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The Economic and Social Status of Romano-British Rural Villas in Southern England

by

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ABSTRACT

The nature of rural settlement patterns and the economy during the Roman occupation of Britain from the Claudian invasion of AD 43 to the end of the fourth century in Hampshire and West Sussex formed the focus of this research.

The objective is to define a method of measuring the attributes of Romano-British ceramic assemblages that can be linked to the socio-economic status of the original owners and their villas. It is the hypothesis of this study that domestic ceramic vessels can be used as a reliable indicator of social status. A tenet of this hypothesis is that the higher social and economically wealthy Romano-British villa owners would be in possession of greater amounts of ceramic fine table wares. The pottery assemblages and the architectural features of twenty villas in West Sussex and Hampshire were analysed in order to test this hypothesis. The quantities of fine wares were measured by Estimated Vessel Equivalents (EVEs) and the Romanised architectural features present were quantified by their presence.

The economics of the Roman Empire was integrated with wealth and power which in itself was reflected in the fashions of the material culture together with the aspirations to acquire status. Social mobility during the Rome Empire relied on wealth and the consequent display of that wealth. The way a person could demonstrate a change in status was to acquire and display higher quality material culture. This can be seen to be demonstrated in the display of Romanised architectural features present in Romano-British villas coupled with the evidence of high value ceramic fine wares present in the cultural artefacts. This demonstration of wealth can be seen as representing the status of an individual within society and by comparison the fewer high value status symbols would indicate a lower status or class of an individual.

The differences in the quantity of these ceramic fine wares obtained by the villa owners can, therefore, be seen as an indicator and a measure of their relative social status. It is this theory that is the basis for the development of the methodology and the creation of a testable model.

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DECLARATION OF AUTHORSHIP

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and the work presented in the thesis are both my own, and have been generated by me as the result of my own original research. I confirm that:

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- where I have consulted the published work of others, this is always clearly attributed;
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1 Introduction

The objective of this research has been to develop and define a methodology of measuring the attributes of ceramic assemblages that can be related to the socio-economic status of the original owners of the vessels. It is hoped that this methodology, which is based on empirical data, will also provide a process whereby domestic ceramic vessels can be used as a reliable indicator of social status. It can be expected that the higher social and economic status Romano-British villa owners would have owned similar ceramic fine wares. The differences in the quantity of these wares in the possession of the villa owners may indicate and be a measure of their relative social status.

The economics of the Roman Empire were integrated with wealth and power which in itself was reflected in the fashions of the material culture together with the aspirations to acquire status (Millett, 1990). Social mobility during the Roman Empire relied on wealth and the display of wealth. The way a person could demonstrate a change in status was to acquire and display higher quality material culture. This was demonstrated in the display of Romanised architectural features present in Romano-British villas coupled with the evidence of high value ceramic fine wares present in the cultural artefacts. This demonstration of wealth can be seen as presenting the status of the individual within society and, by comparison, fewer high value status symbols would indicate a lower status or class of the individual.

The terms status and class are in themselves ambiguous and have been used by archaeologists without clear definitions. The term high and low ‘status’ has frequently been used by archaeologists for many years to describe varying classes of Romano-British rural villas. Status is normally attached to the position of a person within society and social status is the position or rank of a person within a stratified society. Social status can be achieved or inherited and places people in a stratigraphic position within a society and the relative rank that an individual holds has with it attendant rights,

duties, and lifestyle, in a social hierarchy based on honour and prestige (Oxford, 1995). Wealth within Roman society was based on land ownership and dictated the position of a person within society. Wealth and social position was associated with power and influence (Millett, 1990).

The use of the word status as it is applied to Romano-British villas probably reflects the social status of the occupants of the villa rather than the building itself. The amount of 'Romanised' architectural features incorporated into the villa could be taken as an indication of conversion to Roman cultural values and a measurement of the social and economic stratification of society in a rural environment. The terms high and low, however, are subjective and do not have any clear numerical or theoretical values that can be directly ascribed to them and there would seem to have been little, if any, research that has applied any empirical data to calibrate the status of rural villas in Britain. Rivet attempted a classification of villas according to their size and luxury but did not provide any clear theoretical or empirical details of his method of allocation (Rivet, 1969, 221-2).

This research, therefore, investigates the possibility of distinguishing patterns of Romano-British socio-economic stratification among twenty Romano-British archaeological villa sites on the basis of differences in the relative proportion of ceramic fine ware vessels. The relative proportions of ceramic fine wares can then be contrasted and compared with documentary evidence of the status of the villas. The status of the villas will be defined by the degree of Romanised architectural features incorporated into the buildings in order to determine if there is a relationship between the proportion of ceramic fine ware vessels and a social stratification of the villa owners.

1.1 Research Objectives

It is the objective of this study of rural Romano-British villa sites to address the following research questions.

- Pottery is found on every rural villa site but is there a relationship between the amounts of fine (table) and coarse (kitchen) wares which represents a measurement of the social status of the owners?
- Is it possible to quantify the status of rural villa owners by measuring the number of Romanised architectural features incorporated into their villas? This quantification may be a reflection of their conversion to Roman cultural and social values
- Is there a relationship between the quantity of fine ceramic vessels and the Romanised architectural features which could provide a method of quantifying the social status of the villa owners?
- Could a methodology be developed based on these parameters which would allow comparative assessments to be made between different villas?
- Are there local and more particularly regional differences in the proposition of fine wares present at different rural villa sites?

Ceramic vessels were used for food processing, food preparation, eating and display. Ceramic fine wares were selected, however, as they represent a class of vessels used primarily as tableware and possibly decoration. These vessels can be classed as non-essential and were discretionary purchases, gifts or even obtained for their contents such as samian unguent containers (Bulmer, 1980). The acquisition of ceramic fine wares can be seen as a statement of individual preference and an indication of social and economic status. Consumer choice combined with the ability to afford certain vessel types and the social status symbolised by the ownership and display of these vessels was one of the hypotheses of this research. The converse of

this hypothesis is that the acquisition and ownership of utilitarian ceramic kitchen wares was not an indicator of status.

An element of the relative social status of an individual was associated with their ability to influence and control the business and political events within their areas of influence. Lavish eating and dining was a key ritual in this process and demonstrated the owner of the villa's wealth and status. The display of ceramic fine wares would have been a way of indicating this wealth and hence influential status. The ability of villa owners to acquire and display fine ceramic table wares was a demonstration of their financial strength and their potential political influence.

