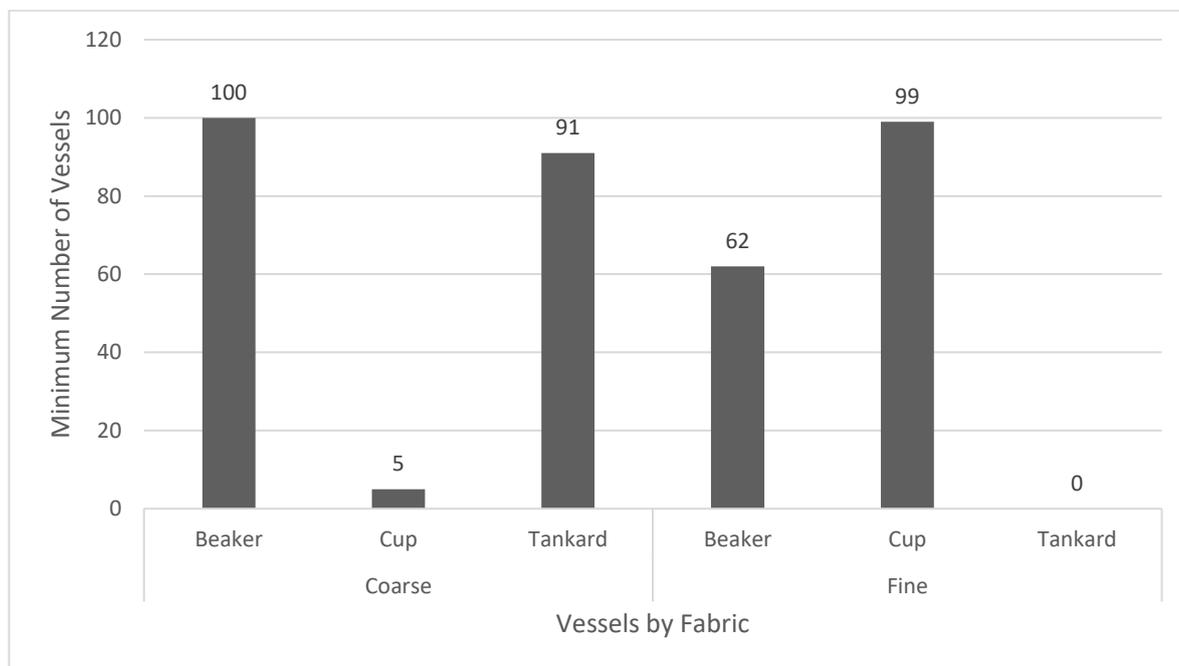
Figure 8.22. Breakdown of the main forms of Drinking Vessels by coarse and fine fabrics

Samian finewares comprise the majority of all fine cups. A single Caerleon Ware cup is also identified at Fox's Field (Gloucestershire), but this was a copy of samian form Dragendorff 27 (Brett 2010, 16), which may indicate a connection between the physical appearance and function. This is further indicated by the composition of the small coarseware assemblage of cup forms, which is comprised of MNV 4 Severn Valley Ware and a single unidentified coarseware vessel. Though lacking the red slip which characterises both samian and Caerleon Ware, Severn Valley Ware has a reddish fabric which may further suggest a visual association between cup forms and certain fabric colours.

Beakers appear in both fine and coarse fabrics. In coarse fabrics beakers appear in Black Burnished (MNV 3) and Severn Valley Ware (MNV 4), but primarily in Grey (often local) (MNV 30) or unidentified, probably local fabrics (MNV 60). In fine fabrics they are represented by a much wider range of fabrics than cup forms, including small amounts as Continental Imports (including Central Gaulish Colour

Coat [MNV 1), Terra Rubra [MNV 1], Lyons Ware [MNV 1])) but significantly higher numbers of Romano-British finewares (primarily Nene Valley Ware [MNV 16]) and Oxfordshire Wares [MNV 15]). There is therefore a strong distinction between the fabrics of cups and beakers.

Tankards appear exclusively in coarse fabrics and almost entirely in Severn Valley Ware (MNV 62), which was a characteristic form. This creates a strong distinction between the tankard and the other forms of drinking vessels, which may be reflective of a difference regarding its function or of the drink it was most commonly paired with. Tankards usually have a larger capacity than cups or beakers and may have been associated with beer rather than wine.

Form	Site Type	Coarse	No of Sites	Fine	No of Sites
Cup	Farm	5	3	95	19
	Villa	1	1	66	6
Beaker	Farm	98	19	57	13
	Villa	63	6	42	7
Tankard	Farm	76	26	0	0
	Villa	44	9	0	0

Table 8.19. MNV of drinking vessel forms by fabric and site type

The number of tankards remains steady in all periods (though this should be interpreted with caution as it is primarily due to the necessity of attributing the full date range of Severn Valley Ware to vessels where a dateable form has not or cannot be assigned), but there is a clear shift in the numbers of both cups and beakers. Cups dominate the drinking vessel assemblage in the Early period, decline slightly in the Middle, and drop precipitously in the Late (Fig. 8.23) due to the end of the import of continental finewares and the lack of cup forms in the repertoire of the growing Romano-British fineware industries. Cups were produced in New Forest Ware (Tyers 1996) but none are present within the study region. The absence of cups in the Late period is therefore not unexpected but may indicate that the cup was not popular enough to have been taken up by the Romano-British fineware industries.
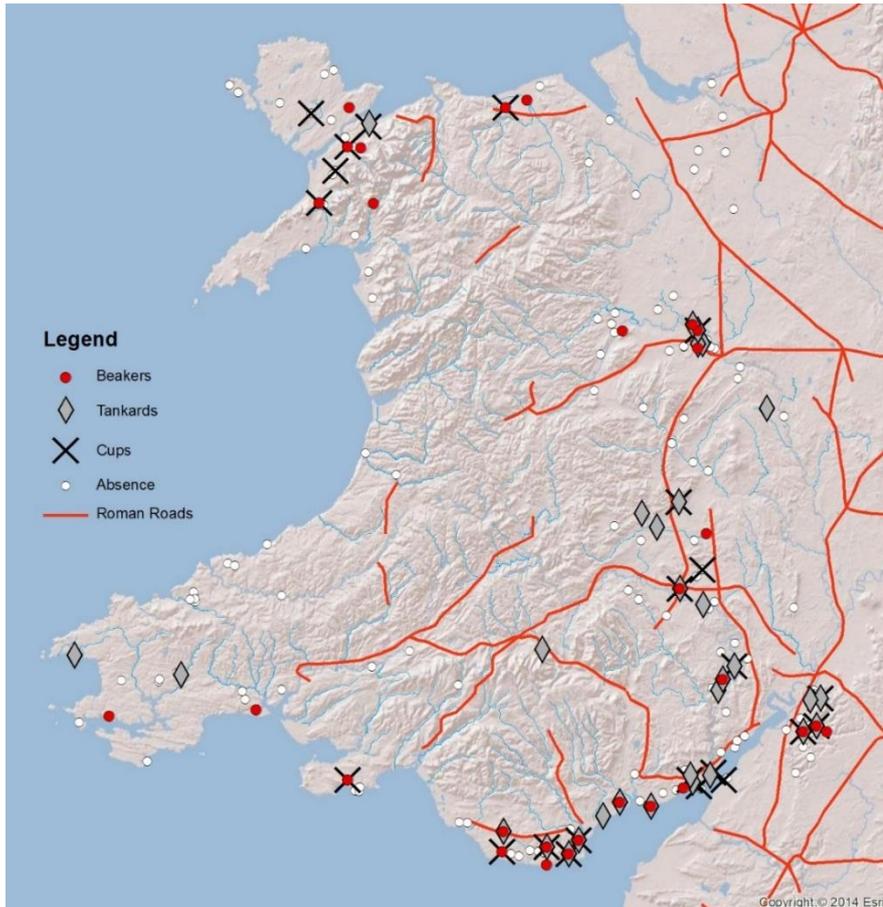
Figure 8.22. Distribution of cup and beaker forms
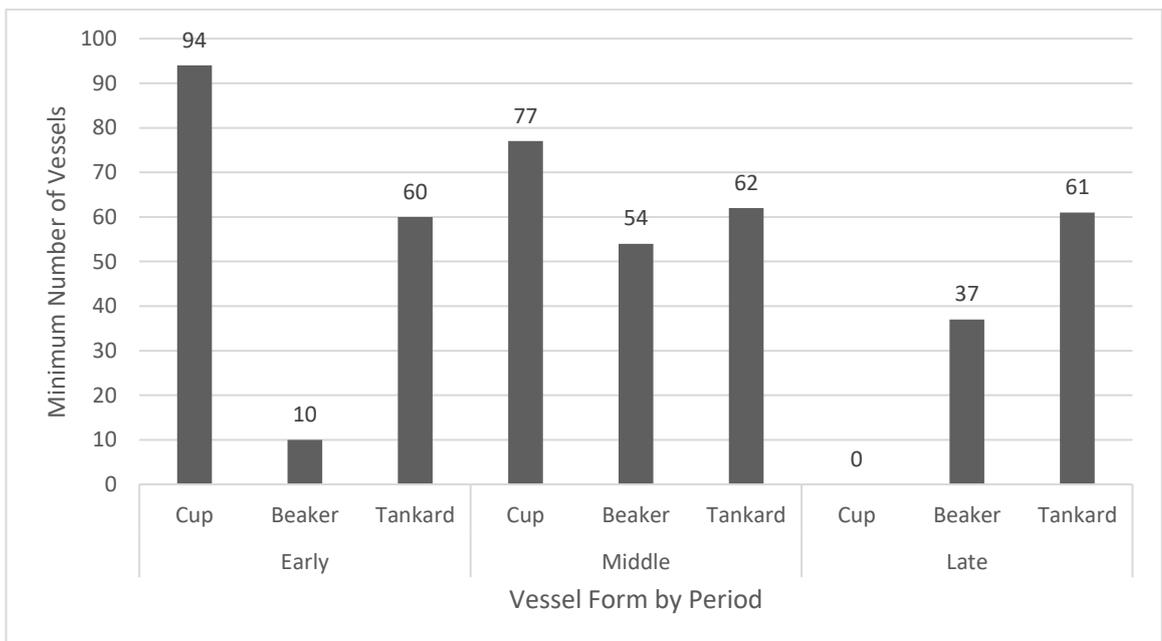
Figure 8.23. Drinking vessel form by period

Fine cups, particularly in samian ware, have traditionally been associated with wine-drinking, though some work has challenged this simplistic association. Biddulph's experimental work in use-wear analysis (2008) argues that patterns of wear on Dragendorff 27 and 33 suggests different usage. Dr 27 usually show patterns consistent with grinding, similar to mortaria, which suggests kitchen use (Biddulph 2008, 97), though Dannell also suggests that the Dr 27 may have been a vessel for individual mixing of water and wine, with the double-curved wall serving as a marker for the level of water (Dannell 2006, 158). The wear patterns of Dr 33 were found to be consistent with stirring - perhaps indicating the mixing of water and wine, or the preparation of spiced or sweetened drinks (Biddulph 2008, 94). Dr 27 and Dr 33 are the most common cup forms within the study region.

The range of material culture involved with drinking wine in the Roman manner did not only involve vessels for drinking but also a range of vessels associated with mixing the wine, such as jugs for holding the wine and water, buckets, and utensils such as ladles (Cool 2006, 136). These were often made of metal and evidence of such vessels within the study region may be found at Whitton (Glamorgan-Gwent) in the form of a jug handle with a hinge for a lid and ladle terminal in the shape of a dolphin/duck (Jarrett and Wrathmell 1981, 182, objects 50 and 51) may indicate vessels for the mixing and serving of wine. A duck/swan-head handle is also present within the assemblage at Newhouse Park (Glamorgan-Gwent) (Ponsford and Robic 2008). Both these sites are villas and suggest a connection between the villa and the consumption of wine in a culturally Roman manner.

As metal is a recyclable material, metal vessels appear rarely on rural sites and it is therefore difficult to draw conclusions from their distribution. Other vessels may also have served the function of a mixing vessel. Though specific vessel function is difficult to discern, large decorated samian bowls (such as the Dragendorff 37) may have been used to mix wine (Dannell 2006, 158). At some kilns Dr 37s were made with mottos, and many had vine-leaf decoration (*ibid*). These forms also show very few instances of wear indicative of interior abrasion, suggesting instead that they may have been used as containers (Willis 2005, 8.7.3). Dr 37 has the second highest MNV of all categories of samian vessel (MNV 76), indicating that they were widely available and desirable. The distribution of

decorated samian bowls has been explored above with regards to their function as vessels for eating from, but it is possible that they were multifunctional objects, or that it was their association with drinking in particular that made them desirable to rural populations in regions where the consumption of wine might be more unexpected.

However, cups were not the only vessel form associated with wine-drinking. Continental imported beakers are also strongly associated with wine, in particular black-slipped wares produced in central and east Gaul, which often featured white barbotine decorated mottos which played with the Roman conventions of wine-drinking (including *parce aquam* (spare the water) and *da merum* (bring unmixed wine) (Mudd 2014, 87) and perhaps indicate the irreverence with which the markers of elite, Roman social practice were sometimes treated in provincial contexts. Beakers generally held significantly more wine than cups and may therefore have represented a different style of drinking, whether this meant that wine was consumed in larger quantities or the vessels were intended for communal use.

Beakers could also be used for drinking beer, which was consumed in larger quantities. This may also have been the role of the tankard. The MNV of tankards is consistent through all periods and suggests that their use remained steady.

As discussed briefly above, communal drinking and eating had been an important feature in Iron Age society and its importance in post-Roman Welsh and Irish literature has also been noted (Arnold 1999). Though the vessels analysed here were clearly in domestic use, the power of feasts may derive from the ritualization of small-scale commensality. The social importance of communal drinking may also be indicated by the persistent popularity of the tankard form. The tankard appeared in Iron Age ceramics (including the Iron Age Durotrigan industry, the forerunner of Black Burnished Ware) at around the same time as wood and copper alloy tankards also appear in the archaeological record (Cool 2006, 169; Horn 2015). Iron Age tankards were wooden, single-handled vessels bound with copper-alloy sheet and often highly decorated. They often formed part of special deposits (such as the Langstone and Trawsfynydd tankards [Horn 2010]) or as part of hoards, including the Seven Sisters Hoard (Gwilt and Davies 2008, 146). Due to their larger size (c2.3l) were likely used for communal

drinking, perhaps in the contexts of feasts which were intended to strengthen social relations in a time of upheaval (Horn 2010, 336). The ceramic tankard may have absorbed some of the associations of the wood-and-copper-alloy tankard as a marker of a continuing Iron Age identity.

8.3.5 Food and Drink: Summary

Though the Romans introduced a number of foods into the study region, it appears from the evidence of the ceramic assemblage that there was not a radical change in food practice at rural sites in the study region through the Roman period. The predominance of jars and bowls within rural assemblages suggests that the tradition of food practice in which low-labour intensity preparations such as stews or porridges dominated continued at the majority of sites throughout the period.

While the forms of vessels which were used throughout this period remained constant, this was not because there was no access to new vessel forms. This is shown by the widespread adoption of the mortarium at rural sites in all regions and at all site types. If mortaria were exclusively associated with a Roman style of cooking such as that documented by Apicius, and linked with the production of sauces, it might be expected that they would appear predominantly conjunction with olive oil amphorae or forms of serving vessels which would be suited to the presentation of foods with separate sauces, such as dishes, plates, and platters. While mortaria do appear in assemblages which also include these vessels, the relationship between the vessel forms is not exclusive. This suggests that the mortarium was as suited to the jar-bowl style of cooking and eating as it was to that of the Roman dinner party, and that they were multifunctional objects used for a variety of food preparation practices in different settlement contexts, as indeed has been suggested by residue analysis (Cramp et al 2011).

The presence of mortaria at sites which do not otherwise appear to have radically changed their way of cooking and eating shows that selective adoption was employed by rural consumers, and that particular forms could be incorporated into existing practice. The preference for decorated samian bowls may be linked with pre-existing importance of communal eating and drinking.

However, indications of new practices can be seen at some sites. Where new forms which are more suited to different styles of food and food preparation are included they are primarily associated with villa sites. Villas consistently produce higher MNV of finewares and of the forms associated with 'Roman' style dining, such as plates and platters, and of evidence linked with the consumption of wine in a culturally 'Roman' manner. Here as elsewhere it seems that villa sites were the loci of new practices and identities which incorporated Roman introductions.

8.4 Discussion

The evidence explored above demonstrates varied responses to the Roman conquest which were mediated through the body through both food and personal presentation

In certain regions the evidence suggests the expression of identity in a distinctive way, such as in the north-west subregion of Upland Wales and the Marches. Here the absence of certain forms of Roman material culture (such as brooches) and a seeming preference for others (shale armlets, large decorated samian bowls) may suggest a particular expression of social identity which may derive from a continuation of Iron Age forms of both personal presentation and social practice. This suggests a strong sense of identity which, if not constructed in opposition to that of the Roman military occupation, seems not to have been expressed with reference to that identity.

By contrast, perhaps, the south-east seems to have had a generally high level of the adoption of new forms of material culture. This may have been a factor of ease of access to this material, and to previous contact with societies to the east which were already using brooches and pottery in the Iron Age. The incorporation of new forms of personal ornament and ceramics may not therefore have represented a challenge to existing ways of performing identity, but a complement.

The engagement of high-status sites with Roman material culture is consistent throughout the region. This is true of both villa and non-villa elite sites. Villa sites are consistently shown to be the settlements at which new categories of material culture – brooches, toilet and cosmetic implements – were adopted. However, it is

notable that high-status assemblages are not necessarily associated with villa sites, and hillforts such as Coygan Camp and Dinorben comprise some of the largest and 'richest' assemblages of both items of personal ornament and ceramics outside the south-east Central Belt. While within a villa context the presence of these objects suggest new ways of living, enabled both by the objects and the architectural context in which they were utilised, their presence on high-status sites without the architectural features consistent with villas suggest that identities could be articulated using a combination of new and existing forms.

Overall, the material culture of this region shows that personal identities and socio-cultural practices did not undergo a radical transformation following the Roman conquest. New forms and ways of expression were introduced, but they seem to have been selectively adopted by the region's inhabitants. It may be more accurate to suggest that objects were in some cases appropriated rather than incorporated, and that they may have been afforded new meanings by the contexts in which they were used.

9. Discussion

9.1 Introduction

This thesis has used data made available through the Rural Settlement of Roman Britain Project and supplementary data to explore a series of research areas and questions, as outlined at the beginning of the thesis and restated below:

- Regionality

How are settlements distributed throughout the study region and does this change throughout the Roman period? What factors are involved in the distribution of these settlements? To what extent can chronological change be observed?

- Economy

What is the economic basis of rural settlements in the study region? How can production, distribution, and consumption be explored through material culture?

- Personal Identities and Socio-Cultural Practice

How are personal identities expressed through material culture during this period, and does this change? Can interaction between the rural and military/urban be identified?

This chapter will integrate the evidence which has been explored in Chapters Six to Eight to engage with patterns which have emerged throughout the analysis, considering each of the research questions outlined in the introduction in greater depth and with reference to the broader field of Romano-British archaeology, contextualising the analysis with comparison to that of the project publications from the Rural Settlement of Roman Britain Project itself.

It will provide a critical review of the methodology and datasets which have been used and provide an overview of the results obtained through the analysis which has been carried out. It will then consider each of the research questions outlined in the introduction and consider each of these in depth.

9.2 Overview

This section will provide an overview of the three analytical chapters and draw out some of the primary conclusions and patterns which have emerged throughout the analysis.

9.2.1 Chapter Six – Landscape

Chapter Six focused on the settlement patterning within the region, exploring the density of settlements and the topographic variation between different site types. Settlement density was found to be variable throughout the study region, with large areas of little to no settlement identified in the mountainous central upland of Wales in particular. Data from the Portable Antiquities Scheme was used to explore if this pattern was supported by the evidence or if it was instead a feature caused by the lack of excavation in this region, and the differing levels of activity in the uplands do seem to indicate fluctuations in the level of activity in central Wales from the Neolithic to Medieval periods which indicate changing use of the landscape at elevation, whether due to the environmental or cultural factors.