The ceramic vessels recovered from an archaeological site only represent a partial sample of the original vessels used by the household as discard patterns and recovery methods result in incomplete assemblages. Whilst the pattern of discard and recovery is unpredictable, it is a hypothesis of this study that the level of ceramic fine wares will increase with status due to the fact that there will be a greater proportion of these ceramics within the original household assemblage. Conversely lower status households will discard fewer fine ware vessels as the vessels will be given greater care and less frequent usage. The less frequent discard of ceramic fine ware vessels should be reflected in the archaeological record.

It is, therefore, one of the objectives of this research to determine if it is possible to use the relationship of ceramic fine wares to infer the relative status of other villa sites where there is insufficient data to establish their status. This could be achieved by establishing a methodology and a model linking the relative values of domestic ceramic fine wares to the degree of Romanised architectural features present in various Romano-British villas in the study area in southern England.

1.2 Study Area

The nature of rural settlement patterns and the economy during the Roman occupation of Britain from the Claudian invasion of AD 43 to the end of the fourth

century in Hampshire and West Sussex formed the basis of this study. The study area of approximately 500 square kilometres was selected as it contained at least fifty Romano-British villa/farmsteads situated on a variety of geological landscapes from the fertile brick earths of the coastal plain, to the chalk downlands and the greensand slopes of the Upper Weald. These villas have been assumed to represent a socio-economic stratum of Romano-British society which can be compared to establish the relationship between wealth and the acceptance of Roman social and cultural lifestyles.

The diversity of soil types in the study area, from the thin grey calcareous rendzinas and thick argillic brown earths of the chalk downland to the heavy pelosol clay-with-flints and the fertile loess brick earths, would have had a significant impact on agricultural practices during the period of the Roman occupation (Courtney and Trudgill, 1984). These dissimilar soil types would have had different consequences for the economic viability of the farms and hence the wealth that the villa owners could generate from their lands. This relationship has been taken into account as part of the study into the status of villas and the ability of the owners to create disposable income which could be spent on non-essential luxury items.

1.3 Roman Administration

Roman control brought with it important changes to the local population as it became subject to the introduction of Roman administration and taxation. Roman provincial administration was centred on *civitates* such as Chichester (*Noviomagus*) and Winchester (*Venta Belgarum*), which were created as urban centres of the territorial divisions of the provinces of *Regni* and *Belgae*. *Civitates* were a Roman unit of territory applied to the indigenous local tribes which were governed by a council whose centre of administration was the *civitas* capital town (Wacher, 1998, 179). Substantial amounts of money would have been needed to develop the buildings and infrastructure of these new towns with their principal public buildings such as forum/basilicas, public baths and temples. The investment of money in such capital

projects stimulated growth in trade and encouraged the circulation of coinage. Towns were, therefore, not only administrative centres but, in creating demand for saleable goods and services, were also marketing centres for the new money economy. Coins were mass produced but the mints were strictly controlled by Rome. Controlling the quantity and quality of the money supply was an important way of managing the currency and a significant component in achieving economic stability. The major beneficiaries of the Roman system became wealthy through trading and gained prestige by embracing Roman social and cultural values.

Taxes were paid either in cash or in kind such as the grain *annona* and the new *civitates* were the collection point for tax payments. The principal taxes were a land tax and a poll tax which each *civitas* was responsible for collecting. For those taxes that were paid in cash, it was necessary for the local population to be included in the Roman monetary economy. Goods and services were sold for low value bronze coins, which were accumulated and exchanged for gold bullion coins needed for tax payments. The effect of this tax regime was to encourage the local population to adopt the new Roman monetary system.

1.4 Civitas and Land Tenure

The elite social structure of the Roman Empire relied on a power base which combined control of the military with the support of the rich landowning aristocracy (Millett, 1990, 40). The wealth of the Empire came from agriculture and it was a society dominated by these landowners operating in a market in which land was freely bought and sold. Beneath these aristocrats there was a class of farmers whose more prosperous members aspired to the status of the landed gentry whilst others were mere tenants (Smith, J.T., 1997).

At the time of the Claudian invasion and conquest in AD 43, Britain was under the control of the local Iron Age tribes. In the south of England the leaders of the Atrebates and other tribes would seem to have submitted to the Romans without any

significant struggle. The distribution of forts in these territories shows little military activity and could be viewed as strategic either for the purpose of a supply base (Chichester) or for the control of important routes (Winchester and Silchester) (Millett, 1990, 46). These forts became the principal Roman towns of *Noviomagus* (Chichester), *Venta Belgarum* (Winchester) and *Calleva Atrebatum* (Silchester). These *civitas* capitals were created in the first century AD to administer each tribal area and the rural villas constructed during the first and second centuries AD were largely owned by the native aristocracy who had adopted the Roman fashions of living (White, 2007, 125).

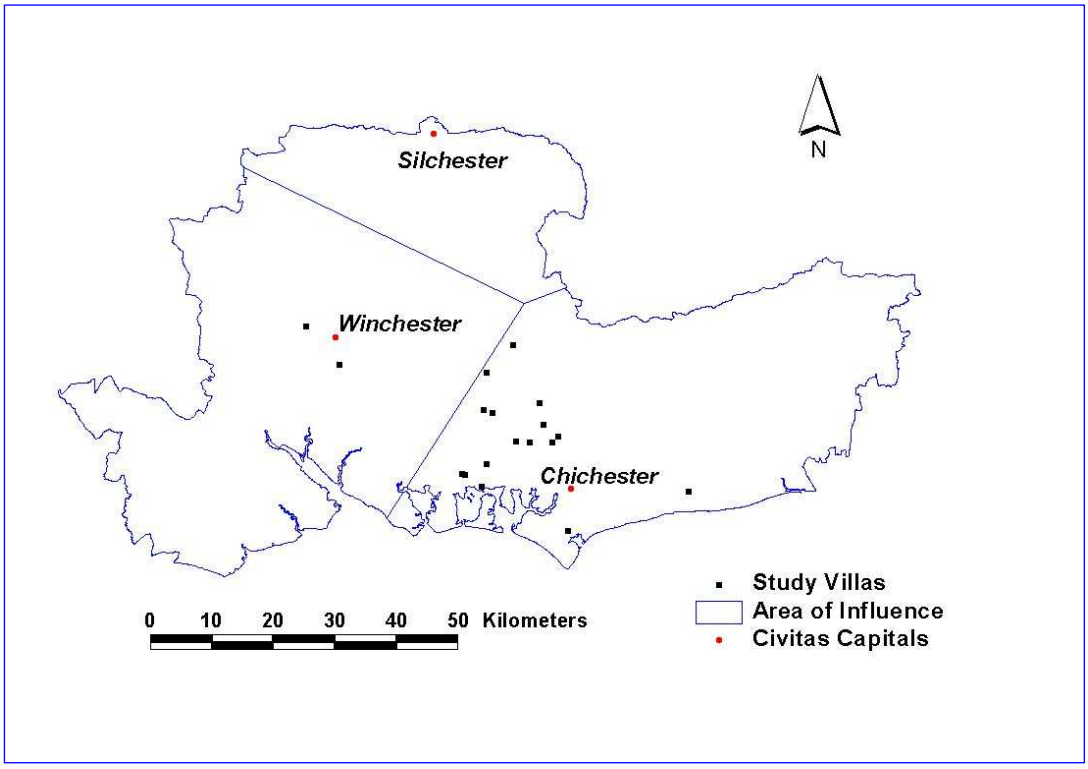

Figure 1: Potential Spheres of Influence of Civitates and Distribution of Villas (Author)

The *civitas* capitals would have been a focal point for laws, markets, social and recreational activities as well as religion and required an administrative structure to ensure that life was regulated and the town remained habitable (*Figure 1*). The main public buildings such as the baths, forums, basilicas and temples were constructed with masonry walls but most of the urban houses would have been built from wood.

These wooden built houses would only appear as ephemeral in the archaeological record and barely visible in large open area excavations. Most, if not all, urban archaeology is usually undertaken under commercial pressure to develop the site and constrained by the limited area under excavation. The ephemeral nature of these buildings and the destruction of the Roman levels by centuries of urban development of the towns have, also, reduced the chances of finding intact archaeological records. This has limited the amount of detailed information about civilian occupation of the *civitas*.

The research excavation of *Insula IX* at Silchester by the University of Reading is the exception. This fifteen-year project has been excavating, under research conditions, an area of approximately 3,000 square metres and has discovered that the *civitas* was developed on the site of an earlier Late Iron Age *oppida* and was occupied until at least the late fifth century AD (Fulford, M. G. et al., 2006). Silchester was abandoned possibly in the late fifth century or the sixth century AD and has remained a rural site. This has given archaeologists a rare opportunity to investigate a Romano-British town site undisturbed by modern development.

The pattern of rural development around the urban centres probably depended on the local geology. The rich fertile rolling landscape of the South Downs was suitable for both arable and pastoral agriculture. The shallow, easily cultivated soils warmed up rapidly and were ideal for growing wheat whilst the higher ground was ideal as sheep pasture. The sheep would not only have provided wool and meat but also helped to maintain the fertility of the soils by manuring (Wade Martins, 2004).

The ownership of land in Roman Britain was complex and a villa and its immediate lands might have formed a part only of a much larger estate. Each separate villa unit could possibly have been devoted to various agricultural activities and as such contributed to the productivity and wealth of the estate owner. This could explain the variation in the size and Romanisation of the different villas in this study. The deliberate production of an agricultural surplus that could be actively marketed to a

wider population needed a market where the produce could be exchanged. The *civitas* capitals would have provided that market. The relationship between the markets, the location of the villas and the communication links to these markets was vital to the success and economic development of the villas (*Figure 2*).

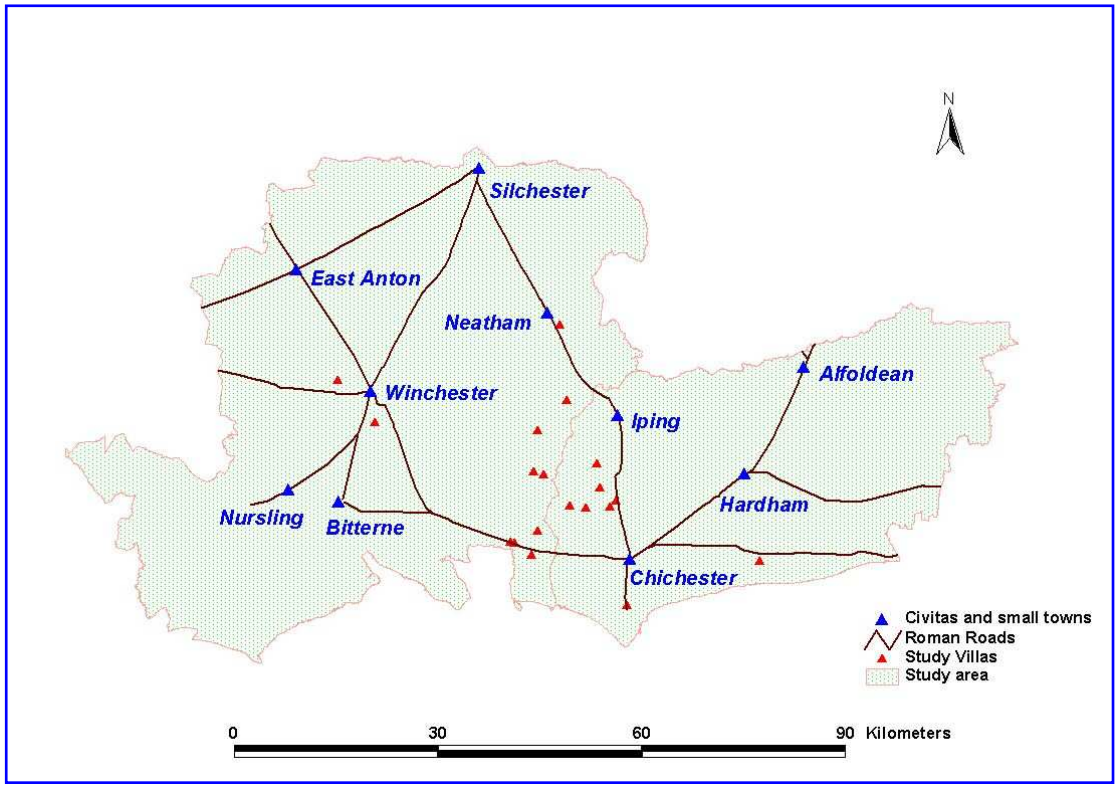

Figure 2: Relationship of Major Roads and Villas (Author)

The barbarian invasions which occurred during the third century AD caused the breakdown of economic and commercial activities and political instability particularly in Gaul. After the collapse of the Gallic Empire in circa AD 270s Diocletian (AD 284 – 305) was acclaimed as emperor by the army and he instigated social, political and economic changes throughout the Roman Empire. Diocletian initiated the separation and enlargement of the Empire's civil and military services and created a new provincial structure. Diocletian's changes included an extensive new tax system based on heads (*capita*) and land (*iuga*). *Civitates* would be expected to provide animals, money, and

manpower in proportion to its *capita*, and grain in proportion to its *iuga* (Treadgold, 1997, 20). These changes resulted in a profound transformation to both the society and economic life of Roman Britain.