The settlements were assigned to three periods: Early Roman (AD75-150), Middle Roman (AD150-300) and Late Roman (AD300+) and a broad chronological overview of settlement was provided. The number of settlements fluctuates over the study period, with new and distinctive settlement forms such as villas appearing in greater numbers in the Middle period while elsewhere continuity of Iron Age forms was maintained.

Settlement morphology was also explored, including both settlement forms such as enclosed and unenclosed settlements and internal structural morphology including roundhouse and villa settlements. Enclosed settlements were found to be more numerous in all periods, though factors of preservation and excavation likely contribute to this. Both villa and non-villa settlements display a topographical bias towards river valleys and plateaux/plains, is deriving from a preference for fertile agricultural land.

9.2.2 Chapter Seven – Economy

Chapter Seven explored the evidence for the economic basis of rural settlements and focused on three main aspects of the economy: production, distribution, and consumption.

Production was examined through the material and structural evidence for agriculture and secondary production. Evidence suggested a generally a generally mixed agricultural regime.

While objects associated with arable agriculture such as reaping hooks and scythes are rare, artefacts associated with crop-processing, such as quernstones, are more widespread. The differential distribution of quernstones and millstones suggests areas of small-scale and intensive agriculture, and this is supported by the distribution of corndriers which is heavily biased towards the villa sites of the Central Belt.

The practice of pastoral agriculture is indicated by the presence of objects such as ox-goads and shears, and also by objects related to secondary production such as spindlewhorls and loomweights indicating textile production. The function of villa sites as sites of intensive production is further suggested by higher concentrations of objects such as shears, suggesting that they may have functioned as central places for tenant farmers to bring their flocks for processing. The distribution of objects related to the processing of fleece for textiles is widespread, though with some regional differences: spindlewhorls are most widespread on sites in Upland Wales and the Marches, while there are fewer loomweights in this region than in the Central Belt, suggesting differences in the scale of production.

Evidence of non-agricultural production such as metalworking is also widespread, particularly at sites in the Marches near the core metal extraction area of the Forest of Dean.

Distribution was explored through the regional ceramic profile to understand the patterns of imported and Romano-British fabrics. The presence of ceramics in rural assemblages is widespread, though often in small quantities. High MNVs are

concentrated in the south east and along the line of the Marches. The function of coastal trade in the dispersal of imported and Romano-British pottery is also indicated by the patterns in samian ware and Black Burnished Ware, and the distribution of these fabrics closely resembles the possible routes suggested by ORBIS modelling (Scheidel and Meeks 2012). The difference between the broad distribution of these mass-produced fabrics traded through military networks and the limited distribution of regional fabrics such as Severn Valley Ware and South Wales Greyware, close to their kilns of origin, is also noted.

Finally, the section on consumption interrogated the distribution pattern of coinage in the region to explore how the extent to which rural settlements became integrated into a monetary economy. Significant regional variation was identified, with low numbers of coins in the north west and south west in all regions and higher numbers present at sites in the south east, particularly villa sites.

9.2.3 Chapter Eight – Personal Identity and Socio-Cultural Practice

Chapter Eight used items of personal ornament and further analysis of the regional ceramic assemblage to explore how personal identity was expressed during the Roman period, and how socio-cultural practices surrounding food and drink changed or were maintained.

The first part of this chapter focused on objects associated with the person, including toilet implements, brooches, and other items of personal ornament such as finger rings and bracelets. Patterns were varied across the study region, but again objects of were most densely distributed in the south east Central Belt. Regional variation in personal adornment and dress practice are also suggested by the absence of brooches from rural sites in some parts of the study region (such as the south west) and the clustering of certain objects in others (jet and shale armlets in the north west).

The second part of this chapter focused on the ceramic evidence as a means of exploring food practice within the region. Though new forms and fabrics were introduced, the high MNV of jars and bowls suggests a conservatism in food practice. Again, the villa sites of the south east represent the highest

concentrations of imported fabrics and of presentational forms such as plates and platters, as well as evidence of the consumption of wine.

9.3 Discussion

9.3.1 Regionality

One of the primary aims of this project was to examine regionality in settlement and material culture in Wales and the Marches. The distribution maps presented throughout this thesis show a significant level of regional variation in both settlement and material patterning has been established in the chapters as described above. This suggests that the responses of rural communities to Roman occupation were highly variable, and that this region should not be understood as a single, monolithic region, but as a multiplicity of interconnected regions.

In the initial design of this thesis the larger regions of the RSRB (Central Belt, Upland Wales and the Marches, Central West) were deliberately retained and were not refined into smaller sub-regions for analysis as had been done in similar large-scale projects, and indeed by the RSRB itself throughout its series of project publications (Smith et al 2016, 2018; Allen et al 2017). In the case of the RSRB the Natural Areas (now the Natural Character Areas) designated by Natural England and based on geographic, ecological and historical variations in landscape character were used to refine analysis to case study level (Smith *et al* 2016, 15). Logistically, this would have been difficult to apply to a region spanning both Wales and the Marches. Additionally, the intent in retaining the larger analytic units of the RSRB was to move away from both the imposition of modern administrative boundaries into the past and from the blunt regional approach which has often structured the archaeology of Wales in particular, dividing it into ordinal quadrants (e.g. Arnold and Davies 2000). The RSRB regions allow for the analysis of patterns across modern geographical borders and have been particularly valuable in breaking down the conceptual barrier of the Anglo-Welsh border.

However, there are also some drawbacks to the approach, and most significantly the reconfiguration of large areas into single entities has the effect of masking nuances in patterning, especially when data is presented in tabular form as

throughout the analysis presented in this thesis. Upland Wales and the Marches, for example, is a region of 20,466km^2, and though it has the lowest number of records of any of the RSRB regions to consider patterns in tabular form as presented throughout this thesis unfortunately elides some of the variation in patterning throughout the region which suggests strongly regional responses. There are, for example, strong differences between the north west and south west of Upland Wales and the Marches.

North west Wales displays distinct regional characteristics in settlement patterning and the morphology of both the settlements and associated buildings. The rectilinear stone enclosure as typified by sites such as Hafotty-Wern-Las (Gwynedd) is distinct in comparison to other parts of this region, and settlements appear to have emerged primarily in the Early Roman period (Chapter Six), possibly in response to Roman military activity in the region (though Iron Age phases may be unidentified) (Smith et al 2016, 366). By contrast, rural settlements in the south west display greater continuity of settlement form from the Iron Age into the Early Roman period, such as the banked and ditched enclosures typified by sites such as Dan-y-Coed (Dyfed). The different development of settlement patterning in this region must be aligned with variations in material culture which also indicate varying levels of economic engagement and different methods of self-presentation and articulation of identities.

Other artefact distributions also indicate the regional distinctiveness of the north west: glass, jet, and shale bracelets and armlets cluster in this region, while by contrast brooches are rare site finds (though PAS distributions show finds along either side of the Menai Strait and along the north-east coast of Anglesey (Chapter Eight, Fig. 8.4). The change in settlement form seemingly coinciding with the Roman occupation in conjunction with the retention of Iron Age styles of dress and ornamentation may suggest a population which was seeking ways of articulating continuity. Though the Roman conquest brought new categories of material culture into the area, imported material culture may have been appropriated into these processes: Chapter Eight highlights the presence of decorated samian ware bowls on rural sites in the north west, which it is suggested became incorporated into a continuation of communal dining or drinking practice. While the chronology of the material culture is difficult to

ascertain from the RSRB evidence, the combination of settlement and material evidence suggests a region with a strong collective identity, one which though evoking a sense of continuity was in fact derived in part from and strengthened by the transformative processes of Roman conquest and occupation.

Another region which has been considered materially distinct is south east Wales. This area, primarily focused on Gwent and Glamorgan, has long been identified as distinct within the bounded entity of 'Roman Wales', but the use of the RSRB regions places it within a broader context encompassing the region to its east, across modern administrative borders. As noted above, the use of RSRB regions has been useful in breaking down the Anglo-Welsh border as a conceptual barrier, and the recontextualization of this area demonstrates that it may be more fruitfully understood as the western extension of a broader pattern of settlement and material culture present in the Severn Estuary, Gloucester and Herefordshire rather than a distinctive subset of 'Roman Wales'. However, by limiting the scope of the study region it also resists subsuming south east Wales within the larger datasets provided by the materially richer settlements to the east.

The greatest breaks with settlement form may be found in the south east Central Belt region. Villa settlements emerge here in greater numbers than elsewhere, and though sites such as Kingscote (Gloucester) and Frocester (Gloucester) represent the western edge of the pattern of large villa settlements which characterise the Cotswolds, the material characteristics of villas in Wales proper are recognisably part of a material suite which is a new introduction to the region. As noted in the previous chapters, rectilinear structures were known in the pre-Roman Iron Age but seemingly served auxiliary functions, as at Goldcliff West (Glamorgan-Gwent). Features such as hypocausts and tiled floors have no parallel in the pre-Roman architecture of the study region and suggest not only the introduction of new materials but of new ways of living, new desires. Smith suggests that the development of the villa at Whitton is emblematic of a shift increasing social stratification, with the gradual move from a loose grouping of roundhouses occupied by extended family units to rectilinear buildings of varying size and complexity signifying the emergence of a hierarchy (Smith 1998, 238). The break with vernacular architecture may have allowed for other shifts, creating dynamic spaces where social practice and identity was more fluid. The consistent association of high-status material culture such as imported finewares

and items of personal ornament, as well as new modes of dress indicated by the increasing adoption of brooches, in comparison to other settlements in the same area, does indicate that villa settlements had not only a distinctive character but influenced both the social fabric of the region and the personal identities of their inhabitants.

The emergence of villa settlements also has implications for patterns of land ownership and land tenure in this area. The intensification of agricultural production associated with villa settlement as identified in Chapter Seven suggests an increase in the amount of land under cultivation and perhaps in the relationships between villas and the surrounding smaller farms. Villas may have served as intermediaries between these smaller rural sites and the Roman power structure (Derks and Roymans 2011, 163). Such a role fits the fluidity evinced in the material culture of villa settlements.

When considering distribution patterns, it is important to note that absence can be conceptualised as a pattern in its own right. A consistent pattern which can be seen in almost all the distribution maps produced throughout this thesis was the absence of rural settlement artefact distributions in the central Welsh uplands. While this is likely due to a combination of factors as explored in Chapter Five (including geography and modern land-use), the use of Portable Antiquities Scheme data suggests (with caveats) that human presence and land-use in the uplands fluctuated over the course of the second and first millennia BC. These fluctuations may be linked to climatic variation and decline, particularly in the middle Iron Age, though human factors should also be considered, such as transhumant pastoralism or a continued cultural association of the upland with prehistoric ritual and funerary use (Lynch et al 2000, 80; Pollock 2006, 84).

9.3.2 Rural Economy

The introduction to Chapter Seven introduced debates about the scale and complexity of the Roman economy, which have largely been divided between 'primitivists' and 'modernists' (Mattingly 2006).

Economic structures certainly became more formalised within the study region during the Roman period. The road networks constructed as part of the Roman

conquest to supply the military campaigns facilitated the movement of goods and people, as demonstrated by the distribution patterns of objects such as Black Burnished Ware pottery over much of the study region. This pottery formed part of military supply networks (Allen and Fulford 1996, 267), and emphasises the extent to which the Roman military seems to have been the driver of economic development in the study region, moving goods on a scale far beyond that of the Late Iron Age, stimulating the intensification of agricultural and secondary production to serve its own needs, and introducing transactional coin use in the form of both taxation and coin exchange. In this way, the economic development of the study region seems to agree most closely with Mattingly's view that the Roman economy is better understood not as an overarching system but rather as a series of economies – political, social, and market – which interacted with each other (2006, 296). There certainly seems to have been variation within the study region in engagement with each of these facets of the Roman economy.

The primary basis of the rural settlement economy throughout the study region is agriculture, though there are regional variations in the distribution of artefacts which suggest that it was practiced on different scales, from the household to the creation of surplus.

Across Upland Wales and the Marches evidence suggests that farming was focused at the household level. Quernstones are widespread across the north west, but an absence of millstones, corndriers, and storage structures identified as granaries suggests that intensive crop-processing and surplus production was not practiced. The small numbers of corndriers also suggest an absence of intensive crop processing and instead of small-scale production in these regions. This in turn raises questions of supply, particularly in the north west where the military presence continued into the 4th century. While the fort at Segontium represented a ready market for agricultural produce, could it have supplied its needs from the rural settlements in its vicinity, or was it reliant on long-distance supply routes? ORBIS modelling outlined in Chapter Seven indicates that coastal trade would have been a viable supply route, as would the Chester-Caernarvon road.

By contrast, the south east appears to have been involved in a process of both intensification and centralisation of agricultural production. The concentration of millstones and corndriers in this region, both strongly associated with villa

development, suggest that these were sites at which intensive agricultural production and processing was carried out. Shears are also strongly associated with the villa sites of the south east, as are spindlewhorls and loomweights. This suggests a centralisation of both sheep-shearing and the processing of textiles, which as noted above may indicate a tenurial relationship between villa settlements and the surrounding rural settlement landscape. The economic and social development may have been interlinked, with the importance of villa settlements as economic intermediaries drawing together the fabric of rural settlement into an increasing social stratification.

The preferential siting of villas near river valleys and roads would have helped to increase connectivity and facilitated trade. Taken together this evidence suggests that villa sites were in a position to create greater quantities of agricultural surplus than farm sites. The trade of this surplus may have created capital, which in turn contributed to the development of villa settlements and their material suites, as noted above. This higher level of economic activity within villa sites is supported by the greater range of material culture which is present on villa sites, and the higher quantities of coins which are recovered from villa assemblages.

The extent to which rural settlements were integrated into wider networks of exchange within the study area appears to have been variable. That rural sites had access to networks of exchange is demonstrated by the presence of imported pottery at rural sites throughout the study region, though again there are significant differences in the levels of material culture, with high MNV concentrated in the south east.

A further consideration is how such objects were obtained. The Roman economy was a monetary economy, and trade was largely conducted through monetary transaction. How far were rural settlements integrated into the monetary economy? The levels of coinage present at sites in different regions is widely variable, with Central Belt sites producing significantly more coinage and this suggests that they were more closely integrated into the transactional economy, though the highest levels of coinage even within the Central Belt do not occur before the late 3rd century and the highest are reached in the 4th century. Did coins become enmeshed in relations between rural settlements, or was their use restricted, for example, to the payment of taxation to the Roman state. In this

way coins may be seen as objects implicated in negotiation between the individual and the state.

The widespread practice of hoarding in the study region suggests that coins were understood to have intrinsic value, but this does not necessarily mean that they were used transactionally. The low levels of coins at many sites may have been due to their limited utility for much of the rural population. Small denominations do not appear at rural sites until the introduction of radii and numii in the 3rd century, and suggest that coinage was not used for small-scale transactional purposes until the Late period. Exchange could therefore have been conducted in kind, or through an alternative transactional system. In north west Wales it has been suggested that imported pottery such as Black Burnished Ware could have been used in economic transactions in place of currency (Fulford 2018, 361). This fits well with the pattern of evidence in north west Wales, where Black Burnished Ware and samian ware are widespread at rural settlements (though in very small MNV) while coins are very rare.

However, the economic pattern of the north west is likely to be transformed by the discovery and excavation of Tai Cochion, a nucleated settlement across the Menai Strait from Caernarvon. Tai Cochion is an undefended settlement covering c14ha, with strip-building development more closely resembling ribbon-developments or small towns elsewhere in Roman Britain (Hopewell 2018, 16), and is unique within the context of north west Wales. The site's position on the Menai Strait and the high levels of coin presence in comparison to the rural settlements both on Anglesey and in mainland Gwynedd suggest that it functioned as a locus of trade and may therefore have served an intermediary function between the military and civilian populations. This may have been a way in which the agricultural capital of the rural settlements could be converted into the coinage with which taxes could be paid.

9.3.3 Personal Identities and Socio-Cultural Practices

As outlined in Chapter Four and in the introduction to Chapter Eight, increasing emphasis has been placed on the role of material culture in the formation and maintenance of personal identities in the Roman period. While the Roman

conquest was a period of large-scale political and social change, these changes were mediated through everyday interactions with objects.

Changes in dress practice and personal presentation may be most clearly identified in the south east of the study region, where the greatest numbers of items associated with personal presentation are present. This is true of all artefacts within this category,

The association of brooches with female dress (Cool 2014, 413) open the way for examination of the archaeology of gender in the study region. Jewellery is also often treated as a gendered artefact category (Sherratt and Moore 2016, 370). Jet items, for example, have been associated with female sexed burials (Allason-Jones 1996). It may be therefore that the concentrations of jet and shale objects in north west Wales and the absence of brooches are both linked with particularly female dress practice. The example used in Chapter Eight of the development of the sari and salwar kameez as a response to British colonial presence in India shows the sensitivity of dress practice to outside forces (Rothe 2012, 247), and it may be that this was a style of dress which emerged as a means of self-definition. In Chapter Eight it was also noted that cooking is a skill which is often passed down the female line, from mother to daughter: in this way, the continued dominance of bowls and jars which imply a continuation of food culture from the Iron Age becomes in part a gendered practice. Perhaps part of the social role of women in this region was as preservers of traditional regional identities.

Of course, gender should not be understood as a homogenous identity, and the difference in the expression of elite and non-elite identities will have been very different. Identities also cut across categories of age and sexuality which have so far been relatively under-studied in Roman Britain (Gilchrist 2006, 142). Exploration of masculinities should also form a part of these approaches: the limited distribution of crossbow brooches throughout the study region may be understood as part of an articulation of masculinity that was not derived from Roman military examples.

Throughout this thesis concentrations of new forms of material culture and innovations in economic practice have been focused on villa settlements. These are settlements where social practice and identities appear to be at their most

receptive and fluid. Villa settlements are often understood as evidence of increasing engagement of the rural population with Roman culture and social practice. Though elite aspiration has traditionally formed a part of romanisation approaches which been reframed as problematic in the last decades (see 3.1.1 for a fuller discussion), it may be more useful to consider the material suites encountered at villa sites in the light of the 'ontological turn' and material agency approaches. Objects are understood to have affordances, that not only make possible but influence the way in which they are used (Van Oyen 2015; Swift 2018). Buildings may also have affordances in the same way, and the villa's structuring of domestic space in unfamiliar forms makes possible the restructuring of personal presentation and social interaction: certain forms of practice become possible because of the affordances and associations of the villa settlement. For example, the strong correlation between villa sites and objects of personal care such as toilet and cosmetic implements within the study region might indicate a new approach to the care of the self which is associated with the presence of the bathhouse as part of the suite of characteristics associated with the villa as a settlement class. The presence of forms of pottery associated with dining culture, such as plates and platters, may be linked with the ways in which the physical properties of the villa afforded the opportunity to create spaces for formal dining.

Military Interaction

The focus on rural settlements to the exclusion of military sites and material throughout this thesis was intended to redress a traditional bias towards the study of the military in the archaeology of Wales and the Marches. While this has been successful in maintaining a focus on rural settlement archaeology, it has to some extent created a lacuna in the distribution patterns presented throughout. In future the incorporation of military and urban material and ceramic assemblages would give greater dimension to the patterns which have been observed within this thesis.

For much of the study region the military presents the major point of transmission with 'Roman' culture, and this should be taken into consideration when analysing the ways in which rural populations reacted to and engaged with Roman material culture. The importance of material culture in the creation of a distinct military identity has formed part of the recent theoretical shift in the understanding of

identity (Gardner 2016). The military underpinnings of the discipline of Roman archaeology have come under increasing scrutiny: the imperial origins of Romano-British archaeology have been stressed in recent years (Hingley 2013), the mechanisms by which Roman material culture entered the provinces and became part of native social practice have been central to romanisation debates (e.g. Millett 1990) and post-colonial approaches to the archaeology itself have examined both the Roman empire as an imperial and colonial entity and the asymmetric power relationships between Roman and native in the conquered territories (Webster 1996). The study region of this thesis, with its varied material and settlement responses, may make a good testing ground for these approaches. However, the practical ways in which power was wielded and maintained by the Roman state, such as the use of violence, have received comparatively little attention (James 2002). The Tacitean narrative as outlined in Chapter Four makes clear that the conquest of Wales was violent and protracted, and the ways in which this may have shaped subsequent engagement with Roman material culture have received limited attention in the literature surrounding the study region. Violence is difficult to contend with in the archaeological record, often leaving few traces.