The rampant inflation of the late third and fourth centuries created by the debasement of the coinage resulted in the increase of taxes in order to maintain the real value of state income. Tax revenues were derived from the rents on land, local goods' tax and contributions from the c*uriales* (Jones, 1964, 732). The *curiales* were the urban merchants, businessmen, and medium-sized landowners who were expected to procure funds for public building projects, temples, festivities, games, and local welfare systems. They would often pay for these expenses out of their own pocket as a means to increase their personal prestige. The c*uriales* were also responsible for the collection of imperial taxes, providing food and board for the army, and supporting the imperial post (*cursus publicus*). The legal liability for the collection of these taxes became financially ruinous to all but the wealthiest, who found ways to evade this onerous burden. This resulted in a reduction of money available to invest in maintenance and construction of public building and the decline of the *civitates* (Duncan-Jones, 1990). Large-scale investment in the construction of walls and bastions as defensive circuits of the *civitates* in the third and early fourth centuries AD illustrates the continued importance of the role of the towns as administrative centres (Millett, 1990, 141).

By the end of the third century, whilst towns still remained an important focus for administration, the countryside had become an area of investment (Millett, 1990, 203). This investment was symbolised by the construction of large rural villas particularly in southern Britain. It was possible that those people who held positions of authority in the administration of the *civitas* would still have wished to live in close proximity to the *civitas*. The largest villas would, however, have formed the foci of large and productive agricultural estates. These estates would have included smaller villas which were possibly tenanted (Dark, K. and Dark, 1997, 71). The expansion and construction of villas during the fourth century was the outcome of an extended period

of growth. They represented the long-term development of the 'villa estate' over many decades (White, 2007, 125).

During this period there were signs of economic growth in the form of mosaics, villas and temples in southern Britain. The growth in the production of indigenous material culture, particularly pottery, was stimulated by the demise of the samian and other Gaulish industries during the barbarian invasions of the 260s – 70s (White, 2007, 35). The disruption of supplies to the Roman Army on the Rhine would probably have had the effect of increased grain prices. Higher grain prices would have given rise to higher land prices. It has been suggested that the Romans exploited Britain during this period and this is one reason for the significant increase in Roman coins found on rural sites (Reece, 1991). This economic development resulted in self-sufficiency in both material culture and agricultural production so that during the fourth century Britain became a net exporter of produce (Witschel, 2004, 272-3).

The land taxes (*iuga*) introduced by Diocletian at the end of the third century were applicable to all landowners. The low echelons of rural society may have been forced off their lands in an attempt to avoid the burden of this new taxation. This would have created an opportunity for the more affluent villa owners to acquire more land to create large estates (e.g. Bignor). The low echelons may then have become tenants or simply farm workers on the new enlarged estates.

A *decurion* was a member of a city senate in the Roman Empire drawn from the *curiales* class, which was made up of the wealthy middle-class citizens of a town society. *Decurions* were the most powerful political figures at the local level. They were responsible for public contracts, religious rituals, entertainment, and ensuring order. Perhaps most importantly to the imperial government, they also supervised local tax collection. Early in the imperial period, aristocratic citizens actively sought the post as a mark of prestige; they would gain seats in the front row of the theatre and be accepted into the class of *honestiores* (honorable men). Once elected as *decurions*, they were expected to pay large sums of their own money to perform public works and

would typically compete with each other to furnish the community with temples, baths and other public facilities. Under the Dominate (c. AD 284 and later), when the Empire's finances demanded more draconian tax collection measures, the position of *decurion* ceased being a status symbol and became an unwanted civil service position. It was still limited to the aristocracy, but the primary emphasis was on tax collection, and *decurions* were expected to make up any shortfall in the local tax collection out of their own pockets. Many *decurions* illegally left their positions in an attempt to seek relief from this burden; if caught, they would be subject to forfeiture of their property or even execution (Grant, 1960).

During the late fourth century there was unrest in the north of Britain with attacks by the *Picti* and the *Scotti* in the north (White, 2007, 55) and Saxon raids along the south coast. The coastal towns in southern Britain were on the front line of these raids and this time of uncertainty coincided with the demise of several of the villas within the study area, such as Langstone and Sidlesham. Both these villas would seem to have been abandoned by the middle of the third century AD (Gilkes, 1998, Collins et al., 1973).

1.5 Romanisation of the Landscape

The establishment of these new urban centres after the Claudian conquest and the continuing presence of the cash-rich military population in Britain created a demand for food. It was in the rural territories of the provinces that the Iron Age farming units developed into Romanised farmsteads or villas. The Romano-British rural landscape became an agricultural environment with the villa as a focal point. Farming moved from subsistence level to a profitable occupation and small farmers, who had only produced goods for the local community, could now dispose of any surpluses at the nearest town market. Agricultural innovations, such as the introduction of heavier ploughs, made land previously too difficult to cultivate now useable for arable production. The introduction and increased use of corn-drying kilns imply that new

crop-processing techniques were also changing farming habits (Wacher, 1998, 110). These improvements in farming techniques introduced by the Romans increased yields and produced greater surpluses, providing the farmers with additional disposable income. New wealth was invested in improvements to farmhouses (villas) and luxury goods such as fine pottery.

1.6 Farms and Villas

Political power in the Roman Empire was linked to wealth which was measured in terms of land ownership. This encouraged landowners to demonstrate their wealth by adopting Roman traditions and values and exhibiting political power through the status of their villas (Millett, 2005, 61). These were lavishly decorated with mosaic floors and walls of painted plaster. The principal rooms may have had under-floor heating provided by complex hypocaust systems. These villas, which left a clear archaeological record and formed an obvious diagnostic feature of the Romano-British provincial landscape, have been selected as a control group. Romano-British villas were developed and extended during the third and fourth centuries AD but most had existed in some form from early first century farmsteads. By comparing the different styles and types of villas it may be possible to identify the areas of influence, if not the precise limits of each estate. However, this will not be considered in this study. In Romano-British times, as today, there would have been small farms with limited buildings and grand winged-corridor villas such as at Bignor. The high density of villas in this part of southern England could be interpreted as indicating a substantial estate or estates which controlled large areas. However, not all villas would have been estate centres and some smaller cottage style houses may represent the local indigenous farmers adopting Roman cultural styles. All villas were unique and varied in size and shape but followed certain basic principles. The simplest villa was a rectilinear building with perhaps just two rooms; at the other extreme, it was a large, multi-roomed, winged corridor-villa with extensive bath houses constructed around an enclosed courtyard.