The influence of the military in the introduction and movement of material culture in the region is felt most clearly in the distribution of material culture such as imported and Romano-British ceramics. This is particularly true of Black Burnished and samian wares which formed part of military supply contracts. The importance of military supply as a driver of trade is shown by the far more localised distributions of wares such as Severn Valley Ware, which did not form part of military supply but moved through civilian networks. The coastal distribution of samian and Black Burnished Ware mirrors the path suggested by the ORBIS modelling as shown in Chapter Seven (Scheidel and Meeks 2012) showing routes between Caerleon and Chester. The continued importance of securing this fast and economical route (in comparison with land routes; see Chapter Seven) may have played a role in the continuing military presence in the north west.

As noted elsewhere, while the intensive military occupation of the conquest period and immediate aftermath was reduced by the 2nd century, the north west retained a continuous military presence until the late 4th century (Arnold and Davies 2000, 34) at Segontium. Recent discoveries of a fortlet at Cemlyn Bay

(overlooking a convenient possible landing point on the north coast of Anglesey (Hopewell 2018, 17) and a potential fourth-century watchtower at Pen Bryn-yr-Eglwys on the north-west coast also attest to the continued strategic importance of Anglesey and north-west Gwynedd even at the end of the Roman period (Hopewell 2018, 18). While Caerleon and Chester were both retained as legionary fortresses throughout the Roman occupation, both lay in regions which developed structures of civilian governance centred on urban developments (Caerwent and Wroxeter, respectively). North west Wales, by contrast, did not develop nucleated settlements (with the exception of Tai Cochion) or civilian governance. It has therefore been assumed that the region remained under direct military governance. This makes it an interesting case study in the long-term effects of interaction between military and rural populations.

Interaction between the military and civilian populations is demonstrated by the presence of imported pottery at rural sites throughout north west Wales. The presence of South Gaulish samian ware at some rural sites suggests that access to pottery, including finewares, was established even in the Early period, and perhaps that the pre-Roman status of some of the sites receiving these early finewares, such as Bryn Eryr, was carried over into the Iron Age (Longley et al 1991, 243) – this may have been part of a Roman policy employed elsewhere of using local elites to maintain control over local populations. However, despite this material interaction between rural and military, there does not appear to have been much engagement of military dress or means of presentation. In the north west, the regional preference for certain forms of personal ornament such as bracelets and armlets of black material and a continuing preference for the roundhouse over rectilinear settlement suggest an effort to create or sustain a separate identity. Elsewhere, such as in the south east of Upland Wales and the Marches, though the adoption of brooches in the south east indicates changing dress, the forms of brooches present at rural sites are not those associated with military communities, and in particular the general absence of crossbow brooches which were closely associated with male, elite military identities in the 4th century, may suggest a way of presenting the self without reference to military identities, if not in opposition to this means of presentation.

Roman power could be wielded not only at the edge of a sword, but in control over the landscape itself. The Roman road network which facilitated the wide

distribution of traded goods throughout the study region was originally intended to facilitate military supply to the campaigns which brought the region under Roman control. The absence of settlement in the central uplands has been discussed above, but a further explanation may lie in the continued military presence in the region which may have been intended to restrict access or movement. The intensity of campaigning and of early military occupation is likely to have severely curtailed the movement of local populations through upland routes and may have disrupted patterns of land-use, such as transhumant pastoralism. Tacitus notes that during the conquest period the Silures and Ordovices had taken advantage of the terrain against the Roman military, and the subsequent siting of forts at mountain passes and river valleys indicates their purpose not only for facilitating military communications, but also in supervising and controlling access (Davies 2008, 93). Roman military power over the landscape could also be demonstrated by way of large-scale projects such as the Wentlooge reclamation, where military involvement is indicated by the Goldcliff Stone (RIB 395). The nature of the Roman army as an occupying force and the consequent power imbalance, particularly in the early period, should not be forgotten when considering settlement patterns in this period.

9.4 Critical Review

This section will situate this thesis within the broader context of the RSRB project. It will also explore the strengths and weaknesses of the dataset which formed the basis for analysis and offer a critical appraisal of the new ceramic methodology which has devised for this thesis.

9.4.1 'Big Data' and the Rural Settlement of Roman Britain Project

Contextualising the thesis
The RSRB has also taken a similar approach to this thesis in focusing its project volumes on different aspects of the study of rural settlement. The first volume provides an introduction to the project and an overview of the information (Smith et al 2016). The second volume focuses on the rural economy (Allen et al 2017). The third volume focuses on social practice and incorporates personal ornament, religious practice, and funerary evidence into a far-reaching analysis (Smith et al

2018). These divisions reflect those used within this thesis and emphasise the importance of these research questions for fully understanding rural settlement.

The RSRB project volumes reflect the full scope of the project and its participants and include a far wider range of information than could be accommodated within the scope of this thesis, including zoarchaeological and bioarchaeological data. Its conclusions are consequently more far-reaching in scope. Where the project does focus on case-studies from the study area of this thesis, its findings are generally in agreement with those derived from the analysis in this thesis. Upland Wales and the Marches and north west Wales in particular are used as case studies throughout the project volumes (e.g. in *Rural Economy of Roman* Britain (Allen et al 2017, 167-171) and *Life and Death in the Countryside of Roman Britain* (Smith et al 2018), 39-41), and through these analyses the distinctiveness of this region is affirmed: the use of jet, shale, and glass in personal ornament, the continued small-scale production.

This thesis complements the broader RSRB project by focusing the resources derived from a large research project on a relatively small area. It provides an opportunity to understand the potential future uses of the RSRB dataset and the way in which large datasets may be used to reframe the narratives of regions which have traditionally received limited academic attention.

Critical Approaches

This thesis was one of the first to incorporate data from the Rural Settlement of Roman Britain Project and has therefore to some extent been a testing ground for the long-term utility of the RSRB dataset as a tool for secondary research, and particularly for doctoral work.

While the RSRB Project has provided an invaluable resource, several issues have been encountered when using the RSRB data. One which has been consistent throughout the thesis has been the difficulty of viewing change throughout the study period due to the lack of chronological specificity in the categories, particularly with regards to artefact categories. While this was possible with coinage and to a certain extent with brooches (by using typology as a rough proxy for chronology), many of the material categories have only been given a numerical value of a number of objects. This has meant that it has not been possible to

track changes over time for some categories of material which have been considered in this thesis, such as items of personal ornament, which necessarily limits the conclusions which can be drawn from the material. This might have been achieved by revisiting each category and analysing the material, but with 183 sites included in the study region the amount of time required to carry out such analysis would have been prohibitive.

In certain cases the use of large datasets such as that of the Rural Settlement of Roman Britain project can lead to a descriptive approach to settlement patterning without further analysis, but the 'dots on maps' approach can still be valuable in regions such as Wales and the Marches where the broad patterns of settlement and material culture distribution have not been well-understood. While fine-grained detail has inevitably been lost as a result of the scale at which the data must be captured in order to make it as inclusive as possible, the ability to view distributions across such a broad geographic area has been valuable for identifying different patterns within a region which has sometimes been conceptualised as a single entity, 'Roman Wales'. A stronger understanding of the different settlement patterns and the distribution of material culture has been achieved.

One issue which is applicable to large datasets compiled as part of finite projects, and to the RSRB in particularly as a publicly available database on the Archaeology Data Service, is its continued relevance. Data collection was completed in 2013 for England and 2014 for Wales and therefore for the purposes of this thesis the RSRB database was broadly up to date; however, the lack of future updates will mean that subsequent projects seeking to use it as a basis for regional study will either have to work within the limitations of this dataset or will require additional work to identify sites which have been excavated in the intervening period. This will inevitably impact the RSRB's utility as a tool for study in years to come. However, it should be emphasised that the Rural Settlement in Roman Britain Project database represents an excellent resource for the study of Roman Britain, particularly for doctoral projects, and the results which have been obtained as part of this thesis have enabled a fuller understanding of the rural settlement of this region.

9.4.2 Ceramic Methodology

The ceramic methodology devised for this thesis was intended to counter the issues of standardisation of categorisation and quantification which have previously stymied inter-site comparison within this study region. It represents the first attempt within this study region to overcome these issues, and this methodology has allowed for the incorporation of a wide range of ceramics from a large number of sites within the study region. The regional comparison which this approach has enabled has demonstrated some interesting patterns and increased understanding of the adoption of ceramics in a region which was largely aceramic during the Iron Age, and of the integration of rural settlements into wider networks of exchange and consumption. The data has shown that there was widespread access to and adoption of ceramics throughout the Roman period, despite its reputation as materially poor. However, the data also shows that there was significant variation between the various sub-regions.

The widespread distribution of fabrics such as Black Burnished Ware and continental imports such as samian ware were likely part of military distribution networks and were therefore traded widely and appeared on sites throughout the study region, with distributions confirming the importance of coastal routes for military trade up to the fort at Segontium and on to Chester. Other fabrics such as Severn Valley Ware had a more limited distribution close to their kilns of origin, indicating that the trade was conducted via a different mechanism and one which was based on civilian supply and demand rather than large-scale military contracts. The chronological distribution of pottery indicates that the largest quantities of pottery were distributed within the region in the Middle period, coinciding with the increase in coinage and agricultural production. The broad conclusions of the methodological work undertaken in this thesis agree with those of Timby's case-study focusing on the western Central Belt, which also used RSRB data (2018, 305-357)

The methodology has both strengths and weaknesses. Due to its ability to incorporate data from a wide variety of sites it is particularly strong at showing distribution patterns, and this has been valuable for exploring the extent to which pottery was traded across the region and its presence and consumption at rural sites. The use of Minimum Numbers of Vessels certainly underestimates the number of vessels which were in use at rural sites, but this is preferable to overestimation and gives a broad understanding of the level of ceramic use at

sites throughout the region. The method can be used for a range of sites where the information is limited or where issues of standardisation with existing methods of quantification preclude inter-site comparison.

9.5   Final Statement

This thesis has aimed to give a new perspective on the rural settlement of the Roman period in Wales and the Marches. It has explored the ways in which the abundance of excavated settlement data which has been amassed over the decades of developer-funded archaeology can be used to re-examine regions which have previously been marginalised in -the wider field of Romano-British archaeology.

Throughout the analysis conducted within this thesis the rural settlements of Wales and the Marches display complex and diverse reactions to their incorporation into the wider Roman empire, demonstrating that the tendency towards considering this region as an addendum to the materially richer territories to the east does a disservice to the diversity and dynamism of the regional rural settlement pattern and material culture. This thesis has been a first step towards a fuller consideration of the people of this region not as a backdrop to the story of the 'Romans in Wales and the Marches', but as active participants within that story.

Bibliography

Ancient Authors

Apicius. *On the subject of cooking*.

Cassius Dio. *Roman History*.

Tacitus. *Agricola*.

Tacitus. *Annals*.

Varro. *On the Latin Language*.

Modern Texts

Aarts, J. 2005. Coins, money and exchange in the Roman world. A cultural-economic perspective. *Archaeological Dialogues*, *12*(1), 1-28.

Adams, C.E. 2001. Feeding the wolf: logistics and the Roman army-ROTH JONATHAN P., THE LOGISTICS OF THE ROMAN ARMY AT WAR (264 BC-AD 235)(Columbia Studies in the Classical Tradition 23; Brill, Leiden 1999). Pp. xv+ 399. ISBN 90 4 11271 5. $129. ERDKAMP PAUL, HUNGER AND THE SWORD: WARFARE AND FOOD SUPPLY IN ROMAN REPUBLICAN WARS (264-30 BC)(Gieben, Amsterdam 1998). Pp. vii+ 324, 4 maps. ISBN 9 0506 3608 X£ 45. *Journal of Roman Archaeology 14*, 465-472.

Alcock, L. 1963. *Dinas Powys*, Cardiff: Cardiff University Press

Aldhouse-Green, M. 2004a. Crowning glories: languages of hair in later prehistoric Europe. *Proceedings of the Prehistoric Society* 70, 299-325

Aldhouse-Green, M.J. 2004b. The Iron Age: Art, Ritual and Society. In S Aldhouse-Green, M Aldhouse-Green, and R. Howell. (eds) **The Gwent County History, Volume I: Gwent in Prehistory and Early History**. Cardiff: University of Wales Press

Aldhouse-Green, S., Aldhouse-Green, M. and Howell, R., 2004. **The Gwent County History, Volume I: Gwent in Prehistory and Early History**. Cardiff: University of Wales Press

Alex M. Gibson 1999. *The Walton Basin project: excavation and survey in a prehistoric landscape 1993-7*. Council for British Archaeology 118

Allason-Jones, L. 2001. Material culture and identity. In S. James and M. Millet (eds) *Britons and Romans: Advancing an Archaeological Agenda*. York: Council for British Archaeology, 19-25

Allason-Jones, L. 2002. The Jet Industry and Allied Trades in Roman Britain. In P. Wilson and J Price (eds) **Aspects of Industry in Roman Yorkshire and the North** 125-132, Oxford: Oxbow Books

Allason-Jones, L. 2011a. Recreation. In L Allason-Jones. **Artefacts in Roman Britain: Their Purpose and Use**, 219-242, Cambridge: Cambridge University Press

Allason-Jones, L. 2011b. *Artefacts in Roman Britain: their purpose and use*. Cambridge University Press.

Allason-Jones, L. 2015. Women in Roman Britain. S. I. James and S. Dillon (eds) *A Companion to Women in the Ancient World*. Oxford: Wiley-Blackwell, 34-476

Allason-Jones, L. and Jones, J.M. 2001. Identification of 'jet' artefacts by reflected light microscopy. *European Journal of Archaeology 4*(2), 233-251.

Allen, J. R. L. and Fulford, M. G. 1996. The Distribution of South-East Dorset Black-Burnished Category I Pottery in South-West Britain. *Britannia* 28, 223-281

Allen, J. R. L., and Fulford, M G. 1986. The Wentlooge Level: A Romano-British Saltmarsh Reclamation in South-east Wales. *Britannia* 17, 91-117

Allen, J.R.L. and Fulford, M.G. 1987. Romano-British settlement and industry on the wetlands of the Severn Estuary. *The Antiquaries Journal*, 67 (2), 237-289.

Allen, J.R.L. Fulford, M.G. and Todd, J.A. 2007. Burnt Kimmeridge Shale at Early Roman Silchester, South-East England, and the Roman Poole-Purbeck Complex-Agglomerated Geomaterials Industry. *Oxford Journal of Archaeology* 26(2) 167-191.

Allen, M., Blick, N., Brindle, T., Evans, T., Fulford, M., Holbrook, N., Richards, J. D., Smith, A. 2015. *The Rural Settlement of Roman Britain: an online resource* [data-set]. York: Archaeology Data Service [distributor] (doi:10.5284/1030449) Accessed: 1st September 2018

Allen, M., Lodwick, L., Brindle, T., Fulford, M. and Smith, A., 2017. *The Rural economy of Roman Britain: New Visions of the Countryside of Roman Britain Volume 2.* London: Society for the Promotion of Roman Studies

Appadurai, A. 1986. *The Social Life of Things: Commodities in Cultural Perspective*. Cambridge: Cambridge University Press.

Applebaum, S., 1958. Agriculture in Roman Britain. *The Agricultural History Review* 6(2), 66-86.

Armit, I. 2007. Hillforts at War: From Maiden Castle to Taniwaha Pā. *Proceedings of the Prehistoric Society* 73, 25–37.

Arnold, B. 1999. 'Drinking the feast': alcohol and the legitimation of power in Celtic Europe. *Cambridge Archaeological Journal*, *9*(1), 71-93.

Arnold, C. J. and Davies, J. L. 2000. *Roman and Early Medieval Wales*, Stroud: Sutton Publishing

Ashmore, W. and Blackmore, C., 2008. Landscape archaeology. In D. M. Pearsall (ed) **Encyclopedia of Archaeology**, 1569-1578

Barber, A., Cox, S and Hancocks, A. 2006. A Late Iron Age and Roman Farm at RAF St Athan, Vale of Glamorgan. Evaluation and Excavation 2002-03. *Archaeologia Cambrensis* 155, 49-115

Barber, A.J., and Holbrook, N. 2000. A Roman Iron-Smelting Site at Blakeney, Gloucestershire: excavations at Millend Lane 1997, *Transactions of the Bristol and Gloucestershire Archaeological Society* 118, 33-60

Barclay, A., Knight, D., Booth, P., Evans, J., Brown, D.H., Wood, I. 2016. **A Standard for Pottery Studies in Archaeology.** Historic England

Barker, L. and Driver, T. 2011. Close to the edge: New perspectives on the architecture, function and regional geographies of the coastal promontory forts of the Castlemartin Peninsula, South Pembrokeshire, Wales. *Proceedings of the Prehistoric Society*, 77, 65-87

Barrett, J.C. 1989. *Barbarians and Romans in North-West Europe: from the later Republic to late Antiquity.* **British Archaeological Reports (International Series) 478**

Barrett, J.C. 1997. Romanization: a critical comment. **Journal of Roman Archaeology – Supplementary Series** 23, 51–66.

Baxter, M.J. and Cool, H.E.M. 2016. Reinventing the wheel? Modelling temporal uncertainty with applications to brooch distributions in Roman Britain. *Journal of Archaeological Science 66*, 120-127.

Bayley, J. and Butcher, S. 1981. Variations in alloy composition of Roman Brooches. *Revue d'Archéométrie, Supplement,* 29-36

Bayley, J. and Butcher, S. 2004. Roman brooches in Britain: a Technological and Typological Study based on the Richborough Collection. *Report of the Research Committee of the Society of Antiquaries of London*, 68.

Baynes, E. N. 1908. The excavations at Din Lligwy, *Archaeologia Cambrensis* 6.8, 183-210

Baynes, E. N.1930. Further excavations at Din Lligwy, *Archaeologia Cambrensis* 85, 375-393

Baynes, E.N. 1908. Excavations at Din Lligwy. *Archaeologia Cambrensis 8*,183-210.

Beasley, M. 2003. Nash, Waste Water Treatment Works (ST 337 840). *Archaeology in Wales* 43, 124

Beaton, M. and Newman, R. 1986. Dan-y-Graig, Porthcawl (SS 84077805). *Archaeology in Wales* 26, 44-45

Bell, M., Caseldine, A. and Neumann, H. 2000. *Prehistoric intertidal archaeology in the Welsh Severn Estuary, Council for British Archaeology 120*

Benson, D.G., Evans, J.G., Williams, G.H., Darvill, T., David, A., Brennan, D., Caseldine, A.E., Cole, R., Dresser, Q., Hyde, L.M. and O'connor, T. 1990. Excavations at Stackpole Warren, Dyfed. *Proceedings of the Prehistoric Society* 56, 179-245

Besly, E. 1998. Rogiet area (ST 45 82). *Archaeology in Wales* 38,121-174

Bevan, A., 2015. The data deluge. *Antiquity*, *89*(348), 1473-1484.

Bevan, B. 1999. *Northern exposure: interpretative devolution and the Iron Ages in Britain*. Leicester: Leicester University Monograph

Biddulph, E. 2008. Form and function: the experimental use of Roman Samian ware cups. *Oxford Journal of Archaeology* 27(1), 91-100.

Birley, A.R. 2002. Officers of the Second Augustan Legion in Britain. In R. J. Brewer (ed) *Birthday of the Eagle: The Second Augustan Legion and the Roman Military Machine*, Cardiff: National Museum of Wales, 103-124

Bishop, M.C. 1999. Praesidium: social, military, and logistical aspects of the Roman army's provincial distribution during the early principate in A Goldsworthy and I Haynes, I (eds). The Roman Army as a Community, Journal of Roman Archaeology Supplementary Series 34. Portsmouth: RI, 111-18.

Blockley, K. 1989 Excavations on the Romano-British Settlement at Ffrith, Clwyd, 1967-9. *Flintshire Historical Society Journal* 32, 135-165

Blockley, K. 1989. *Prestatyn 1984-5: An Iron Age Farm and Romano-British Industrial Settlement in North Wales British Archaeological Reports (British Series) 210*

Blockley, K. 1989b. 'Excavations on the Romano-British settlement at Ffrith, Clwyd, 1967-9', *Flintshire Historical Society Journal* 32, 135-165

Bond, C.J. 2007. The Portable Antiquities Scheme: the contribution of lithics and lithic scatters. In S. Worrell, G. Negan, and J. Naylor (eds) *A Decade of Discovery. Proceedings of the Portable Antiquities Scheme Conference*, *British Archaeological Reports (British Series) 520*, 19-38

Boon, G. C. 1988. The Samian Ware. In D. Robinson, *British Archaeological Reports (British Series)* 188, 160-161

Boon, G.C. 1966. 'Legionary' Ware at Caerleon. *Archaeologia Cambrensis* 115, 45-66

Boon, G.C. and Savory, H.N. 1975. A silver trumpet-brooch with relief decoration, parcel-gilt, from Carmarthen, and a note on the development of the type. *The Antiquaries Journal* 55(1), 41-61.

Booth, P. 1991. Inter-Site Comparisons Between Pottery Assemblages in Roman Warwickshire: Ceramic Indicators of Site Status. *Journal of Roman Pottery Studies* 4, 1-10

Bourdieu, P. 1992. *The Logic of Practice*. Cambridge: Cambridge University Press

Bowden, M. and McOmish, D. 1987. The Required Barrier. *Scottish Archaeological Review*, 4(2), 76-84.

Bowden, M. and McOmish, D. 1989. Little boxes: more about hillforts. *Scottish Archaeological Review* 6, 12-16.

Braanlund, L., Wright, J. 2012. Land at Hunts Grove, Hardwicke, Gloucestershire, Gloucestershire: Archaeological Evaluation. Cotswold Archaeology: Cotswold Archaeology. CA typescript report 12664

Bradley, R. 2006. Bridging the two cultures–commercial archaeology and the study of prehistoric Britain. *The Antiquaries Journal* 86, 1-13.

Brandt, R. and Slofstra, J. Roman and native in the low countries. *British Archaeological Reports (International Series) 184.*

Branigan, K. and Dearne, M. J. 1992. *Romano-British Cavemen – Cave Use in Roman Britain*. Oxford: Oxbow Monographs

Breeze, D. J. 2002. The Second Augustan Legion in north Britain. In R J Brewer (ed) *Birthday of the Eagle: The Second Augustan Legion and the Roman Military Machine*. Cardiff: National Museum of Wales, 67-82

Breeze, D. The impact of Rome on the British Countryside. A conference organised by the Royal Archaeological Institute, Chester, 11-13 October 2013. Wetherby: Royal Archaeological Institute

Brennan, D. 1998. 'Native' and Romano-British pottery. In G. Williams and H. Mytum (eds.) *British Archaeological Reports (British Series)* 275, 96-103

Brett, M. 2006. Trowbridge, land between Crickhowell Road and Willowbrook Drive (ST 2354 8036). **Archaeology in Wales** 46, 190

Brett, M. 2013. A Beaker Pit and Romano-British Settlement at Foxes Field, Ebley Road, Stonehouse: Excavations in 2010. *Glevensis* 44, 5-9

Brett, M., McSloy, E. R., Holbrook, N. 2009. A Roman enclosure at Crickhowell Road, Trowbridge, Cardiff. Evaluation and excavation 2005-06, *Archaeologia Cambrensis* 158, 131-166

Brewer, R J. 1990. Caerwent – Venta Silurum: A Civitas Capital. In B. C. Burnham and J. L. Davies (eds) *Conquest, Coexistence and Change: Recent Work in Roman Wales*, Lampeter: Trivium 25, 75-85

Brewer, R. 2004. The Romans in Gwent. In S Aldhouse-Green, M Aldhouse-Green, and R. Howell. (eds) **The Gwent County History, Volume I: Gwent in Prehistory and Early History**. Cardiff: University of Wales Press, 205–43.

Brewer, R. J. 2002. *Birthday of the Eagle: The Second Augustan Legion and the Roman Military Machine*. Cardiff: National Museum of Wales

Brewer, R. J. 2002. Legio II Augusta and Caerleon. In R. J Brewer (ed) *Birthday of the Eagle: The Second Augustan Legion and the Roman Military Machine*. Cardiff: National Museum of Wales, 11-26

Briggs, C.S. 2003. *Towards a research agenda for Welsh archaeology: proceedings of the IFA Wales/Cymru Conference, Aberystwyth 2001*. Oxford: Archaeopress.

Brindle, T. 2013. Making the most of PAS data: Macro-and Micro-level Studies of Romano-British Settlement. *Landscapes*, 14(1), 73-91.

Britnell, J. 1990. Settlement and Industry in North-East Wales. In B. C. Burnham and J. L. Davies (eds) *Conquest, Coexistence and Change: Recent Work in Roman Wales*. Lampeter: Trivium 25, p130-137

Britnell, W. 1980. Collfryn Hill-slope enclosure, Llansantffraid, Deythew (SJ 222173). *Archaeology in Wales* 20, 55 75

Britnell, W. 1989. The Collffryn Hillslope Enclosure, Llansantffraid Deuddwr, Powys: Excavations 1980-1982. *Proceedings of the Prehistoric Society* 55, 89-134

Britnell, W. J. and Silvester, R. J. 2018. Hillforts and Defended Enclosures of the Welsh Borderland. *Internet Archaeology* 48 [https://doi.org/10.11141/ia.48.7] Accessed 5th August 2018.

Brown, A. 2013. From Iron Age to Early Medieval: Detecting the Ecological Impact of the Romans on the Landscape of South-East Wales. *Britannia* 44, 250-257.

Brown, I. 2009. *Beacons in the Landscape: the hillforts of England and Wales*. Oxford: Windgather Press.

Buckland, P.C., Pearson, M.P., Wigley, A. and Girling, M.A. 2001. Is there anybody out there? A reconsideration of the environmental evidence from the Breiddin Hillfort, Powys, Wales. *The Antiquaries Journal* 81, 51-76

Burnham, B and Burnham, H. 1990. Pumsaint, Dyfed: The Excavations of 1989. In B. C. Burnham and J. L. Davies (eds) *Conquest, Coexistence and Change: Recent Work in Roman Wales*. Lampeter: Trivium 25, 49-56

Burnham, B. C and Davies, J. L. 2010. *Roman Frontiers in Wales and the Marches*. Aberystwyth: Royal Commission on Ancient and Historic Monuments

Burnham, B. C. and Davies, J. L. 1990. *Conquest, Coexistence and Change: Recent Work in Roman Wales*, Lampeter: Trivium 25.

Burnham, B.C. and Wacher, J.S. 1990. *The small towns of Roman Britain*. Oakland: University of California Press.

Burrow, I. C. G. 1979. Roman material from hillforts. In P. J. Casey (ed) *British Archaeological Reports* (British Series) 71, 212-29

Campbell, L., Maldonado, A., Pierce, E. and Russell, A. 2016. *Creating Material Worlds: the uses of identity in archaeology*. Oxford: Oxbow Books.

Carr, G. 2002. Creolisation, pidginisation and the interpretation of unique artefacts in early Roman Britain. In G. Carr, E. V. Swift, J. Weekes (eds) *TRAC 2002: Proceedings of the Twelfth Annual Theoretical Roman Archaeology Conference, Canterbury*. Oxford: Oxbow Books, 113–25.

Carr, G. 2005. Woad, tattooing and identity in later Iron Age and early Roman Britain. *Oxford Journal of Archaeology* 24(3), 273-292.

Carreras, C. and Morais, R. 2012. The Atlantic Roman trade during the Principate. *Oxford Journal of Archaeology* 31(4), 419-441

Carrington, P. 2008. Feeding the wolf in Cheshire: models and (a few) facts. In R. Thomas and S. Stallibrass (eds) *Feeding the Roman Army: The Archaeology of Production and Supply in NW Europe*. Oxford: Oxbow Books, 18-30

Carruthers, M., van Driel-Murray, C., Gardner, A., Lucas, J., Revell, L., and Swift, E. 2002 *TRAC 2001: Proceedings of the Eleventh Annual Theoretical Roman Archaeology Conference, Glasgow 2001*. Oxford: Oxbow Books

Carver, M.O.H, and Hummler, M.R. 1991. Excavations at Rock Green, Ludlow, *Shropshire Archaeology and History* 67, 84-97

Caseldine, A. 1990a. *Environmental Archaeology in Wales*. Lampeter: University of Trinity St David

Caseldine, A. 1990b. Environmental Archaeology and the Roman Period in Wales: Recent Work. In B. C. Burnham and J. L. Davies (eds) *Conquest, Coexistence and Change: Recent Work in Roman Wales*. Lampeter: Trivium 25, 172-184

Caseldine, A. 2010. The military impact on the environment and economy'. In B. C. Burnham and J. L. Davies (eds.), *Roman Frontiers in Wales and the Marches*. Aberystwyth: Royal Commission on Ancient and Historic Monuments, 147-157

Caseldine, A. 2018. Humans and Landscape. *Internet Archaeology* 48. [https://doi.org/10.11141/ia.48.4]. Accessed 5th August 2018.

Caseldine, A. E., and Holden, T. G. 1998. 'The carbonised plant remains' in G. Williams and H. Mytum (eds) *British Archaeological Reports (British Series*) 275, 105-118

Casey, P. J. 2010. The End of the Roman army in Wales and the Marches. In B. C. Burnham and J. L. Davies (eds) *Roman Frontiers in Wales and the Marches*. Aberystwyth: Royal Commission on Ancient and Historic Monuments, 62-66

Casey, P. J. and Davies, J L. 1993. Excavations at Segontium (Caernarfon) Roman Fort 1975-1979. *Council for British Archaeology Research Report 90*

Chadwick, A. 1999. Digging Ditches, but Missing Riches? Ways into the Iron Age and Romano-British cropmark landscapes of the north midlands. In B. Bevan (ed) *Northern Exposure: Interpretative devolution and the Iron Age in Britain*. Leicester: Leicester University Monograph, 149-171

Chadwick, A. 2004. Heavier burdens for willing shoulders? Writing different histories, humanities and social practices for the Romano-British countryside. In B. Croxford, H. Eckardt, J. Meade, and J. Weekes (eds) *TRAC 2003: Proceedings of the Thirteenth Annual Theoretical Roman Archaeology Conference*. Oxford: Oxbow Books, 90–110.

Chadwick, A. 2013. Some Fishy Things About Scales: Macro-and Micro-approaches to Later Prehistoric and Romano-British Field Systems. *Landscapes* 14(1), 13-32.

Charlton, K.S. 2013. Rituals of Resistance? Hope and Hoarding in Late Iron Age South-east Wales. *Studia Celtica* 47(1), 25–39.

Chitty, L.F., Lynch, F. and Burgess, C. 1972. *Prehistoric man in Wales and the West: Essays in Honour of Lily F. Chitty*. Bath: Adams and Dart

Clarke, S. 1999. Contact, architectural symbolism and the negotiation of cultural identity in the military zone. In P Barker, C. Forcey, S. Jundi, R. Witcher (eds) *TRAC 98 Proceedings of the Eighth Annual Theoretical Roman Archaeology Conference, Leicester 1998*. Oxford: Oxbow Books, 36–45.

Collingwood, R.G. and Myres, J.N.L. 1936. *Roman Britain and the English Settlements*. Oxford: Clarendon Press

Collis, J. 1996. Hill-forts, enclosures and boundaries. In. T. C. Champion and J. Collis (eds) *The Iron Age in Britain and Ireland: Recent Trends*. Sheffield: J. R. Collis Publications, 87–94.

Cooks, L., 2009. You are what you (don't) eat? Food, identity, and resistance. *Text and Performance Quarterly* 29(1), 94-110.

Cool, H.E.M and Baxter, M.J. 2016. Brooches and Britannia. *Britannia 47*, 71-98.

Cool, H.E.M. 2006. *Eating and Drinking in Roman Britain*. Cambridge: Cambridge University Press

Cool, H.E.M. 2014. Clothing and Identity. In M. Millett, L. Revell, and A. Moore (eds) *The Oxford Handbook of Roman Britain*. Oxford: Oxford University Press, 406-425

Cool, H.E.M. and Baxter, M.J. 1999. Peeling the onion: an approach to comparing vessel glass assemblages. *Journal of Roman Archaeology* 12, 72-100.

Cool, H.E.M. and Baxter, M.J. 2002. Exploring Romano–British finds assemblages. *Oxford Journal of Archaeology* 21(4), 365-380.

Cool, H.E.M. and Baxter, M.J. 2016. Exploring morphological bias in metal-detected finds. *Antiquity 90* (354), 1643-1653.

Cooper, A. and Green, C. 2017 Big questions for large, complex datasets: approaching time and space using composite. *Internet Archaeology 45 [*https://doi.org/10.11141/ia.45.1]. Accessed 5th June 2018.

Cooper, A. and Green, C., 2016. Embracing the complexities of 'Big Data' in archaeology: the case of the English Landscape and Identities project. *Journal of Archaeological Method and Theory 23*(1), pp.271-304.

Cooper, N.J., 1996. Searching for the blank generation: consumer choice in Roman and post-Roman Britain. In J. Webster and N. J. Cooper (eds) *Roman imperialism: post-colonial perspectives*. Leicester: School of Archaeological Studies, University of Leicester, 85-98

Copeland, T. 2011. *Roman Gloucestershire*. Stroud: The History Press

Cottam, S., Dungworth, D., Scott, S., and Taylor, J.1994. *TRAC 94: Proceedings of the Fourth Annual Theoretical Roman Archaeology Conference, Durham 1994*. Oxford: Oxbow Books.

Cramp, L.J., Evershed, R.P., and Eckardt, H. 2011. What was a mortarium used for? Organic residues and cultural change in Iron Age and Roman Britain. *Antiquity* 85(330), 1339-1352.

Crane, P. 1998. Porth y Rhaw, Solva (SM 786 242). *Archaeology in Wales* 38, 125

Creighton, J. 1995. Visions of power: imagery and symbols in late Iron Age Britain. *Britannia* 26, 285-301.

Creighton, J. 2001. The Iron Age – Roman Transition. In S. James and M. Millet (eds) *Britons and Romans: Advancing an Archaeological Agenda*. York: Council for British Archaeology, 1-11

Creighton, J. 2006. *Britannia: the creation of a Roman province*. London: Routledge.

Crew, P. 1990. Iron Age and Roman Iron Production in North-West Wales. In B. C. Burnham and J. L. Davies (eds) *Conquest, Coexistence and Change: Recent Work in Roman Wales*. Lampeter: Trivium 25, 150-160

Crew, P. 1998. Excavations at Crawcwellt West, Merioneth, 1990-1998. A late prehistoric upland iron-working settlement. *Archaeology in Wales* 38, 22-35

Croom, A. 2010. *Roman clothing and fashion*. Stroud: Amberley Publishing Limited.

Croxford B, Eckardt H, Meade J, Weekes J. TRAC 2003: Proceedings of the Thirteenth Annual Theoretical Roman Archaeology Conference, Leicester 2003.

Crummy, N. 2007. Six honest serving men: a basic methodology for the study of small finds. In R. Hingley and S. Willis (eds) *Roman Finds: Context and Theory*. Oxford: Oxbow Books, 59-66

Crummy, N. and Buckley, D.G. 1983. *The Roman small finds from excavations in Colchester, 1971-79 (Vol. 2)*. Colchester: Colchester Archaeological Trust.

Crummy, N. and Eckardt, H. 2003. Regional identities and technologies of the self: nail-cleaners in Roman Britain. *Archaeological Journal* 160(1), 44-69.

Cruse, G. 2009. *Brecon to Tirley High Pressure Gas Pipeline. Assessment of Potential for Analysis. Network Archaeology*. Network Archaeology Report no. 413

Cunliffe, B. 1974. *Iron Age Communities in Britain: An Account England, Scotland and Wales from the Seventh Century BC Until the Roman Conquest*. London: Routledge.

Cunliffe, B. 1992. Pits, preconceptions and propitiation in the British Iron Age. *Oxford Journal of Archaeology,* 11(1), 69-83.

Cunliffe, B. 2004. *Iron Age Communities in Britain: An Account of England, Scotland and Wales from the Seventh Century BC Until the Roman Conquest* [4th Edition]. London: Routledge.

Current Archaeology. 2013. *Time Heals: Digging Caerwent with Operation Nightingale*. Available at: http://www.archaeology.co.uk/articles/time-heals-digging-caerwent-with-operation-nightingale.htm. Accessed 5th July 2017.

Cuttler, R. Davidson, A., and Hughes, G. 2012. *A Corridor Through Time: The Archaeology of the A55 Anglesey Road Scheme*. Oxford: Oxbow Books.

Dannell, G. B. 2018. The Uses of South Gaulish Terra Sigillata on the Roman Table. A study of nomenclature and vessel function. *Internet Archaeology* 50. [https://doi.org/10.11141/ia.50.5]. Accessed 3rd June 2018.

Dannell, G.B. 2006. Samian cups and their uses. In R. J. A. Wilson, (ed) *Romanitas. Essays on Roman Archaeology in Honour of Sheppard Frere on the Occasion of his Ninetieth Birthday*. Oxford: Oxbow Books, 147-76.

Dark, P. 2006. Climate deterioration and land-use change in the first millennium BC: perspectives from the British palynological record. *Journal of Archaeological Science* 33(10), 1381-1395.

Darvill, T. 2010. *Prehistoric Britain*.London: Routledge.

Davidson, A. 2002. The Coastal Archaeology of Wales. *Council for British Archaeology Research Report* 131

Davies, H. and Davies, H.E. 2002. *Roads in Roman Britain*. Stroud: Tempus Publishing Limited.

Davies, J. L. 1967. Excavations at Cae Summerhouse, Tythegston, Glam: Second Interim Report, *Morgannwg* 11, 75-77

Davies, J. L. 1990. Military Vici: Recent Research and its Significance. In B. C. Burnham and J. L. Davies (eds) *Conquest, Coexistence and Change: Recent Work in Roman Wales*. Lampeter: Trivium 25, 65-74

Davies, J. L. 1991. Roman military deployment in Wales and the Marches from Pius to Theodosius I. In V. Maxfield, and M. Dobson (eds) *Roman Frontier Studies 1989: Proceedings of the 15th International Congress of Roman Frontier Studies*. Exeter: University of Exeter Press, 52-57

Davies, J. L. and Jones, R. H. 2006. *Roman camps in Wales and the Marches*. Cardiff: University of Wales Press.

Davies, J.L. 1977. Roman arrowheads from Dinorben and the sagittarii of the Roman army. *Britannia* 8, 257–270.

Davies, J.L. 1984. Soldiers, peasants and markets in Wales and the Marches. In T. F. C. Blagg and A. King (eds), *British Archaeological Reports (British Series) 136*, 93–127.

Davies, J.L. 2004. Soldier and civilian in Wales. In M. Todd (ed) *A Companion to Roman Britain*. Oxford: Blackwell Publishing Ltd, 91-113

Davies, J.L. and Kirby, D.P. 1994. *Cardiganshire County History, Vol 1: from the earliest times to the coming of the Normans*. Cardiff: University of Wales Press.

Davies, J.L. and Spratling, M.G. 1976. The Seven Sisters hoard, a centenary study. In H. N. Savory, G. C. Boon, and J. M. Masters (eds) *Welsh Antiquity: essays mainly on prehistoric topics presented to HN Savory upon his retirement as Keeper of Archaeology*. Cardiff: National Museum Wales, 121–47.

Davies, J.L., Lynch, F. and Aldhouse-Green, S. 2000. *Prehistoric Wales*. Stroud: Sutton, 139-219.

Davies, W. 1979. Roman settlements and post-Roman estates in south-east Wales. In P. J. Casey (ed) *British Archaeological Reports* 71, 153-173

Davis, M. and Gwilt, A. 2008. Material, style and identity in first century AD metalwork, with particular reference to the Seven Sisters Hoard. In D. Garrow, C. Gosden, and J. D. Hill *Rethinking Celtic Art*, Oxford: Oxbow Books, 146-184

Davis, O. P. 2017. Filling the gaps: the Iron Age in Cardiff and the Vale of Glamorgan. *Proceedings of the Prehistoric Society* Vol. 83, 325-356

Davis, O. P., Sharples, N.M. and Waddington, K. 2008. *Changing Perspectives on the First Millennium BC: Proceedings of the Iron Age Research Student Seminar 2006*. Oxford: Oxbow Books.