The word villa has different meanings and can be the house of a farm, the house and the adjoining building within an enclosure or courtyard or the entire establishment, land and buildings. It was a rural estate consisting of not only the domestic buildings but also the fields, stock, and orchards that made it a viable enterprise. In this paper, 'villa' refers to the houses and their associated buildings. As the excavation of villa sites in England has normally concentrated only on the stone remains of the houses or part of the houses and buildings this definition should not cause any inconsistencies. The artefacts will only have been recovered from the houses and the associated buildings.

Romano-British villas form a large body of archaeological evidence which, if classified, could help to identify trends in the social and economic structure of rural Roman Britain. Villas were set out in an enormous variety of ways and those chosen for analysis here by necessity are but a small section of the population. It should be noted, however, that villa plans are not the only determinant of the social and economic wealth of the occupants. A rich man may choose to build a comparatively small house or a poor man build beyond his means but these examples would probably be the exception to the norm and should not invalidate any model based on the architectural features of a villa. It is hoped that an analytical approach to the Romanisation of villas will show that that there are underlying principles that could be applied to other villas to better understand the social and economic significance of the cultural values of a rural population.

An attempt to predict a social structure based solely on any typology of the plans of villas will be fraught with problems of chronology (Smith, J.T., 1997, 19). The significance of stratification was not appreciated by the archaeologists who excavated many of the villas before modern field recording techniques were introduced as standard practice. Boxes of pottery surviving in museum stores from such excavations can provide an indication of the time-span of the site. It is impossible, however, to distinguish which artefacts came from which occupational level. Thus despite more

refined dating of pottery forms, which allows the different phases of a building to be categorised, uncertainty still remains about the reliability of the stratification data.

There was no simple or single design for a villa and all were individual. The simplest form of structure that could be classified as a villa was a single-roomed rectangular building, usually constructed with stone foundations and wooden superstructure. This single room would have been the centre for all family and domestic activities (Smith, J.T., 1997). Such undivided buildings are the most rudimentary style of hall. The villa at Elsted was probably of this type of construction but the full ground plan of the building was not recovered during the excavation.

In Britain, row houses were the commonest type of villa (Smith, J.T., 1997, 232). The simplest row house consisted of a row of two to five interconnecting rooms but lacked a dominant room. A simple development of the row house was the addition of a veranda or portico. This allowed access to the individual rooms and possibly provided some privacy. The corridor not only gave access to the rooms but provided a gallery that overlooked the countryside and architecturally were a sign of Romanisation. The size of the rooms tended to vary but room use in villas is mostly unknown and designations given to rooms by the Romans are uncertain in their provincial application (Smith, J.T., 1997, 46). A further development was the addition of one or two pavilions at either end of the building producing a symmetrical shape with a balanced façade and this was the badge of Romanisation in most European provinces (Smith, J.T., 1997, 117). An example of this type of house is the late third to late fourth century AD house at Sparsholt **(***Figure 3*).

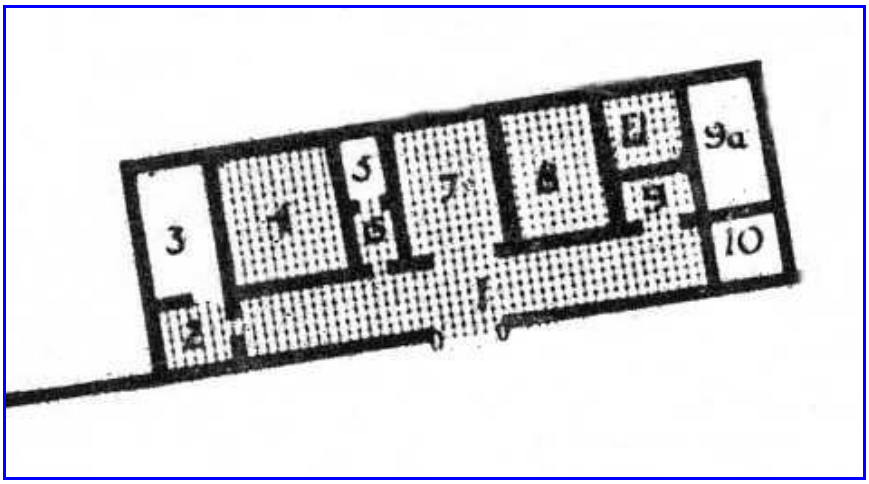

Figure 3: Fourth Century Row House at Sparsholt (Johnston, 1972)

A development of the single cell building was the Hall House which comprised a single large room, open from ground to roof, constructed wholly or partially of stone. The building was heated by a central hearth and may have had subsidiary rooms at one or both ends under a single roof (Smith, J.T., 1997, 22). The roof was supported on wooden posts creating aisles either side of the building. Aisled houses combined shelter for the family and the animals. Functional divisions were marked by the position of the hearth or by differing floor formats. The domestic part of the hall may have had a hard-rammed clay floor whilst the animals were kept in an area where the floor would have been made robust with flint or stone (Smith, J.T., 1997, 36). Typical examples of aisled halls are *Sparsholt and Stroud* (*Figure 4*).

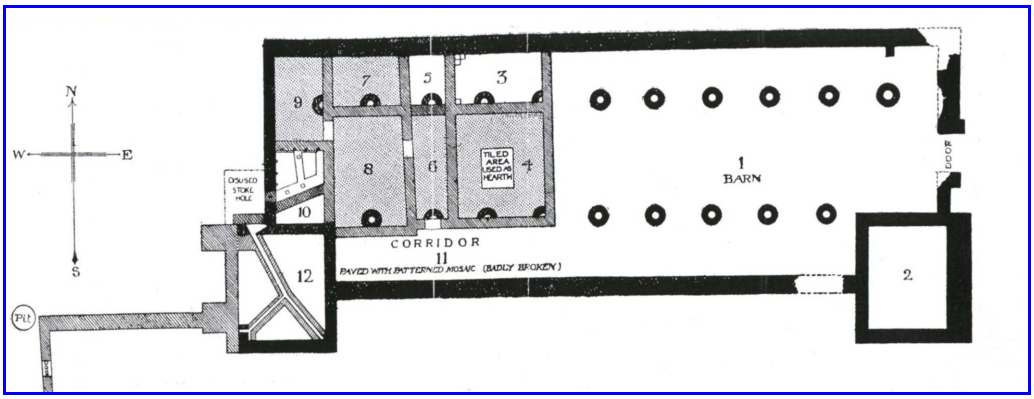

Figure 4: The Aisled House at Stroud (Moray-Williams, 1909)

The enclosure of the farmyard by a perimeter wall created a simple courtyard villa with buildings on three or four sides of a large open yard. The buildings of a winged courtyard villa were continuous on at least three sides. These villas can be seen as a development of either the row house or the aisled hall. The term corridor courtyard villa has been applied where there is a veranda connecting the outside of the buildings. An example of a grand courtyard villa is *Bignor*.