Davis, O.P. 2013. Re-interpreting the Danebury assemblage: Houses, households and community. *Proceedings of the Prehistoric Society* 79, 353–75

Deetz, J. 1977. *In small things forgotten: the archaeology of early American life*. Garden City, N.Y: Anchor Press/Doubleday.

Dietler, M. 1990. Driven by drink: the role of drinking in the political economy and the case of early Iron Age France. *Journal of Anthropological Archaeology* 9(4), 352-406.

Dietler, M., 2007. Culinary Encounters: Food, Identity, and Colonialism. In K. Twiss (ed) *The Archaeology of Food and Identity*. Carbondale: Southern Illinois University, 218-242.

Dobney, K. and Ervynck, A. 2007. To fish or not to fish? Evidence for the possible avoidance of fish consumption during the Iron Age around the North Sea. In C. Haselgrove, and T. Moore (eds) *The Later Iron Age in Britain and Beyond*. Oxford: Oxbow Books, 403-418

Dobson, B. and Mann, J.C. 1973. The Roman army in Britain and Britons in the Roman army. *Britannia* 4, pp.191-205.

Dowdell, G. and Evans, E. 1981. Glan-y-Mor, Cold Knap, Barry (SO O993 6648). *Archaeology in Wales* 21, 46

Driver, T. 2013. *Architecture, Regional Identity and Power in the Iron Age Landscapes of Mid Wales: the Hillforts of north Ceredigion.* Oxford: Oxbow Books

Driver, T. 2018. New Perspectives on the Architecture and Function of Welsh Hillforts and Defended Settlements. *Internet Archaeology* 48. [https://doi.org/10.11141/ia.48.9]. Accessed 1st August 2018.

Driver, T. and Davies, J.L. 2011. Abermagwr Romano-British villa, Ceredigion, mid Wales: interim report on its discovery and excavation. *Archaeologia Cambrensis* 160, 39-49.

Dudley, D. 1967. Excavations on Nor'nour in the Isles of Scilly, 1962–6. *Archaeological Journal* 124(1), 1-64.

Dudley, D.R. 1974. Tacitus and the Roman conquest of Wales. In E. Birley, B. Dobson, and M. G. Jarrett (eds) *Roman Frontier Studies, 1969: Eighth International Congress of Limesforschung*. Cardiff: University of Wales Press, 27–33.

Dunbabin, K.M. 1993. Wine and water at the Roman convivium. *Journal of Roman Archaeology* 6, 116-141.

Eckardt, H. 2005. The social distribution of Roman artefacts: the case of nail-cleaners and brooches in Britian. *Journal of Roman Archaeology* 18, 139-160.

Eckardt, H. 2014. *Objects and Identities: Roman Britain and the North-western Provinces*. Oxford: Oxford University Press.

Eckardt, H. and Crummy, N. 2008. Styling the body in Late Iron Age and Roman Britain: a contextual approach to toilet instruments. *Instrumentum Monograph* 36. Montagnac: Instrumentum

Evans, E. 1999. Five Lanes Villa, Caerwent and Llanvaches (centred ST 447 912). *Archaeology in Wales* 39, 101

Evans, E. 2000. Lower Machen (centred ST 228 877). *Archaeology in Wales* 40, 100

Evans, E. M. 2018. Romano-British Settlement in South_East Wales. *Internet Archaeology* 48. [https://doi.org/10.11141/ia.48.8]. Accessed 1st August 2018.

Evans, J. 1993. Pottery function and finewares in the Roman north. *Journal of Roman Pottery Studies* 6, 95-118.

Evans, J. 1996. 'The Roman Pottery' in G. Hughes, *The Excavation of a Late Prehistoric and Romano-British Settlement at Thornwell Farm, Chepstow, Gwent, 1992*, BAR British Series 244, p46-64

Evans, J. 2001. Material approaches to the identification of different Roman-British site types. In S. James and M. Millet (eds) *Britons and Romans: Advancing an Archaeological Agenda*. York: Council for British Archaeology, 26-45

Evans, J. 2013. Balancing the Scales: Romano-British Pottery in Early Late Antiquity. *Late Antique Archaeology* 10(1), 425-450.

Evans, J. G. 1990. An Archaeological Survey of Skomer, Dyfed. *Proceedings of the Prehistoric Society* 56 247-267

Evans, J., Brown, D., and Knights, D. 2016. 'Hold Your Beliefs Lightly': Innovation and Best Practice in Prehistoric, Roman and Post-Roman Ceramic Studies in Britain. In E. Sibbesson, B. Jervis, and S. Coxon (eds). *Insight from Innovation: New Light on Archaeological Ceramics*. St Andrews: The Highfield Press, 253-268

Evans, P. 2004. Excavations in Cardiff Castle. *Archaeology in Wales* 44, 43-60

Fasham, P. J., Kelly, R. S., Mason, M. A. and White, R. B. 1998. The Graeanog Ridge: The Evolution of a Farming Landscape and its Settlements in North-West Wales. *Cambrian Archaeological Monographs* No. 6, Aberystwyth : Cambrian Archaeological Association

Finley, M.I. 1973. *The Ancient Economy*. Berkeley: University of California Press.

Fitchett, M.1986. *Excavations at Park Farm, Lydney. The New Regard of the Forest of Dean No* 2, 24-7

Fleure, H.J. 1923. *The races of England and Wales: a survey of recent research*. London: Benn Brothers

Foster, I.L. and Daniel, G. 1965. *Prehistoric and Early Wales*. London: Routledge.

Fowler, C. 2010. From identity and material culture to personhood and materiality. In D. Hicks, and M. C. Beaudry (eds) *The Oxford Handbook of Material Culture Studies.* Oxford: Oxford University Press

Fowler, P.J. 1976. Farms and Fields in the Roman West Country. In K. Branigan, P. J. Fowler (eds) *The Roman West Country, Classical Culture and Celtic Society*, Newton Abbot: David and Charles Publishers, 162–182.

Fox, C. 1932. *The Personality of Britain: Its influence on inhabitant and invader in prehistoric and early historic times*. Cardiff: National Museum of Wales

Fox, C. 1932. *The Personality of Britain: Its influence on inhabitant and invader in prehistoric and early historic times*. Cardiff: National Museum of Wales

Freeman, P.W. 1993. 'Romanisation' and Roman material culture. MARTIN MILLETT, THE ROMANIZATION OF BRITAIN. AN ESSAY IN ARCHAEOLOGICAL INTERPRETATION (Cambridge University Press 1990). Pp. xvi+ 255, 95 ills,(maps and plates) and 32 tables. ISBN 0-521-36084-6.\pounds 30. *Journal of Roman Archaeolog*y 6, 438–445.

Frere, S.S. 1969. *Britannia: a history of Roman Britain*. Taylor and Francis.

Fulford, M. 2001. Links with the past: pervasive 'ritual' behaviour in Roman Britain. *Britannia 32*,199-218.

Fulford, M. 2008. Economic structures. In M. Todd (ed) *A Companion to Roman Britain,* Oxford: Blackwell Publishing Ltd, 309-26.

Fulford, M. and Holbrook, N. 2011. Assessing the contribution of commercial archaeology to the study of the Roman period in England, 1990–2004*. The Antiquaries Journal* 91, 323-345.

Fulford, M. and Holbrook, N. 2018. Relevant Beyond the Roman Period: Approaches to the Investigation, Analysis and Dissemination of Archaeological Investigations of the Rural Settlements and Landscapes of Roman Britain. *Archaeological Journal* 175 (2)*,* 1-17.

Fulford, M. G. 2002. The Second Augustan Legion in the west of Britain. In R. J. Brewer (ed) *Birthday of the Eagle: The Second Augustan Legion and the Roman Military Machine*. Cardiff: National Museum of Wales, 45-66

Fulford, M.G. and Allen, J.R.L. 1992. Iron-Making at the Chesters Villa, Woolaston, Gloucestershire: Survey and Excavation 1987—91. *Britannia* 23, 159-215.

Fulford, M.G. and Huddleston, K. 1991. *The current state of Romano-British pottery studies*. London: English Heritage.

Fulford, M.G., Allen, J.R.L. and Rippon, S.J. 1994. The settlement and drainage of the Wentlooge Level, Gwent: excavation and survey at Rumney Great Wharf 1992. *Britannia* 25, 175-211.

Gaffney, V.L., White, R.H., Goodchild, H. and Bevan, L. 2007. Wroxeter, the " Cornovii", and the urban process: final report on the Wroxeter Hinterland Project, 1994-1997. *Journal of Roman Archaeology Supplementary Series 68*

Gardner, A. 1999. Military identities in late Roman Britain. *Oxford Journal of Archaeology* 18(4), 403–418.

Gardner, A. 2001. Identities in the late Roman army: material and textual perspectives. In J. Pearce, D. Davies, A. Gardner, and K. Lockyear (eds) *TRAC 2000: Proceedings of the Tenth Annual Theoretical Roman Archaeology Conference, London 2000*. Oxford: Oxbow Books.

Gardner, A. 2013. Thinking about Roman Imperialism: Postcolonialism, Globalisation and Beyond? *Britannia* 44, 1–25.

Gardner, W., Savory, H.N. and Williams, I. 1964. *Dinorben; a hill-fort occupied in early iron age and Roman times*. Cardiff: National Museum of Wales.

Garrow, D. 2012. Odd deposits and average practice. A critical history of the concept of structured deposition. *Archaeological dialogues* 19(2), 85-115.

Gerrard, J. 2008. *Feeding the army from Dorset: pottery, salt and the Roman state*. In R. Thomas and S. Stallibrass (eds) *Feeding the Roman Army: The Archaeology of Production and Supply in NW Europe*. Oxford: Oxbow Books, 116-127

Ghey, E., Edwards, N. and Johnston, R. 2008. Categorizing Roundhouse Settlements in Wales: A Critical Perspective. *Studia Celtica* 42(1), 1-25.

Ghey, E., Edwards, N., Johnston, R., and Pope, R. 1997. Characterising the Welsh Roundhouse: Chronology, Inhabitation and Landscape. *Internet Archaeology* 23. [https://doi.org/10.11141/ia.23.1]. Accessed 1st August 2018.

Gilchrist, R. 2006. Archaeology and the Life Course: A Time and Age for Gender. In Meskell, L. and Preucel, R. (eds) *A Companion to Social Archaeology*. Oxford: Blackwell, 142-160

Giles, M. 2012. *A Forged Glamour: Landscape, Material Culture and Identity in the Iron Age*. Oxford: Windgather Press

Gillam, J.P. 1976. Coarse fumed ware in North Britain and beyond. *Glasgow Archaeological Journal* 4(4), pp.57-80.

Goodman, C.N. and Morant, G.M. 1940. The human remains of the Iron Age and other periods from Maiden Castle, Dorset. *Biometrika* 31(3/4), 295-312.

Gosden, C. and Marshall, Y. 1999. The cultural biography of objects. *World Archaeology* 31(2), 169–178.

Grahame, M. 1998. Redefining Romanization: Material Culture and the Question of Social Continuity in Roman Britain. In C. Forcey and R. Witcher (eds). *TRAC 97: Proceedings of the Seventh Annual Theoretical Roman Archaeology Conference, Nottingham 1997*. Oxford: Oxbow Books

Grant, I. 2003. Arddleen, Naylor Fields Enclosure (SJ 2608 1602). *Archaeology in Wales* 43, 125-126

Grant, I., Hankinson, R., Jones, N.W. 2012. The Jamesford Coin Hoard, Montgomery. Geophysical Survey and Excavation. Welshpool: Clwyd-Powys Archaeological Trust. Report 1121

Green, C., Gosden, C., Cooper, A., Franconi, T., ten Harkel, L., Kamash, Z. and Lowerre, A., 2017. Understanding the spatial patterning of English archaeology: modelling mass data, 1500 BC to AD 1086. *Archaeological Journal*, *174*(1), 244-280.

Greene, K. 1984. The Roman fortress at Usk, Wales, and the Processing of Roman Pottery for Publication. *Journal of Field Archaeology* Vol 11 No 4, 405-412.

Greene, K. 1990. *The Archaeology of the Roman Economy*. Oakland: University of California Press.

Greene, K. 2000. Technological innovation and economic progress in the ancient world: MI Finley re-considered. *The Economic History Review* 53(1), 29-59.

Greene, K. 2005. Roman pottery: models, proxies and economic interpretation. *Journal of Roman Archaeology* 18, 34-56.

Gregory, T. and Rogerson, A.J. 1984. Metal-detecting in archaeological excavation. *Antiquity 58*(224), 179-184.

Griffith, F.M. 1990. Aerial reconnaissance in mainland Britain in the summer of 1989. *Antiquity* 64(242), 14-33.

Griffiths, K. 1989. Marketing of Roman Pottery in Second-Century Northamptonshire and the Milton Keynes Area. *Journal of Roman Pottery Studies* 2, 66-76.

Griffiths, W.E. 1951. The development of native homesteads in North Wales. *Antiquity* 25(100), 174-186.

Griffiths, W.E. 1958. *The Excavation of a Romano-British Hut-group at Cors-y-Gedol in Merionethshire*. Cardiff: University of Wales Press.

Grimes, W.F. 1951. *The prehistory of Wales*. Cardiff: National Museum of Wales.

Gruffudd, P. 1995. Remaking Wales: nation-building and the geographical imagination, 1925–1950. *Political Geography*, 14(3), 219-239.

Gruffudd, P., Herbert, D.T. and Piccini, A. 2000. In search of Wales: travel writing and narratives of difference, 1918–50. *Journal of Historical Geography 26*(4), pp.589-604.

Guest, P. 2008. The early monetary history of Roman Wales: identity, conquest and acculturation on the imperial fringe. *Britannia* 39, 33–58.

Guest, P., Wells, N. 2007. *Iron Age and Roman Coins from Wales* [data-set] York: Archaeology Data Service [distributor] [https://doi.org/10.5284/1000263] Accessed 1st May 2018.

Guilbert, G. 2018. Historical Excavation and Survey of Hillforts in Wales: some critical issues, *Internet Archaeology* 48 [https: doi.org/10.11141/ia.48.3] Accessed 1st August 2018.

Gwilt, A and Lodwick, M. 2008. Recent fieldwork at Llanmaes, Vale of Glamorgan. *Archaeology in Wales* 48, 67-69

Gwilt, A. 2003. Understanding the Iron Age: towards agenda for Wales. In C. S. Briggs (ed) *British Archaeological Reports (British Series) 343*, 105–122.

Gwilt, A. 2007. Silent Silures? Locating people and places in the Iron Age of south Wales. In C. Haselgrove and T. Moore (eds) *The Later Iron Age in Britain and Beyond*. Oxford: Oxbow Books, 297–328.

Gwilt, A. and Haselgrove, C. 1997. *Reconstructing Iron Age Societies: New Approaches to the British Iron Age*. Oxford: Oxbow Books

Gwilt, A., Lodwick, M., and Deacon, J. 2006. Excavation at Llanmaes, Vale of Glamorgan, 2006. *Archaeology in Wales* 46, 42-48

Hanson, W.S. 1997. Forces of change and methods of control. In D. Mattingly (ed) *Journal of Roman Archaeology Supplementary Series* 23, 67–80.

Harris, O.J. 2016. Becoming post-human: identity and the ontological turn. In M. Campbell and R. Pierce (eds). *Creating Material Worlds: The Uses of Identity in Archaeology*. Oxford: Oxbow Books, 17-37

Haselgrove, C. and Moore, T. 2007. New narratives of the Later Iron Age. In C. Haselgrove and T. Moore. *The Later Iron Age in Britain and Beyond*. Oxford: Oxbow Books, 1-15

Haselgrove, C. and Moore, T. 2007. *The Later Iron Age in Britain and Beyond*. Oxford: Oxbow Books

Haselgrove, C. and Pope, R. 2007. *The Earlier Iron Age in Britain and the Near Continent*. Oxford: Oxbow Books.

Haselgrove, C., Armit, I., Champion, T., Creighton, J., Gwilt, A., Hill, J.D., Hunter, F. and Woodward, A. 2001. *Understanding the British Iron Age: an agenda for action. A report for the Iron Age Research Seminar and the Council of the Prehistoric Society*. *Salisbury: Trust for Wessex Archaeology*.

Hattatt, R. 1982. *Ancient and Romano-British Brooches*. Dorset: Dorset Publishing Company.

Hattatt, R. 1985. *Iron Age and Roman Brooches: a second selection of brooches from the author's collection*. Oxford: Oxbow Books

Hattatt, R. 1989. *Ancient brooches and other artefacts: a fourth selection of brooches together with some other antiquities from the author's collection*. Oxford: Oxbow Books.

Hattatt, R. 2000. *A visual catalogue of Richard Hattatt's ancient brooches*. Oxbow Books Ltd.

Haverfield, F. 1905. *The Romanization of Roman Britain*. Oxford: Clarendon Press

Haverfield, F. 1910. *'Military Aspects of Roman Wales', paper read before the Honourable Society of Cymmrodorion at 20 Hanover Square, on Thursday 18 March 1909*. Oxford: Ashmolean Library

Haverfield, F. 1923. *The Romanization of Roman Britain* 4th Edition. Oxford: Clarendon Press

Hawkes, C. 1931. Hill-forts. *Antiquity* 5(17), 60–97.

Hawkes, C. 1959. The ABC of the British Iron Age. *Antiquity* 33(131), 170–182.

Hawkes, G. 1999. Beyond Romanization: The creolization of food. A framework for the study of faunal remains from Roman sites. *Papers from the Institute of Archaeology* 10, 89-95.

Hawkes, G. 2002. Wolves' Nipples and Otters' Noses? Rural Foodways in Roman Britain. In M. Carruthers, C. van Driel-Murray, A. Gardner, J. Lucas, L. Revell, and E. Swift, (eds.) *TRAC 2001: Proceedings of the Eleventh Annual Theoretical Roman Archaeology Conference, Glasgow 2001*. Oxford: Oxbow Books, 45-50

Hawkes, S.C., Hawkes, S.C. and Dunning, G.C., 1961. Soldiers and settlers in Britain, fourth to fifth century: with a catalogue of animal-ornamented buckles and related belt-fittings. *Medieval Archaeology* 5(1), 1-70.

Hayward, W. 2018. *Dozens of lost and hidden ancient ruins have been revealed by the heatwave* [online] Wales Online. Available at: https://www.walesonline.co.uk/news/wales-news/dozens-lost-hidden-ancient-ruins-14883178. Accessed: 01/08/2018.

Hemp, W.J., and Gresham, C. A., and Radford, C. R. 1953. Hut-Circles in North-West Wales. *Antiquity* 27(105), 29–32.

Hicks, D. 2010. The material-cultural turn. In D. Hicks and M. C. Beaudry (eds) *The Oxford Handbook of Material Culture Studies*, 25-98.

Hicks, D. and Beaudry, M.C. 2010. *The Oxford Handbook of Material Culture Studies*. Oxford: Oxford University Press

Hill, J.D. 1989. Re-thinking the Iron Age. *Scottish Archaeological Review* 6, 16–24.

Hill, J.D. 1995a. *Rituals and Rubbish in the Iron Age of Wessex*. Oxford: Tempus Reparatum

Hill, J.D. 1995b. How should we understand Iron Age societies and hillforts? A contextual study from southern Britain. In J. D. Hill and C. G. Cumberbatch (eds) Different Iron Ages: Studies on the Iron Age in Temperate Europe, *British Archaeological Reports (International Series)* 602, 45–66

Hill, J.D. 1997. "The end of one kind of body and the beginning of another kind of body"? Toilet instruments and 'Romanization'. In A. Gwilt and C. Haselgrove (eds). *Reconstructing Iron Age Societies: New Approaches to the British Iron Age*. Oxford: Oxbow Books, 96-107

Hill, J.D. 2001. Romanisation, gender and class: recent approaches to identity in Britain and their possible consequences. In S. James and M. Millet (eds) *Britons and Romans: Advancing an Archaeological Agenda*. York: Council for British Archaeology, 12-18

Hill, J.D. and Cumberbatch, C.G. 1995. Different Iron Ages: Studies on the Iron Age in Temperate Europe. *British Archaeological Reports (International Series) 602*

Hingley, R. 1984. The archaeology of settlement and the social significance of space. *Scottish Archaeological Review* 3(1), 22-7.