In addition to the major architectural features of Romano-British villas there were, also, internal Romanised functional and decorative features. Many of the walls of the rooms were decorated with painted plaster and the floors were tiled and tessellated. Villas were adorned with tessellated mosaics with geometric designs and scenes from mythology covering floors and pavements. It has been suggested that mosaics were a statement of wealth by the landowning aristocratic (Scott, S., 2000, 77). It is possible that the landowning aristocrats who held positions of authority in the administration of their local *civitas* would have wished to live in close proximity to the towns (Millett, 1990). This aristocratic elite would have probably wished and been able to afford luxury residencies in the surrounding countryside. Some of the rural villas may well have been country retreats for their urban owners with the opulence of the villas being a reflection of their wealth. The magnificent mosaics, particularly within the public reception rooms, were a way of displaying wealth and status to visitors and guests. These villas can be seen as a status symbol and a social space. The public rooms were used to receive and entertain guests and acted as a place to conduct business. The display of wealth within the public rooms was a demonstration of the social position of the owners in society and their political powers (Revell, 2009). Privileged access to the dining rooms (*triclinium*) with their fine ceramic table wares was also a method of demonstrating power and influence. Dining and feasting was a ritual of Roman domestic life and would have been a social event but also acted as a political forum. Guests were arranged in a seating order to emphasise their political and social status.

A classic symbol of the Romanisation of villas in Britain was the hypocaust and the bath house. Hypocausts were used for heating the villas. The floor was raised above the ground by pillars, called *pilae stacks*, and spaces were left inside the walls so that hot air and smoke from the *praefurnium* (furnace) would pass through these enclosed areas and out of flues in the roof, thereby heating but not contaminating the interior of the room. Ceramic box tiles were placed inside the walls to remove the hot air, and to heat the walls. Rooms requiring the most heat were placed closest to the furnace, whose heat could be increased by adding more wood to the fire. A hypocaust was labour-intensive to run and maintain as it required constant attention to tend the fire, and expensive in fuel, so it was not a feature of all villas.

A bath house was heated by a hypocaust and comprised three principal rooms: the *caldarium* (hot bath), the *tepidarium* (warm bath) and the *frigidarium* (cold bath). Bath houses would have required a large capital investment to build and their construction and design was not straightforward (White, 2007, 106). The size and opulence of the bath house was a reflection of the wealth and status of the villa owner. Bath houses and hypocausts should therefore be seen as a status symbol of the more affluent villa owners.

All villas were occupied over a considerable period of time and were subject to changes and modifications but it is only the plan of their final form which is normally known (Smith, J.T., 1997, 13). The earlier archaeologists, who excavated a large number of villa sites, were more interested in recovering the walls and other structures of the buildings they discovered and were less interested the in chronology of the phases of construction and modification of the dwellings. It is now difficult to directly relate the artefacts that were recovered during the excavation to distinct phases of the life of the villa. The pottery, however, may provide evidence of periods of time over which the villa was occupied. The amounts of pottery by period may help in identifying the growth or decline of the villa complex over time.

1.7 Roman Material Culture

The distribution of known villas in the study area is not uniform: sites were not spread regularly across the landscape and only those villas that have been located are denoted. The distribution does not therefore reflect those sites yet to be discovered or those that have been destroyed. The villas were analysed as far as was possible and categorised by type, accommodation and additional features, in order to understand if any relationship existed between the villas and their spatial position within the landscape.

The study and identification of the artefacts of Romano-British societies can help in understanding the social and cultural values that were important at that time and the analysis of Roman pottery is the major tenet of this dissertation. There are, however, many other artefacts that represent the material culture during the period. A study of the artefacts and material culture from any segment of society can help in identifying the status of the divisions within society. Most societies had valuables which can be regarded as symbols of power. In Roman Britain glass and metal containers could be regarded as symbols of power but were also part of the domestic scene like pottery vessels. All these vessels types may well have been present on the more opulent villa sites. Unfortunately both glass and metal do not survive in the archaeological record as well as ceramic vessels. Once pottery vessels are broken they have very little residual value and are discarded unlike glass and metal both of which can be recycled. The survival rate of pottery on Romano-British rural villa site makes them an ideal artefact for quantification and comparative studies.

The Roman occupation had an impact on the consumption of food and different culinary habits were accepted into the domestic life of the local population. The importation of exotic foods such as figs, olives, lentils, mulberries and pine nuts, which were introduced to Britain and widely distributed, would have had a major impact on the dietary and culinary habits of the indigenous population (van der Veen et al., 2008, 33).

The introduction of separate categories of cooking and tablewares can be seen in the pottery. These differences were present prior to the Claudian invasion but it is not until the Roman occupation that these trends start to be more widespread. Most late Iron Age pottery assemblages lacked tablewares such as shallow bowls, dishes, bottles and jugs but towards the end of the first century BC these vessels started to appear (Cool, 2006, 155). The majority of these new forms were imported from the *terra nigra* and *terra rubra* kilns in northern Gaul (Tyers, 1996, 161 - 6). New vessel forms such as *mortaria* would also seem to indicate an adoption of Roman culinary habits. *Mortaria* appeared sporadically in pre-Claudian contexts but their numbers increased rapidly after the conquest in AD 43 (Cool, 2006, 43).Coarse pottery *mortaria* in creamy-white fabrics were the classic Roman kitchen utensil, whilst the bright red samian *mortaria* served a different purpose as tableware. The combination of wine *amphora* and new forms of cups and beakers equate to wine drinking which had more to do with social and cultural values than perhaps political ideals. *Amphorae* were used to import olive oil, fish sauce (garum) and other culinary items as well as wine and, as such, would have broadened the culinary horizon of the local indigenous population.