Hingley, R. 1989. *Rural settlement in roman Britain*. London: Seaby.

Hingley, R. 1990. Boundaries surrounding Iron Age and Romano-British settlements. *Scottish Archaeological Review* 7, 96–103.

Hingley, R. 1991. Past, present and future–the study of the Roman period in Britain. *Scottish Archaeological Review* 8, 90–101.

Hingley, R. 1997. Resistance and domination: social change in Roman Britain. In D. J. Mattingly (ed). Dialogues in Roman imperialism power, discourse, and discrepant identity. *Journal of Roman Archaeology Supplemetary Series* 23, 81-102

Hingley, R. 2005. *Globalizing Roman culture: unity, diversity and empire*. London: Routledge

Hingley, R. 2010. *Roman officers and English gentlemen: the imperial origins of Roman archaeology*. London: Routledge.

Hodder, I. 1974. Some marketing models for Romano-British coarse pottery. *Britannia* 5, 340-359.

Hodder, I. 2011. Human-thing entanglement: towards an integrated archaeological perspective. *Journal of the Royal Anthropological Institute* 17(1), 154–177.

Hodder, I. 2012. *Entangled. An Archaeology of the Relationships between People and Things*. Oxford: Wiley-Blackwell.

Hodson, F.R. 1964. Cultural Grouping within the British pre-Roman Iron Age. *Proceedings of the Prehistoric Society* 30, 99–110.

Hogg, AH. A. 1965. Early Iron Age Wales. In I. L. Foster and D. Daniel (eds) *Prehistoric and Early Wales*. London: Routledge

Hogg, A H.A. 1966. Native settlement in Wales. In C. Thomas (ed) *Rural Settlement in Roman Britain*. London: Council for British Archaeology, 28–38.

Hogg, A.H.A. 1972a. The size distribution of hill-forts in Wales and the Marches. In L. F. Chitty, F. Lynch, and C. Burgess (eds) *Prehistoric man in Wales and the West: Essays in Honour of Lily F. Chitty.* Bath: Adams and Dart, 293–305

Hogg, A.H.A. 1972b. *Hill-forts in the coastal area of Wales*. York: Council for British Archaeology

Hogg, A.H A. 1975. Din Lligwy, *The Archaeological Journal* 132, 285-286

Hogg, A.H.A. 1979. Invasion and Response: The Problems in Wales. In B. C. Burnham and H. B. Burnham (eds) Invasion and Response: The Case of Roman Britain, *British Archaeological Reports (British Series) 73*

Hogg, A.H A. and Smith, D. J. 1974. The Llantwit Major Villa: A Reconsideration of the Evidence. *Britannia* 5, 225-250 80

Holbrook, N. 2005. Roman Carmarthen: Excavations, 1978–1993. By H. James. Britannia Monograph Series 20. Society for the Promotion of Roman Studies, London, 2003. Pp. xxii+ 398, illus. Price:£ 60.00. ISBN 0 90776430 4. *Britannia*, *36*, 517

Holbrook, N. 2006. The Roman period. In N. Holbrook and J. Juřica (eds) *Twenty-five years of archaeology in Gloucestershire. A review of new discoveries and new thinking in Gloucestershire, South Gloucestershire and Bristol 1979-2004*. Stroud: Bristol and Gloucestershire Archaeological Reports, 97–131.

Holbrook, N. and Morton, R., 2010. *Assessing The Research Potential of Grey Literature in the study of Roman England* [data-set]. York: Archaeology Data Service [distributor] [https://doi.org/10.5284/1000418] Accessed 8th March 2018.

Holtorf, C. 2002. Notes on the life history of a pot sherd. *Journal of Material Culture* 7(1), 49–71.

Hopewell, D., 2018. Roman Anglesey: Recent Discoveries. *Britannia*, 11-20

Hopewell, D., Burman, J., Evans, J., Ward, M., Williams, D. 2005. Roman Fort Environs in North-West Wales. *Britannia* 36, p225-269

Hopewell, D. and Smith, G. 2012. *Tai Cochion and Trefarthen Roman Settlement Interim Excavation Report*, Gwynedd Archaeological Trust: Report No 1037

Horn, J.A., 2015. Tankards of the British Iron Age. *Proceedings of the Prehistoric Society* 81, 311-341

Howell, R. 2006. *Searching for the Silures: an Iron Age tribe in South-East Wales*. Stroud: Tempus Publishing

Howell, R. and Pollard, J. 2004. The Iron Age: settlement and material culture. In S. Aldhouse-Green, M. Aldhouse-Green, and R. Howell (eds) **The Gwent County History, Volume I: Gwent in Prehistory and Early History**. Cardiff: University of Wales Press, 140-159

Howgego, C., 2013. The monetization of temperate Europe. *Journal of Roman Studies* 103, 16-45.

Hughes, G. 1996. The Excavation of a Late Prehistoric and Romano-British Settlement at Thornwell Farm, Chepstow, Gwent, 1992. *British Archaeological Reports (British Series)*

Hughes, G.W. 1994. Old Oswestry Hillfort: excavations by WJ Varley 1939-1940. *Archaeologia Cambrenensis* 144, 46-91.

Hughes, G.W., 1994. Old Oswestry Hillfort: excavations by WJ Varley 1939-1940. *Archaeologia Cambrenensis* 144, 46-91.

Humphrey, J. 2003. *Re-searching the Iron Age: selected papers from the proceedings of the Iron Age Research Student Seminars, 1999 and 2000*. University of Leicester, School of Archaeology and Ancient History.

Hunter, F. 1997. Iron Age hoarding in Scotland and northern England. In A. Gwilt and C. Haselgrove (eds) *Reconstructing Iron Age Societies*. Oxford: Oxbow Books, 108–133.

Hurst, H. 2005. Roman Cirencester and Gloucester compared. *Oxford Journal of Archaeology* 24(3), 293-305.

Hutton, R. 2011. Romano-British reuse of prehistoric ritual sites. *Britannia* 42, 1-22.

Insole, P. 2000. The Archaeological Excavation of a Romano-British Farm at Church Farm, Church Road, Caldicot, Monmouthshire. *Archaeology in Wales* 40, 20-33

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

Jackson, D. 1999. Variation in the Size Distribution of Hillforts in the Welsh Marches and its Implication for Social Organisation. In B. Bevan (ed) *Northern Exposure: Interpretative devolution and the Iron Age in Britain*. Leicester: Leicester University Monograph, 197–216.

James, H. 2003. *Roman Carmarthen: excavations, 1978-1993*. London: Society for the Promotion of Roman Studies.

James, S. 1998. The community of the soldiers: a major identity and centre of power in the Roman empire. In P Barker, C. Forcey, S. Jundi, R. Witcher (eds) *TRAC 98 Proceedings of the Eighth Annual Theoretical Roman Archaeology Conference, Leicester 1998*. Oxford: Oxbow Books, 14–25.

James, S. 1999. *The Atlantic Celts*. London: British Museum Press

James, S. 2001. 'Romanization' and the peoples of Britain. In S. Keay and N. Terrenato (eds) *Italy and the West: comparative issues in Romanization* Oxford: Oxbow Books, 187-209

James, S. 2002. Writing the Legions: The Development and Future of Roman Military Studies in Britain. *Archaeological Journal* 159, 1-58

James, S. 2007. A bloodless past: the pacification of Early Iron Age Britain. In C. Haselgrove and R. Pope (eds) *The Earlier Iron Age in Britain and the Near Continent*. Oxford: Oxbow Books, 160–73.

James, T., 1990, January. Concentric Antenna Enclosures—A New Defended Enclosure Type in West Wales. *Proceedings of the Prehistoric Society* Vol. 56, 295-298). Cambridge University Press.

Jankovic, M. A., Mihajlovic, V. D., and Babic, S. 2014. *The Edges of the Roman World*. Newcastle upon Tyne: Cambridge Scholars Publishing

Jarrett, M. and Mann, J. C. 1968. The Tribes of Wales. *Welsh History Review* 4, 161-174

Jarrett, M. and Wrathmell, S. 1981. *Whitton: An Iron-Age and Roman Farm in South Glamorgan*. Cardiff: University of Wales Press, Cardiff

Jarrett, M.G. 2002. Early Roman Campaigns in Wales. In R. J. Brewer (ed) *Birthday of the Eagle: The Second Augustan Legion and the Roman Military Machine*. Cardiff: National Museum of Wales, 45-66

Jemmet, D. 2003a. Hadnock Roman Villa, Monmouth (SO 535 151). *Archaeology in Wales* 43, 118-119

Jennings, J., Antrobus, K., Atencio, S., Glavich, E., Johnson, R., Loffler, G., Luu, C., Dietler, M., Hastorf, C., Hayden, B. and Ikram, S. 2005. "Drinking Beer in a Blissful Mood" Alcohol Production, Operational Chains, and Feasting in the Ancient World. *Current Anthropology* 46(2), 275-303.

Johns, C. 1996. *The Jewellery of Roman Britain: Celtic and Classical traditions*. London: UCL Press.

Jones, G. 2017. *Sourcing the clay: Iron Age pottery production around Poole Harbour and the Isle of Purbeck, Dorset, UK*. PhD Dissertation (Unpublished)

Jones, G. D. B. 1989. The Roman Settlement at Ruthin, Clwyd. *Britannia* 20, 249-254

Jones, G. D. B. 1990a. North-East Wales: The Empty Quarter. In B. C. Burnham and J. L. Davies (eds) *Conquest, Coexistence and Change: Recent Work in Roman Wales*, Lampeter: Trivium 25, 123-129

Jones, G.D.B. 1990b. Searching for Caradog. In B. C. Burnham and J. L. Davies (eds) *Conquest, Coexistence and Change: Recent Work in Roman Wales*, Lampeter: Trivium 25, 57–64.

Jones, M.L. 1984. Society and Settlement in Wales and the Marches 500 BC to AD 1100. *British Archaeological Reports 121*

Jones, N and Owen, W. 1999. Excavation and survey at Maesderwen Romano-British villa complex, Llanfrynach, Powys. *Archaeology in Wales* 39, 10-16

Jones, N. 1999. Excavation and survey at Broad Heath Romano-British Enclosure, Presteigne, Powys. *Archaeology in Wales* 39, 17-26

Joy, J. 2009. Reinvigorating object biography: reproducing the drama of object lives. *World Archaeology* 41(4), 540–556.

Jundi, S. and Hill, J.D. 1998. Brooches and Identities in First Century AD. In S. Jundi, J. D. Hill, C. Forcey, J. Hawthorne, and R. Witcher (eds) *TRAC 97. Proceedings of the Seventh Annual Theoretical Roman Archaeology Conference Nottingham 1997*. Oxford: Oxbow Books, 125-137

Jundi, S., Hill, J.D., Forcey, C., Hawthorne, J. and Witcher, R. 1998. *TRAC 97. Proceedings of the Seventh Annual Theoretical Roman Archaeology Conference Nottingham 1997*. Oxford: Oxbow Books

Karl, R. 2008. Random coincidences or: the return of the Celtic to Iron Age Britain. *Proceedings of the Prehistoric Society* Vol. 74, 69-78)

Karl, R. 2011. Becoming Welsh: modelling first millennium BC societies in Wales and the Celtic context. In T. Moore and X Armada (eds) *Atlantic Europe in the*

first millennium BC: Crossing the divide. Oxford: Oxford University Press, 336-357

Kelly, R.S. 1976. Metal-working in North Wales During the Roman Period. *Bulletin of the Board of Celtic Studies* 27, 127-147

Kelly, R.S. 1982. The Ardudwy Survey: fieldwork in western Merioneth, 1971–81. *Journal of the Merioneth Historical and Record Society* 9(2), 121–62.

Kelly, R.S. 1990. Recent research on the hut group settlements of north-west Wales In B. C. Burnham and J. L. Davies (eds) *Conquest, Coexistence and Change: Recent Work in Roman Wales*, Lampeter: Trivium 25, 102–11.

Kelly, R.S. 1990. 'Recent Research on the Hut Group Settlements of North-West Wales. In Burnham and Davies (eds) *Conquest, Coexistence and Change: Recent Work in Roman Wales*. Lampeter: Trivium 25, 102-111

Kelly, R.S. 1998a. The Excavation of an Enclosed Hut Group at Graeanog, Clynnog, Gwynedd 1985, 1987, and 1998. In P. J. Fasham , R. S. Kelly, M. A. Mason, and R. B. White (eds) *The Graeanog Ridge: The Evolution of a Farming Landscape and its* **82** *Settlements in North-West Wales.* Aberystwyth: Cambrian Archaeological Monographs, 121-159

Kelly, R.S. 1998b. The Wider Setting. In P. J. Fasham, R. S. Kelly, M. A. Mason, and R. B. White(eds.), *The Graeanog Ridge: The Evolution of a Farming Landscape and its* **82** *Settlements in North-West Wales.* Aberystwyth: Cambrian Archaeological Monographs, 160-168

Kemmers, F. and Myrberg, N. 2011. Rethinking numismatics. The archaeology of coins. *Archaeological Dialogues*, 18(1), 87-108.

Kenney, J. 2005. A Roman T-shaped corn drier from Tremadog, Gwynedd. *Archaeology in Wales* 45, 25-32

Kenney, J. 2008. Recent excavations at Parc Bryn Cegin, Llandygai, near Bangor, North Wales. *Archaeologia Cambrensis* 157, 9-142

Kissock, J. 2006. The Roman Settlement Pattern in Western Gower Landscape: A Preliminary Report. *Archaeology in Wales* 46, 118-121

Knight, J. K. 2013. *South Wales from the Romans to the Normans: Christianity, literacy and lordship*. Stroud: Amberley.

Kopytoff, I. 1986. The cultural biography of things: commoditization as process. In A. Appadurai (ed) *The social life of things: Commodities in cultural perspective*. Cambridge: Cambridge University Press, 64–94.

Kopytoff, I. 2004. The cultural biography of things. In V. Buchli (ed) *Material Culture: Critical Concepts in the Social Sciences* **2**. London: Taylor and Francis, 210-235.

Lancaster, J. 2014. A model of decentralised political structure among the Silures. *Studia Celtica* 48(1), 3-54.

Langley, J.K. 1979. Romano-British corn-drying oven: an experiment. *Archaeological Journal* 136(1), 27-42.

Laurence, R. 2001. Roman narratives. *Archaeological dialogues* 8(02), 90–101.

Laurence, R. 2006. 21st century TRAC: is the Roman battery flat? In B. Croxford, N. Ray, and R. Roth (eds) *TRAC 2005: Proceedings of the Fifteenth Annual Theoretical Roman Archaeology Conference, Birmingham 2005*. Oxford: Oxbow Books, 116–27.

Lloyd, J.E. 1930. *A History of Wales*. London: Benn

Lock, G. 2011. Hillforts, Emotional Metaphors, and the Good Life: a Response to Armit. *Proceedings of the Prehistoric Society* 77, 355–362

Lock, G. and Ralston, I. 2007. Atlas of Hillforts of Britain and Ireland [ONLINE]. [Available at: https://hillforts.arch.ac.uk] Accessed 25th June 2018.

Locker, A. 2007. In piscibus diversis; the bone evidence for fish consumption in Roman Britain. *Britannia* 38, 141-180.

Lockyear, K. 2007. Where do we go from here? Recording and analysing Roman coins from archaeological excavations. *Britannia* 38, 211-224.

Locock, M. 1998. The Goldcliff Stone and Roman Drainage on the Caldicot Level: An Evaluation at Hill Farm, Goldcliff, 1996. *Britannia 29*, 329-336.

Lodwick, M and Gwilt, A. 2007. Exploratory excavation of a later prehistoric and Romano-British enclosure at Llanmaes, Vale of Glamorgan. *Archaeology in Wales* 47, 78-82

Lodwick, M. and Gwilt, A. 2004. 'Cauldrons and Consumption: Llanmaes and Llyn Fawr', *Archaeology in Wales* 44, 77-81

Lodwick, M. and Gwilt, A. 2005. 'Continuing excavation at Llanmaes, Vale of Glamorgan', *Archaeology in Wales* 45, 91-92

Longley, D, Johnstone, N, Evans, J, Chambers, F M, Ede, J., Henderson, J., Hopewell, D., Jenkins, D. A., Lageard, J. G. A., King, A., Millet, M., Williams, J., Wilshaw, I. C, Lynch, F, Dickinson, B, Hartley, K, Smith, G. 1998. Excavations on Two Farms of the Romano-British Period at Bryn Eryr and Bush Farm, Gwynedd. *Britannia* 29, 185-246

Longley, D. 1998. Bryn Eryr: an enclosed settlement of the Iron Age on Anglesey. *Proceedings of the Prehistoric Society* Vol 64, 225–273.

Lowerre, A., Lyons, E., Roberts, B.K., Wrathmell, S. (2015) *Atlas of Rural Settlement in England* [data-set]. York: Archaeology Data Service [distributor] [https://doi.org/10.5284/1031493] Accessed 5th May 2018.

Lynch, F., Aldhouse-Green, S., and Davies, J. L. 2000. *Prehistoric Wales*. Sutton Publishing, Stroud

Mackreth, D. 2011. *Brooches in Late Iron Age and Roman Britain*. Oxford: Oxbow Books.

Madgwick, R. and Mulville, J. 2015. Feasting on fore-limbs: conspicuous consumption and identity in later prehistoric Britain. *Antiquity* 89(345), 629-644

Madgwick, R., Lewis, J., Grimes, V., and Guest, P. 2017. On the hoof: exploring the supply of animals to the Roman legionary fortress at Caerleon using strontium (87 Sr/86 Sr) isotope analysis. *Archaeological and Anthropological Sciences*, 1-13.

Madgwick, R., Redknap, M. and Davies, B., 2016. Illuminating Lesser Garth Cave, Cardiff: the human remains and post-Roman archaeology in context. *Archaeologia Cambrensis* 165, 201-229.

Makepeace, G A. 2006. *The Prehistoric Archaeology of Settlement in South-East Wales and the Borders*. Oxford: Archaeopress

Manning, W.H. 1971. The Piercebridge plough group. *The British Museum Quarterly* 35 (1/4), 125-136.

Manning, W. H. 1993. *Report on the excavations at Usk 1965-76: The Roman Pottery*. Cardiff: University of Wales Press.

Manning, W.H. 2002. Early Roman Campaigns in the south-west of Britain. In R J Brewer (ed) *Birthday of the Eagle: The Second Augustan Legion and the Roman Military Machine*, Cardiff: National Museum of Wales, 27-44

Martin, T.F. and Weech, R. 2017. *Dress and society: contributions from archaeology*. Oxford: Oxbow Books.

Mason, D.J.P. 1988. 'Prata Legionis' in Britain. *Britannia* 19, 163–189.

Mason, M. A., and Fasham, P. J. 1998. The Report on RB White's Excavations at Cefn Graeanog II 1977-79: An Iron Age and Romano-British Hut Group Settlement. In P. J. Fasham, R. S. Kelly, M. A. Mason, and R. B. White (eds.) *The Graeanog Ridge: The Evolution of a Farming Landscape and its 82 Settlements in North-West Wales*. Aberystwyth: Cambrian Archaeological Monographs, 5-120

Mattingly, D. J. 2006. *An Imperial Possession: Britain in the Roman Empire, 54 BC-AD409*. London: Penguin

Mattingly, D.J. 1997. Dialogues in Roman imperialism: power, discourse, and discrepant experience in the Roman Empire. *Journal of Roman Archaeology Supplementary Series 23*

Mattingly, D.J. 2006. The Imperial Economy. In D. S. Potter (ed) *A Companion to the Roman Empire*. Oxford: Blackwell, 283-297.

Mattingly, D.J. 2014. *Imperialism, power, and identity: Experiencing the Roman Empire*. Princeton: Princeton University Press.