Not only did the Romans introduce new culinary practices but also new patterns of consumption. Tablewares of platters, cups, beakers and flagons suggest that food was served as individual portions and that wine was consumed with meals (Cool, 2006, 165). It would seem that pottery vessels reflected these fundamental changes introduced to cooking and dining practices in the transition from the late Iron Age to Roman cultural values. The range of pottery types associated with food preparation and cooking in the kitchen were markedly different from those used in food consumption. The classic glossy-red samian (*terra sigillata*) of the early Roman period epitomises the introduction of tablewares to Britain. The relationship between coarse kitchen wares and fine tablewares resulting from the Roman occupation is the central theme that this thesis will examined.

1.8 Study Scope

The use of pottery in the domestic environment was a feature common to all villa/farmsteads. It has been assumed that villas represent a socio-economic stratum of Romano-British society and therefore the pottery assemblages associated with these sites contained a similar range of fine (table) and coarse wares (kitchen).The fundamental premise of this study is that the more affluent villa owners acquired a greater proportion of fine wares. This hypothesis has formed the basic tenet of this study. Traditionally archaeologists have concentrated on using pottery to date sites which means that consideration of what the vessels were actually being used for and in what context was often ignored. The function for which the vessels were used, whether in the kitchen or the dining room, can potentially provide an insight into the social and cultural status of a villa.

Although the advent of a uniform recording system for Roman pottery in the 1990s has enabled recently accessed assemblage compositions to be compared and analysed (Tomber and Dore, 1998, Webster, 1996, Tyers, 1996), quantified data contained in most pottery reports is very limited. To overcome this lack of empirical data, it has been necessary to revisit and quantify the pottery assemblages of older excavations. The study area contains the Romano-British towns (*civitates*) of Chichester and Winchester which were potentially the major marketing centres for the products of the local potteries. The establishment of quantified pottery data volumes within a comparable structure has enabled marketing trends to be hypothesised where it was possible to qualify the data by time periods.

1.9 Summary

In AD 43, Britain became a province of the Roman Empire when it was invaded by an army under the emperor Claudius. Its links with the Empire, however, had already been long established through trade, population movement and political alliances. The

invasion would have had a disruptive effect on trade for a short period as most, if not all, of the available ships would have been commandeered for the army. The withdrawal of the Roman legions, the collapse of the monetary system and the breakdown of administrative systems all contributed to the end of the Romano-British era. The end of Roman authority and administration may not have been immediate with the departure of the Roman Army in AD 410 but coinage stopped. These events do not explain the abandonment of most villas by the late fourth to the early fifth century, but this is outside of the scope of this study.

Romanisation was not the simple acceptance of new forms of material culture, such as different types of pottery, clothing and food, but a fundamental change in the way the world was perceived. The lack of documented evidence makes analysing the changes which took place prior to and during the Roman occupation very difficult and perhaps more subjective. The material culture, however, can be used to achieve some empirical understanding of the social and economic changes which took place during this period.

2 Background

2.1 Objectives

The objective of this study has been to develop a method of comparative assessment whereby pottery assemblages can be ranked in a sequence that reflects the relative socio-economic status of Romano-British villas in southern England. The approach involved the generation of hypotheses which were tested against empirical data gathered from the excavation reports and pottery assemblages of selected villas. The aim was to highlight the value of pottery as a resource for exploring a series archaeological enquiry beyond its essential role in providing dating evidence.

It has been assumed that villas represented a socio-economic stratum of Romano-British society and that the pottery assemblages associated with these sites therefore contained a similar range of fine and kitchen wares. Fine wares represented non-essential vessel types acquired as a matter of choice by villa owners. This choice has been interpreted as an expression of socio-economic status. The method was to differentiate on the basis of the proportion of fine wares between each pottery assemblage.

Traditionally pottery from excavations has been used to aid the dating of the site and the chronology of the phases, with little quantified published data. This lack of reliable, quantified data has necessitated the analysis of archived pottery assemblages and excavation reports of the selected villas, in order to establish a database of factors to test the hypotheses.

There have been few attempts to develop numerically based approaches to the study of Romano-British pottery as opposed to samian (Willis, 1998) or coins (Reece, 1991). It is hoped that this model will be of assistance to future research for the comparison of pottery assemblages from different rural villa sites. The basic model

should establish the normal pattern of occurrence of both fine and coarse wares on rural villa sites with which other individual site assemblages can be compared.

2.2 Urban Villas

It was hoped that it would be possible to analyse the pottery assemblages from urban villas as part of a comparative study with rural villas. The objective of these comparisons was to identify if there were any apparent differences between the relative amount of fine wares in urban and rural sites. The development of Roman town sites over the centuries has unfortunately destroyed much of the archaeology. The earliest deposits have been disturbed and truncated by subsequent developments. This has been further complicated by the very limited amount of large open area excavation possible on urban sites. The majority of city excavations tend to be piecemeal with very little intact archaeology, the bulk of the walls having been robbed over the centuries. Where excavations have been undertaken, the amount of disruption to the archaeology and the difficulty in assigning clear stratigraphic relationships to the Roman levels has in several instances severally limited the possibility of using pottery assemblages from urban villas. In most excavations it is possible to assign pottery to a site level but not to a building or stratigraphic level. It may be possible in future to carry out such comparative analysis when the results of the current excavation at Silchester by Reading University and other such sites are available to a wider audience.

The focus of the study, therefore, has been on rural villa sites in Hampshire and West Sussex but selective comparisons have been made with other rural villa sites outside the domain.

2.3 Study Area

The study area was selected with the objective of being able to assess the distribution of villas with different and variable agricultural environments and their

relationship within the landscape. The topographical boundaries to the study area are independent of the current administrative borders which, for studying villas in the landscape of Roman Britain, are totally irrelevant. For reasons of logistics and accessibility to artefacts and material, the major study area was restricted to East Hampshire and West Sussex. However, the current administrative boundaries did have a relevance to where the previously recovered archaeological material was located and archived. To gain access to this material, it was necessary to visit various museums in both Hampshire (Winchester and Portsmouth) and West Sussex (Chichester and Worthing).

The southern section of the study area is surrounded by the sea, which provides a natural boundary. The western, eastern and southern boundaries were selected to include diverse surface geology. These include the chalk of the South Downs, the brickearths of the coastal plain, the 'clay-with-flints' of the upper downs and the greensands of the Weald (*Figure 5*).