Maxfield, V.A. 2002. Soldier and Civilian: Life Beyond the Ramparts. In R. J. Brewer (ed) *Birthday of the Eagle: The Second Augustan Legion and the Roman Military Machine*. Cardiff: National Museum of Wales, 145-164

McCarthy, M.R. 2013. *The Romano-British Peasant: Towards a Study of People, Landscapes, and Work During the Roman Occupation of Britain*. Oxford: Windgather Press

McCoy, M.D., 2017. Geospatial Big Data and archaeology: Prospects and problems too great to ignore. *Journal of Archaeological Science 84*, 74-94.

McWhirr, A.D. 1976. Cirencester (Corinium): A Civitas Capital in the West Country. In K. Branigan, P. J. Fowler (eds) *The Roman West Country, Classical Culture and Celtic Society*. Newton Abbot: David and Charles Publishers, 81–98.

Meadows, K. 1995. You Are What You Eat: Diet, Identity and Romanisation. In S. Cottam, D. Dungworth, S. Scott, and I. J. Taylor (eds) **TRAC 94: Proceedings of the Fourth Annual Theoretical Roman Archaeology Conference, Durham 1994**. Oxford: Oxbow Books, 133-140

Meek, J. 2015. Archaeological Investigations at Wiston Roman Fort and its Environs, Pembrokeshire 2014: Interim Report. *Dyfed Archaeological Trust Report No, 2014/38*

Mein, A G. 2003. 'Five Lanes Villa, Caerwent and Llanvaches (ST 452 909). *Archaeology in Wales* 43, 118

Mellor, M. 1999. *Living on the Edge of Empire. Models, Methodology and Marginality*. Manchester: CBA North West

Meskell, L. 2005. *Archaeologies of Materiality*. Oxford: Blackwell.

Meskell, L. and Preucel, R.W. 2004. *Companion to Social Archaeology*. Malden, MA: Blackwell Publishing

Millett, M. 1990. *The Romanization of Britain: an essay in archaeological interpretation*. Cambridge: Cambridge University Press.

Millett, M., Revell, L. and Moore, A. 2016. *The Oxford Handbook of Roman Britain*. Oxford: Oxford University Press

Minniti, C., Valenzuela-Lamas, S., Evans, J. and Albarella, U. 2014. Widening the market. Strontium isotope analysis on cattle teeth from Owslebury (Hampshire, UK) highlights changes in livestock supply between the Iron Age and the Roman period. *Journal of Archaeological Science* 42,305-314.

Moore, T. 2003. Rectangular houses in the British Iron Age: squaring the circle. In J. Humphrey (ed.) *Researching the Iron Age*. Leicester: Leicester University Press, 47–58.

Moore, T. and Armada, X. 2011. *Atlantic Europe in the first millennium BC: Crossing the divide*. Oxford: Oxford University Press

Moore, T. and Reece, R. 2001. The Dobunni. *Glevensis* 34, 17-26.

Moore, T., 2011. Detribalizing the later prehistoric past: Concepts of tribes in Iron Age and Roman studies. *Journal of Social Archaeology*, *11*(3), pp.334-360.

Morley, N., 2015. Globalisation and the Roman economy. In M Pitts and M. J. Versluys (eds**), *Globalisation and the Roman World. World History, Connectivity and Material Culture*, Cambridge**, 49-68.

Mudd, S.A., 2014. Vinum vires: Trier Black-Slipped Ware and Constructive Drinking in Roman Britain. In. M. A. Jankovic, V. D. Mihajlovic, and S. Babic, *The Edges of the Roman World*. Newcastle upon Tyne: Cambridge Scholars Publishing, 86-104

Mullin, D. 2012. *A landscape of borders?: the prehistory of the Anglo-Welsh borderland*. Oxford: Archaeopress.

Murphy, K. 2002. The archaeological resource: chronological overview to 1500 AD. In A. Davidson (ed.) *Council for British Archaeology Research Report 131*

Murphy, K. 2018. The Atlantic Coast. *Internet Archaeology* 48. [https://doi/10.11141/ia.48.5]. Accessed 1st August 2018.

Murphy, K. and Mytum, H. 2011. Iron Age enclosed settlements in west Wales. *Proceedings of the Prehistoric Society* 78, 263–313

Murphy, K., Mytum, H., Austin, L., Caseldine, A.E., Griffiths, C.J., Gwilt, A., Webster, P. and Young, T.P. 2012. Iron Age enclosed settlements in west Wales. *Proceedings of the Prehistoric Society* Vol. 78, 263-313

Musson, C R. 1991. The Breiddin Hillfort. *Council for British Archaeology Research Report 76*.

Mytum, H. 1998. 'Drim Camp'. In G. Williams and H. Mytum (eds) *British Archaeological Reports (British Series) 275*, 53-64

Mytum, H. 2013. *Monumentality in Later Prehistory.* London: Springer

Mytum, H. and Webster, C., 2001. Survey and excavation at Henllys Top Field and Cwm Gloyne enclosures. *Studia Celtica*, *35*(1), 89-108.

Nash-Williams, V.E. 1939. An Early Iron Age Coastal Camp at Sudbrook, near the Severn Tunnel, Monmouthshire. *Archaeologia Cambrensis* 94, 42-79

Nash-Williams, V.E. 1954. *The Roman frontier in Wales*. Cardiff: University of Wales Press, on behalf of the Board of Celtic Studies of the University of Wales.

Nayling, N., and McGrail, S. 2004. The Barland's Farm Romano-Celtic Boat. *Council for British Archaeology Research Report 138*

Nevell, M. 2005. Salt making in Cheshire: the Iron Age background. *Archaeology Northwest* 7(17), 9-14.

Nevell, M. and Roberts, J. 2005. Towards an Understanding of the Rural Economy and Society of the Iron Age, and Romano-British Landscape of the Mersey Basin and Southern Pennines. In M. Nevell (ed) *Living on the Edge of Empire: Models, Methodology and Marginality*. Manchester: CBA North West, 107-124

Newman, R. 1990. Excavations of a Romano-British building at Dan-y-Graig, Porthcawl, Mid Glamorgan, *Bulletin of the Board of Celtic Studies* 37, 247-80

Norton, A. 2010. Hunts Grove, Quedgeley, Gloucestershire. Oxford: Oxford Archaeological Unit

Okun, M.L. 1989. An example of the process of acculturation in the early Roman frontier. *Oxford Journal of Archaeology* 8(1), 41-54.

O'Leary, T. J. 1989. *Pentre Farm, Flint, 1976-81: An official building in the Roman lead mining district British Archaeological Reports (British Series) 207* Archaeopress

Olsen, B. 2007. Keeping things at arm's length: a genealogy of asymmetry. *World archaeology* 39(4), 579–588.

Olson, K. 2012. *Dress and the Roman woman: self-presentation and society*. London: Routledge.

Orton, C. 1989. An introduction to the quantification of assemblages of pottery. *Journal of Roman Pottery Studies 2*, 94-97.

Oswald, A. 1997. A doorway on the past: practical and mystic concerns in the orientation of roundhouse doorways. In A. Gwilt and C. Haselgrove (eds). *Reconstructing Iron Age Societies: New Approaches to the British Iron Age*. Oxford: Oxbow Books, 87–95.

Owen-John, H. 1990. Recent Investigations at the Roman Auxiliary Forts at Loughor and Neath, West Glamorgan. In B. C. Burnham and J. L. Davies (eds) *Conquest, Coexistence and Change: Recent Work in Roman Wales*. Lampeter: Trivium 25, 40-48

Owen-John, H. S. 1988. Llandough: The Rescue Excavation of a Multi-Period Site Near Cardiff, South Glamorgan. In D. Robinson (ed) *British Archaeological Reports (British Series) 188*, 123-177

Parkhouse, J. 1988a. Excavations at Biglis, South Glamorgan'. In D. Robinson (ed) *British Archaeological Reports (British Series) 188*, 1-64

Parkhouse, J., Evans, E., Allen, D. W. H 1996. *Excavations in Cowbridge, South Glamorgan, 1977-88*. Oxford: Tempus Reparatum.

Peacock, D. 1968. A petrological study of certain Iron Age pottery from Western England. *Proceedings of the Prehistoric Society* 34, 414-27

Peacock, D. 1982. *Pottery in the Roman world: an ethnoarchaeological approach*. Harlow: Longman Group

Pearce, J., Davies, D., Gardner, A. and Lockyear, K. 2001. *TRAC 2000: Proceedings of the Tenth Annual Theoretical Roman Archaeology Conference, London 2000*. Oxford: Oxbow Books

Pena, J. T. 2007. *Roman pottery in the archaeological record*. Cambridge: Cambridge University Press

Percival, J. 1988. *The Roman villa: an historical introduction*. London: Batsford

Perring, D. 2002. *The Roman House in Britain*. London: Routledge

Perring, D., and Pitts, M. 2013. *Alien Cities*. *Consumption and the origins of urbanism in Roman Britain*. Portslade: Spoil Heap Publications Monograph 7.

Petch, J.A. 1936. Excavations at Pentre Ffwrndan near Flint 1932-4. *Archaeologia Cambrensis* 91, 74-92.

Petts, D. 1998. Landscape and Cultural Identity in Roman Britain. In R. Laurence and J. Berry (eds) *Cultural identity in the Roman Empire*. London: Routledge, 79-94

Pitts, M. 2005a. Pots and pits: drinking and deposition in late Iron Age south-east Britain. *Oxford Journal of Archaeology* 24(2), 143-161.

Pitts, M. 2005b. Regional identities and the social use of ceramics. In J. Bruhn, B. Croxford, and D. Grigoropoulos (eds) *TRAC 2004: Proceedings of the Fourteenth Annual Theoretical Roman Archaeology Conference, Durham 2004*. Oxford: Oxbow Books, 50–64.

Pitts, M. 2007. The Emperor's new clothes? The utility of identity in Roman archaeology. *American Journal of Archaeology*, 693–713.

Pitts, M. 2008. Globalizing the local in Roman Britain: An anthropological approach to social change. *Journal of Anthropological Archaeology* 27(4), 493–506.

Pitts, M. 2017. Globalisation, circulation and mass consumption in the Roman world. In. M. Pitts and M. Versluys (eds) *Globalisation and the Roman world: World history, connectivity and material culture*. New York: Cambridge University Press, 69-98.

Pitts, M. and Versluys, M.J. 2014. *Globalisation and the Roman world: world history, connectivity and material culture*. New York: Cambridge University Press.

Pollard, J., Howell, R., Chadwick, A. and Leaver, A. 2006. Lodge Hill Camp, Caerleon and the Hillforts of Gwent. *British Archaeological Reports (British Series) 407*

Pollard, J., Howell, R., Chadwick, A., McFayden, L. 2006. 'Discussion: Lodge Hill Camp and the hillforts of Gwent. In J. Pollard, R. Howell, A. Chadwick, and A. Leaver (eds) *British Archaeological Reports (British Series) 407,* 47-66

Pollock, K. 2006. *The evolution and role of burial practice in Roman Wales*. Oxford: John and Erica Hedges Ltd.

Potter, T.W. and Jackson, R.P.J., 1982. The Roman site of Stonea, Cambridgeshire. *Antiquity* 56(217), 111-120.

Pritchard, F. and Wild, J.P. 2005. *Northern Archaeological Textiles. NESAT VII. Textile Symposium in Edinburgh, 5th-7th May 1999*. Oxford: Oxbow Books

Pryce, H. 2011. *JE Lloyd and the Creation of Welsh History: Renewing a Nation's Past*. Cardiff: University of Wales Press.

Pudney, C. 2010. Pinning down identity: the negotiation of personhood and the materialisation of identity in the Late Iron Age and Early Roman Severn estuary. In D. Mladenovic and B. Russell (eds) *TRAC 2010. Proceedings of the twentieth annual Theoretical Roman Archaeology Conference, Oxford*. Oxford: Oxbow Books, 115-131

Pudney, C. 2017. A Bone-Disc Nail Cleaner from South-East Wales. *The Monmouthshire Antiquary 33*, 37-42

Rae, A. 2017. A Land Cover Atlas of the United Kingdom (Document). figshare. Paper. [https://doi.org/10.15131/shef.data.5266495.v1] Accessed 8th March 2018

RCAHMW. 1976. *An Inventory of the Ancient Monuments in Glamorgan. Volume I: Pre-Norman. Part II: The Iron Age and Roman Occupation*. Cardiff: HMSO

RCAHMW. 1986. *An Inventory of the Ancient Monuments in Brecknock (Brycheiniog). The Prehistoric and Roman Monuments. Part ii: Hill-forts and Roman Remains*. London: HMSO

RCAHMW. 2018a. *Cropmarks 2018*. Available at: https://rcahmw.gov.uk/cropmarks-2018/ [Accessed 1st August 2018]

RCAHMW. 2018b. *Wales-wide drought reveals further lost archaeological monuments*. Available at: https://rcahmw.gov.uk/wales-wide-drought-reveals-further-lost-archaeological-monuments/ [Accessed 1st August 2018]

Reddé, M. 2016. *Méthode d'analyse des différents paysages ruraux dans le nord-est de la Gaule romaine*. Paris : RurLand

Redfern, R.C. and Chamberlain, A.T. 2011. A demographic analysis of Maiden Castle hillfort: evidence for conflict in the late Iron Age and early Roman period. *International Journal of Paleopathology* 1(1), 68-73.

Redfern, R.C., Hamlin, C. and Athfield, N.B. 2010. Temporal changes in diet: a stable isotope analysis of late Iron Age and Roman Dorset, Britain. *Journal of Archaeological Science* 37(6), 1149-1160.

Redknap, M. 2008. The Vikings in Wales. In. S. Brink and N. S. Price (eds) *The Viking World*. London: Routledge, 401-410.

Reece, R. 1972. A short survey of the Roman coins found on fourteen sites in Britain. *Britannia* 3, 269-276.

Reece, R. 1973. Roman coinage in the western Empire. *Britannia* 4, 227-251.

Reece, R. 1984. The use of Roman coinage. *Oxford Journal of Archaeology* 3(2), 197-210.

Reece, R. 1988. *My Roman Britain*. Cirencester: Cotswold Studies.

Reece, R. 1993. Review: The Romanization of Britain by Martin Millett. *The English Historical Review* 108(429), 993.

Reece, R. 2002. The future of Roman military archaeology. In R J Brewer (ed) *Birthday of the Eagle: The Second Augustan Legion and the Roman Military Machine*, Cardiff: National Museum of Wales, 179-192

Reece, R. and Moore, T. 2001. The Dobunni. *Glevensis* 34, 17-26

Rees, S. 2011. Agriculture. In L. Allason-Jones (ed) *Artefacts in Roman Britain: Their Purpose and Use*. Cambridge: Cambridge University Press, 89-113

Reynolds, P.J. 1979. *Iron-age farm: the Butser experiment*. London: British Museum Publications

Richards, J.D., Naylor, J., Holas-Clark, C. Anglo-Saxon Landscape and Economy: using portable antiquities to study Anglo-Saxon and Viking Age England. *Internet Archaeology* 25. [https://doi.org/10.11141/ia.25.2] Accessed 4th June 2018.

Rippon, S. 1997. *The Severn Estuary: landscape evolution and wetland reclamation*. London: Leicester University Press.

Rippon, S. 2000. The Historic Landscapes of the Severn Estuary Levels. *Archaeology in the Severn Estuary* 11, 119-135

Rippon, S., Smart, C. and Pears, B. 2015. *The Fields of Britannia: continuity and change in the late Roman and early medieval landscape*. Oxford: Oxford University Press

Rippon, S., Smart, C., Pears, B. and Fleming, F. 2013. The Fields of Britannia: continuity and discontinuity in the Pays and regions of Roman Britain. *Landscapes* 14(1), 33-53.

Ritchie, M. 2018. A Brief Introduction to Iron Age Settlement in Wales. *Internet Archaeology*, 48. [https://doi.org/10.11141/ia.48.2] Accessed 1st August 2018.

Rivet, A. L. F. 1969. *The Roman villa in Britain*. London: Routledge and Kegan Paul

Robbins, K.J., 2013. Balancing the scales: exploring the variable effects of collection bias on data collected by the Portable Antiquities Scheme. *Landscapes* 14(1), 54-72.

Roberts, R.1998. Rogiet, Manor House Farm (ST 456 876). *Archaeology in Wales* 38, 121

Robinson, D A. 1988. Biglis, Caldicot and Llandough. Three Late Iron Age and Romano British Sites in South-East Wales. Excavations 1977-79. *British Archaeological Reports (British Series) 188*

Roskams, S. and Whyman, M., 2007. Categorising the past: lessons from the Archaeological Resource Assessment for Yorkshire. *Internet Archaeology*, *23*. [https://doi.org/10.11141/ia.23.2] Accessed 6th July 2018.

Rosten, J. 2008. Appearance, Diversity, and Identity in Roman Britain. In C. S. Colburn and M. K. Heyn (eds) *Reading a Dynamic Canvas: Adornment in the Ancient Mediterranean World*. Newcastle: Cambridge Scholars Publishing, 194-222.

Roth, J. P. *The Logistics of the Roman army at war: 264 BC-AD 235*. Leiden: Brill

Rothe, U., 2012. The "Third Way": Treveran Women's Dress and the "Gallic Ensemble". *American Journal of Archaeology* 116(2), 235-252.

Roymans, N. and Derks, T. 1994. *Villa Landscapes in the Roman North*. Amsterdam: Amsterdam University Press

Roymans, N., Derks, A.M.J. and Redde, M. 2016. A Roman villa in a peripheral region. Rural habitation in the area of the Texuandri (Southern Netherlands/Northern Belgium). In M. Reddé (ed) *Méthode d'analyse des différents paysages ruraux dans le nord-est de la Gaule romaine*. Paris : RurLand, 159-181.

Roymans, N.G.A.M. and Derks, T., 2011. Studying Roman villa landscapes in the 21st century: a multi-dimensional approach. In N. Roymans and T. Derks (eds) *Villa Landscapes in the Roman North*. Amsterdam: Amsterdam University Press, 1-44

Ryder, M.L. 2005. The Human Development of Different Fleece-Types in Sheep. In Pritchard, F. and Wild, J.P. (eds) *Northern Archaeological Textiles*. *NESAT VII. Textile Symposium in Edinburgh, 5th-7th May 1999*. Oxford: Oxbow Books, 122-128

Salway, P. 1981. *Roman Britain*. Oxford: Clarendon Press

Sands, R. and Horn, J.A., 2017. Bring Me Three Large Beers: Wooden Tankards at Roman Vindolanda. *Oxford Journal of Archaeology* 36(1), 71-83.

Savory, H. N. 1964. The Metalwork. In W. Gardner and H. N. Savory (eds) *Dinorben*. Cardiff: National Museums Wales, 131-166

Savory, H.N. 1989. Archaeology. In H. Owen (ed) *Settlement and Society in Wales*. Cardiff: University of Wales Press, 151–176.

Scheidel, W. 2013. Explaining the maritime freight charges in Diocletian's Prices Edict. *Journal of Roman Archaeology* 26, 464-468.

Scheidel, W. 2014. The shape of the Roman world: modelling imperial connectivity. *Journal of Roman Archaeology* 27, 7-32.

Scheidel, W. and Meeks, E. 2012. *ORBIS* [Online]. Available at http://orbis.stanford.edu] Accessed: 1st February 2018.

Schiffer, M.B. 1972. Archaeological context and systemic context. *American Antiquity* 37(2), 156–165.

Schiffer, M.B. 1983. Toward the identification of formation processes. *American Antiquity* 48(4), 675-706.

Schiffer, M.B. 1985. Is there a" Pompeii Premise" in archaeology? *Journal of Anthropological Research* 41(1),18-41.

Schlee, D. 2010. Archaeological Investigations at Upper Newton 'Roman Villa' Wolfcastle, Pembrokeshire. *Dyfed Archaeological Trust Report No. 2010/60*

Scott, E. 1990. In search of Roman Britain: talking about their generation. *Antiquity* 64(245), 953–956.

Scott-Garrett, C.1938. Chesters Roman villa, Woolaston, Gloucestershire, *Archaeologia Cambrensis* XCIII, 93-125

Sellet, F. 1993. Chaîne opératoire; the concept and its applications. *Lithic technology* 18(1–2), 106–112.

Shanks, M. 2007. Symmetrical archaeology. *World Archaeology* 39(4), 589–596.

Sharples, N. 2010. *Social relations in later prehistory: Wessex in the first millennium BC*. Oxford: Oxford University Press

Sharples, N.M. 1991. Warfare in the Iron Age of Wessex. *Scottish Archaeological Review* 8, 79-89.

Sherratt, M., and Moore, A. 2016. Gender in Roman Britain. In Millett, M., Revell, L. and Moore, A. (eds) *The Oxford Handbook of Roman Britain*. Oxford: Oxford University Press, 363-380

Sibbesson, E., Jervis, B. and Coxon, S. 2016. *Insight from Innovation: New Light on Archaeological Ceramics*. St Andrews: The Highfield Press

Sim, D. and Ridge, I. 2002. *Iron for the eagles: the iron industry of Roman Britain*. Stroud: Tempus

Simpson, C.J. 1976. Belt-buckles and strap-ends of the later Roman empire: a preliminary survey of several new groups. *Britannia* 7, 192-223.

Sinclair, A., Gwilt, A., Haselgrove, C. and Gowlett, J. eds., 1997. *Reconstructing Iron Age Societies: New Approaches to the British Iron Age*. Oxbow: Oxbow Books

Slofstra, J. 1983. An anthropological approach to the study of romanization processes. In R. Brandt and J. Slofstra (eds) Roman and native in the low countries. *British Archaeological Reports (International Series) 184*, 71–103.

Smith, A., Allen, M., Brindle, T. and Fulford, M., 2016. **New visions of the countryside of Roman Britain, volume 1: the rural settlement of Roman Britain.** London: The Society for the Promotion of Roman Studies.

Smith, A.H.V., 2005. Coal microscopy in the service of archaeology. *International journal of Coal Geology* 62(1-2), 49-59.

Smith, C.A. 1974. A Morphological Analysis of Late Prehistoric and Romano-British Settlements in North West Wales. *Proceedings of the Prehistoric Society* 40, 157–169.

Smith, G. 1999. Survey of prehistoric and Romano-British settlement in north-west Wales. *Archaeologia Cambrensis* 148, 22–53.

Smith, G. 2018. Hillforts and Hut Groups of North-West Wales. *Internet Archaeology* 48. [https://doi.org/10.11141.ia.48.6]. Accessed 1st August 2018

Smith, J T. 1978. Villas as a key to social structure. In M. Todd (ed) *Studies in the Romano-British Villa*. Leicester: Leicester University Press, 149-185

Smith, J.T. 1997. *Roman villas: a study in social structure*. London: Routledge

Snodgrass, A. 2001. Comment on Ray Laurence, 'Roman Narratives…'. *Archaeological Dialogues* 8(2), 102–104.

Sommer, C.S. 2006. Military vici in Roman Britain revisited'. In R. J. A. Wilson (ed) *Romanitas. Essays on Roman Archaeology in Honour of Sheppard Frere on the Occasion of his Ninetieth Birthday*. Oxford: Oxbow Books, 95–146

Stallibrass, S. and Thomas, R. 2008. Food for thought: what's next on the menu? In R. Thomas and S. Stallibrass (eds) *Feeding the Roman Army: The Archaeology of Production and Supply in NW Europe*. Oxford: Oxbow Books, 146-169

Stanford, S.C. 1972. Welsh border hillforts. In C Thomas (ed) The Iron Age in the Irish Sea Province. *Council for British Archaeology Research Report 9*, 25–36.

Stanford, S.C. 1974. *Croft Ambrey: Excavations Carried out for the Woolhope Naturalists' Field Club, 1960-1966*. Malvern: Archaeological Committee of the Malvern Hills

Stanford, S.C. 1980. *The archaeology of the Welsh Marches*. London: Collins.

Stephens, J. 2008. Ancient Roman hairdressing: on (hair) pins and needles. *Journal of Roman Archaeology* 21, 110-132.

Stevens, C.J. 2003. An investigation of agricultural consumption and production models for prehistoric and Roman Britain. *Environmental Archaeology* 8(1), pp.61-76.

Stevenson, R.B. 1976. Romano-British glass bangles. *Glasgow Archaeological Journal,* 4(4), 45-54.

Stoertz, C. 2004. *The Marches Uplands Mapping Project*. English Heritage Aerial Survey Report Series AER/1/2004

Sutherland, L.A. and Burton, R.J., 2011. Good farmers, good neighbours? The role of cultural capital in social capital development in a Scottish farming community. *Sociologia Ruralis* 51(3), 238-255.

Swift, E. 2000. *Regionality in dress accessories in the late Roman West*. Montagnac: Edition Monique Mergoil

Swift, E. 2011. Personal Ornament. In Allason-Jones, L. *Artefacts in Roman Britain: Their Purpose and Use*. Cambridge: Cambridge University Press, 194-219

Swift, E. 2012. Object biography, re-use and recycling in the late to post-Roman transition period and beyond: rings made from Romano-British bracelets. *Britannia* 43, 167–215.

Swift, E., 2004. Dress accessories, culture and identity in the late Roman period. *Antiquité Tardive* 12, 217-222.

Swift, E., 2017. *Roman artefacts and society: design, behaviour, and experience*. Oxford: Oxford University Press.

Swift, E. 2018. *Style and Function in Roman Decoration: Living with Objects and Interiors*. Oxford: Routledge.

Taylor, J. 1997. Space and place: some thoughts on Iron Age and Romano-British landscapes. In A. Gwilt and C. Haselgrove (eds) *Reconstructing Iron Age Societies: New Approaches to the British Iron Age*, Oxbow, Oxford, 192-204

Taylor, J. 2001. Rural Society in Roman Britain. In S. James and M. Millet (eds) *Britons and Romans: Advancing an Archaeological Agenda*. York: Council for British Archaeology, 46-59

Taylor, J. 2007. *An Atlas of Roman rural settlement in England*. York: Council for British Archaeology

Taylor, J. 2013. Encountering Romanitas: Characterising the Role of Agricultural Communities in Roman Britain. *Britannia* 44, 171–190.

Thomas, R and Stallibrass, S. 2008. *Feeding the Roman army: the archaeology of production and supply in NW Europe*. Oxford: Oxbow Books.

Thomas, R. 1997. Land, kinship relations and the rise of enclosed settlement in first Millenium BC Britain. *Oxford Journal of Archaeology* 16(2), 211–218.

Thomas, W. G., and Walker, R. F. 1959. Excavations at Trelissey, Pembrokeshire, 1950-1. **Bulletin of the Board of Celtic Studes** 18 (3), 295-303

Tilley, C. 1994. *A phenomenology of landscape: places, paths, and monuments*. Oxford: Berg

Timberlake, S. 2003. An Archaeological Examination of Some Early Mining Leats and Hushing Remains in Upland Wales. *Archaeology in Wales* 43, p33-44

Timby, J. Paper 4: Review of Current Practices in Roman Pottery Analysis. *Approaches to the Investigation, Analysis and Dissemination of Work on Romano-British Rural Settlements and Landscapes*.

Timby, J., and Arthur, P. 1998. **Excavations at Kingscote and Wycomb, Gloucestershire.** *A Roman estate centre and small town in the Cotswolds with notes on related settlements*. Cirencester: Cotsworlds Archaeological Trust

Tipping, R. 2002. Climatic variability and'marginal'settlement in upland British landscapes: a re-evaluation. *Landscapes* 3(2), 10-29.

Todd, M. 2008. *A companion to Roman Britain*. Oxford: Blackwell

Todd, M. and Blagg, T.F.C. 1989. *Research on Roman Britain, 1960-89.* London: Society for the Promotion of Roman Studies.

Todd, M., 2008. The Claudian conquest and its consequences. In Todd (ed) *A Companion to Roman Britain*. Oxford: Blackwell, 42-59.

Tomber, R. and Dore, J. 1998. *The National Roman Fabric Reference Collection: A Handbook*. London: MoLAS Monograph.

Tomlin, R. S. O. 2011. Writing and communication. In L. Allason-Jones (ed) *Artefacts in Roman Britain: Their Purpose and Use*. Cambridge: Cambridge University Press, 133-152

Twiss, K., 2012. The archaeology of food and social diversity. *Journal of Archaeological Research*, *20*(4), 357-395.

Tyers, P.A. 1996. *Roman Pottery in Britain*. London: Batsford.

University of Southampton (2014) *Roman Amphorae: a digital resource* [data-set]. York: Archaeology Data Service [distributor] [https://doi.org/10.5284/1028192]. Accessed 5th May 2018

Van Arsdell, R.D. 1994. *The coinage of the Dobunni: money supply and coin circulation in Dobunnic territory*. Oxford: Oxford University Committee for Archaeology.

Van der Veen, M. 1989. Charred grain assemblages from Roman-period corn driers in Britain. *Archaeological Journal* 146(1), 302-319.

Van der Veen, M. 2003. When is food a luxury? *World Archaeology* 34(3), 405-427

Van der Veen, M. 2007. Food as an instrument of social change: feasting in Iron Age and early Roman southern Britain. In K. Twiss, *The Archaeology of Food and Identity*. Carbondale: Southern Illinois University, 112-129

Van der Veen, M. 2008. Food as embodied material culture: diversity and change in plant food consumption in Roman Britain. *Journal of Roman Archaeology 21*, 83-109.

Van Der Veen, M., Livarda, A. and Hill, A. 2007. The archaeobotany of Roman Britain: current state and identification of research priorities. *Britannia 38*, 181-210.

Van Oyen, A. 2015. Actor-Network Theory's Take on Archaeological Types: Becoming, Material Agency and Historical Explanation. *Cambridge Archaeological Journal* 25(01), 63–78.

Van Oyen, A. and Pitts, M. 2017a *Materialising Roman Histories*. Oxford: Oxbow

Van-Oyen, A. and Pitts, M. 2017b. What did objects do in the Roman world? Beyond representation. In Van Oyen, A. and Pitts, M. (eds). *Materialising Roman Histories*. Oxford: Oxbow, 3-20

Varley, W.J. 1948. The hill-forts of the Welsh Marches. *Archaeological Journal 105*(1), 41-66.

Versluys, M.J. 2001. Splendid Isolation? A Glimpse into Contemporary British Archaeology. *Archaeological Dialogues* 8(02), 104–108.

Voss, B. and Allen, R. 2010. Guide to ceramic MNV calculation qualitative and quantitative analysis. *Technical Briefs in Historical Archaeology* 5, 1-9.

Vsevolodov, E.B., Adalsteinsson, S. and Ryder, M.L. 1987. Electron spin resonance spectrometrical study of the melanins in the wool of some North European sheep in relation to their color inheritance. *Journal of Heredity* 78(2), 120-122.

Vyner, B. 1994. *Building on the past: papers celebrating 150 years of the Royal Archaeological Institute*. London: Royal Archaeological Institute.

Vyner, B., and Allen, D. W. H. 1988. A Romano-British Settlement at Caldicot, Gwent. In D. Robinson (ed) *British Archaeological Reports (British Series) 188*, 65-122

Wacher, J. 1995. *The Towns of Roman Britain* [2nd edition]. London: Routledge

Waddelove, E., Waddelove, A.C, and Jones, G. D. B. 1989. 'The Roman Settlement at Ruthin, Clwyd', *Britannia* 20, 249-254

Waddington, K. 2013. *Settlements of northwest Wales, from the late bronze age to the early medieval period*. Cardiff: University of Wales Press.

Wainwright, G J. 1967. *Coygan Camp*. Cardiff: Cambrian Archaeological Association.

Wainwright, G. J. 1971. 'The Excavation of a Fortified Settlement at Walesland Rath, Pembrokeshire', *Britannia* 2, 48-108

Wainwright, G.J., Simpson, G. and Lewis, J.M. 1971. The excavation of a fortified settlement at Walesland Rath, Pembrokeshire. *Britannia 2*, 48-108.

Wait, G. A. 1997. Plas Coch, Wrexham (SJ 326 515). *Archaeology in Wales* 37, 79-80

Wallerstein, I. 1974. The rise and future demise of the world capitalist system: Concepts for comparative analysis. *Comparative Studies in Society and History* 16(4), 387-415.

Walton, P.J. 2012. *Rethinking Roman Britain-coinage and archaeology*. Wettern: Moneta

Ward, J. 1907. Roman Remains at Cwmbrwyn, Carmarthenshire. *Archaeologia Cambrensis* 62, 175-209.

Ward, M. and Smith, G. 2001. The Llŷn Crop Marks Project. *Studia Celtica*, *35*(1), 1-88.

Watt, S. 2011. *The Archaeology of the West Midlands. A framework for research. Oxford: Oxbow Books*

Webmoor, T. 2007. What about 'one more turn after the social' in archaeological reasoning? Taking things seriously. *World Archaeology* 39(4), 563–578.

Webmoor, T. and Witmore, C. 2005. Symmetrical archaeology. *Metamedia, Stanford University*.

Webmoor, T. and Witmore, C.L. 2008. Things are us! A commentary on human/things relations under the banner of a 'social' archaeology. *Norwegian Archaeological Review* 41(1), 53–70.

Webster, G. 1953. The lead mining industry in North Wales in Roman times. *Flintshire Historical Society Transactions* 13, 5-33

Webster, G. 1975. *The Cornovii*. London: Duckworth

Webster, G. Romano-British coarse pottery: a student's guide. *Council for British Archaeology Research Report 6*

Webster, J. 2001. Creolizing the Roman provinces. *American Journal of Archaeology* 105 (2), 209–225.

Webster, J. and Cooper, N. J. 1996. *Roman imperialism: post-colonial perspectives.* Leicester: School of Archaeological Studies, University of Leicester.

Webster, P. 1981. 'The Coarse Pottery. In M. J. Jarrett and S. Wrathmell (eds) *Whitton: An Iron-Age and Roman Farm in South Glamorgan*. Cardiff: University of Wales Press, 102-147

Webster, P. 1988. Coarse Pottery. In D. Robinson (ed) *British Archaeological Reports (British Series) 188*, 33-89

Webster, P. 1990. Pottery and Trade in Roman Wales. In B. C. Burnham and J. L. Davies (eds) *Conquest, Coexistence and Change: Recent Work in Roman Wales*. Lampeter: Trivium 25, 138-149

Webster, P. 1992. Roman pottery in South-East Wales: an introduction. *Journal of Roman Pottery Studies 5*, 111-121

Webster, P. 1996. *Roman Samian Pottery in Britain*. York: Council for British Archaeology

Webster, P.V. 1976. Severn Valley ware: a preliminary study. *Transactions of the Bristol and Gloucestershire Archaeological Society* 94, 18-46.

Timby, J. 1990. Severn Valley wares: a reassessment. *Britannia* 21, 243-251.

Wheeler, R.E.M. 1921. A Roman fortified house near Cardiff. *Journal of Roman Studies 11*, 85.

Wheeler, R.E.M. 1925. *Prehistoric and Roman Wales*. Oxford: Clarendon press.

Wheeler, R.E.M. 1943. *Maiden Castle, Dorset*. London: Society of Antiquaries

Whimster, R. 1989. *The emerging past: air photography and the buried landscape*. London: Royal Commission on the Historical Monuments of England.

White, P. 2002. *Herefordshire: From the Middle Bronze Age to the Later Iron Age*. Birmingham: West Midlands Regional Research Framework

White, P. 2003. *The Arrow Valley, Herefordshire: archaeology, landscape change and conservation*. Hereford: Herefordshire Archaeology.

Wigley, A. 2002a. *Fugitive pieces: towards a new understanding of the later second and first millennia BC in Shropshire*. Birmingham: West Midlands Regional Research Framework

Wigley, A. 2002b. *Touching the void: Iron Age landscapes and settlement in the West Midlands*. Birmingham: West Midlands Regional Research Framework

Wigley, A. 2007. Rooted to the spot: The 'smaller enclosures' of the later first millennium bc in the central Welsh Marches. In C. Haselgrove, and T. Moore (eds) *The Later Iron Age in Britain and Beyond*. Oxford: Oxbow Books, 173–189.

Wild, J.P. 2002. The textile industries of Roman Britain. *Britannia 33*, 1-42.

Wild, J.P. 2003. Textiles and dress. In M. Todd (ed) *A Companion to Roman Britain*. Oxford: Blackwell Publishing Ltd, 299-308

Williams, E.W. 2015. JE Lloyd and his intellectual legacy; the tribes of Wales reconsidered. *National Library of Wales Journal* 36(2), pp.1-68.

Williams, G and Mytum, H. 1998. Llawhaden, Dyfed. Excavations on a group of small defended enclosures 1980-4. *British Archaeological Reports (British Series) 275*

Williams, G. 1990. Recent Work on Rural Settlement in South-West Wales. In B. C. Burnham and J. L. Davies (eds) *Conquest, Coexistence and Change: Recent Work in Roman Wales*. Lampeter: Trivium 25, 112-122

Williams, G. 1998a. Woodside Camp. In G. Williams and H. Mytum (eds) *British Archaeological Reports (British Series) 275*, 16-29

Williams, G. 1998b. Dan-y-Coed Enclosure. In G. Williams and H. Mytum (eds) *British Archaeological Reports (British Series) 275*, 30-52

Williams, H. 1923a. The Romano-British site at Rhostryfan, Caernarvonshire - III: the Coed-y-Brain krall, and house-burial at Bryn-Beddau. *Archaeologia Cambrensis* 88, 291-302

Williams, H. 1923b. The Romano-British site at Rhostryfan, Caernarvonshire: the quadrangular enclosure and workshop at Hafotty-wern-las. *Archaeologia Cambrensis* 88, 87-113

Willis, S. 1996. The Romanization of Pottery Assemblages in the East and North-East of England during the First Century AD: A Comparative Analysis. *Britannia* 27, 179-221.

Willis, S. 1998. Samian pottery in Britain: exploring its distribution and archaeological potential. *Archaeological Journal* 155(1), 82-133.

Willis, S. 2004. Samian Pottery, a Resource for the Study of Roman Britain and Beyond: the results of the English Heritage funded Samian Project. An e-monograph. *Internet Archaeology* 17 [https://doi.org/10.11141/ia.17.1] Accessed 5th June 2018.

Willis, S. 2011. Samian ware and society in Roman Britain and beyond. *Britannia* 42, 167-242.

Wilmott, T. and Rahtz, S. P. Q. 1985. An Iron Age and Roman settlement outside Kenchester (Magnis), Herefordshire. *Transactions of the Woolhope Naturalists' Field Club* **45**, 36-185

Wilson, D. 1990. Air-reconnaissance of Roman Wales. In B. C. Burnham and J. L. Davies (eds) *Conquest, Coexistence and Change: Recent Work in Roman Wales*, Lampeter: Trivium 25, 10-18

Wilson, P. and Price, J. 2002. *Aspects of Industry in Roman Yorkshire and the North*. Oxford: Oxbow

Wilson, R.J.A. 2006. *Romanitas: Essays on Roman Archaeology in Honour of Sheppard Frere on the Occasion of his Ninetieth Birthday*. Oxford: Oxbow Books.

Witmore, C.L. 2007. Symmetrical archaeology: excerpts of a manifesto. *World Archaeology* 39(4), 546–562.

Wmffre, I. 2007. Post-Roman Irish settlement in Wales: new insights from a recent study of Cardiganshire place-names. In K. Jankulak and J. M. Wooding (eds) *Ireland and Wales in the Middle Ages*. Dublin: Four Courts Press, 46-61

Woolf, G. 1990. World-systems analysis and the Roman empire. *Journal of Roman Archaeology 3*, 44-58.

Woolf, G. 1992. Imperialism, empire and the integration of the Roman economy. *World Archaeology 23*(3), 283-293.

Woolf, G. 1997. Beyond Romans and Natives. *World Archaeology 28(3)*, 339-350

Woolf, G. 1998. *Becoming Roman: the origins of provincial civilization in Gaul*. Cambridge: Cambridge University Press

Young, C. J. 1977. *The Roman pottery industry of the Oxford region, British Archaeological Reports 43*

Young, T. 2001. Ely Roman Villa (ST 147 761). *Archaeology in Wales* 41, 131-2 90

Zienkiewicz, J D. 1990. The Early Development of the Legionary Fortress of Caerleon-Isca and Consequences for Flavian Policy in Britain. In B. C. Burnham and J. L. Davies (eds) *Conquest, Coexistence and Change: Recent Work in Roman Wales*. Lampeter: Trivium 25, 27-34