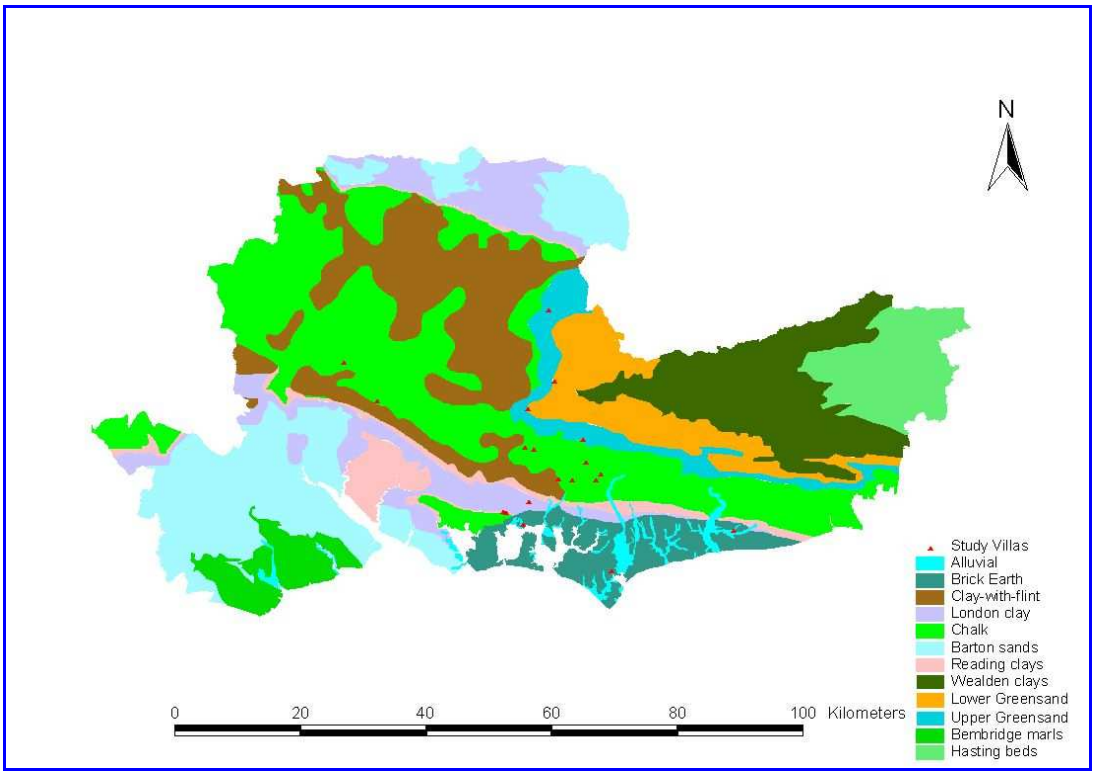

Figure 5: Basic Geology of the Study Area (Author)

The area contains the Romano-British towns (*civitates)* of Chichester (*Noviomagus*) and Winchester (*Venta Belgarum*). These *civitates* would have been the marketing centres for the agricultural products of the villas within the provinces, as well as the distribution centres for pottery. The area also includes the small towns of Neatham and Iping which may have held small markets and fairs (Peacock, D. P. S.. 1982, 157). Whilst some pottery could have been obtained from the kiln sites or supplied directly to the army such as BB1 (Allen and Fulford, 1996) these markets were all potential places for local potters to sell their kitchen wares. Apart from BB1 products and possibly Alice Holt products most kitchen wares had limited distribution patterns and were produced for the local population (Hodder, 1974).

2.4 The Romano-British Pottery Industry

The major elements of any form of pottery production were the selection of suitable clay, the inclusions added to the clay, forming the vessel including decoration, and the method of firing. These elements have remained the same since early prehistoric times and objects made from clay are dependent on the treatment of each of these elements. Over time these elements have all been prone to change and alteration, with some elements of the process being more susceptible to change than others. Cultural traditions, however, can exercise a strong conservative influence on production processes. Shape of cooking vessels and other utilitarian wares was governed by function rather than aesthetics and the basic forms changed little over time.

The introduction of the centrifugal wheel into Britain during the first century AD revolutionised ceramic production processes, enabling vessels to be made quickly and in relatively large numbers. The change in the shape of a vessel was comparatively simple as was its size, as these were only dependent on the skill of the potter and the fashions of the day. The introduction of the centrifugal wheel allowed the potters more

flexibility to produce different shapes and forms as well as improved uniformity in size. Similarly, incised decoration or slipped designs on the vessels did not require major modifications to the technical processes of ceramic production.

Modification to the type of inclusions used or, more radically, the change of a clay source would, however, potentially necessitate changes to the firing techniques. The structure of the clay and the inclusions alter the temperature at which the chemical composition changes. Firing is a very skilled process. Potters would have developed various techniques in controlling this procedure and would have been reluctant to introduce change.

The indigenous late Iron Age pottery industries of southern England were established some time before the Claudian invasion and in Hampshire and Sussex have been described as Belgic or more recently as Atrebatic (Gibson, 2002, 123). The commonest forms were simple hand formed jars with a high carination in a coarse black or grey-brown fabric containing a flint temper. There were signs of burnishing on the outer surface and faint incised diagonal decoration. Petrological analysis of the fabric characteristics of the Belgic pottery recovered from the Causeway, Horndean (SU 696 125) in 1958 (Cunliffe, 1961a), compared with the non-plastic inclusions of examples of Rowland's Castle pottery, showed a high degree of commonality (Dicks, Unpublished-b). All shared a common isotropic clay matrix with abundant to frequent sub-rounded well-sorted silt grade 0.05 mm quartz with frequent rounded 0.05 mm iron rich particles. Additional inclusions included both calcified flint and additional coarse quartz sand used as tempers. The petrological evidence, therefore, would seem to suggest that the kiln site at Rowland's Castle was the production centre for these vessels.

Romano-British potters were not consciously following a classification but producing the shapes and forms that they could sell. The determination of form was associated with social history and economics rather than producing vessels to some predetermined shape. The changing social and culinary habits had a significant impact

on the shapes and sizes of vessels through the four centuries of the Romano-British period. More solid foods such as meats and fish were consumed rather that soups and stews. This influenced the development of shapes of vessels from bowls towards plates and platters. Drinking habits of wine rather than beer also influenced the introduction of cups rather beakers (Cool, 2006).

The majority of the pottery assemblages were dominated by wheel thrown grey wares which would have been used in the kitchens of both the urban and rural communities. These ubiquitous grey wares were the products of local pottery kilns such as Alice Holt, Rowland's Castle, and Shedfield. Other suppliers were the industries at Wareham and the surrounding area, which produced Black Burnished wares (BB1), and the New Forest kilns, which produced both grey kitchen wares and fine table wares (*Figure 6*).

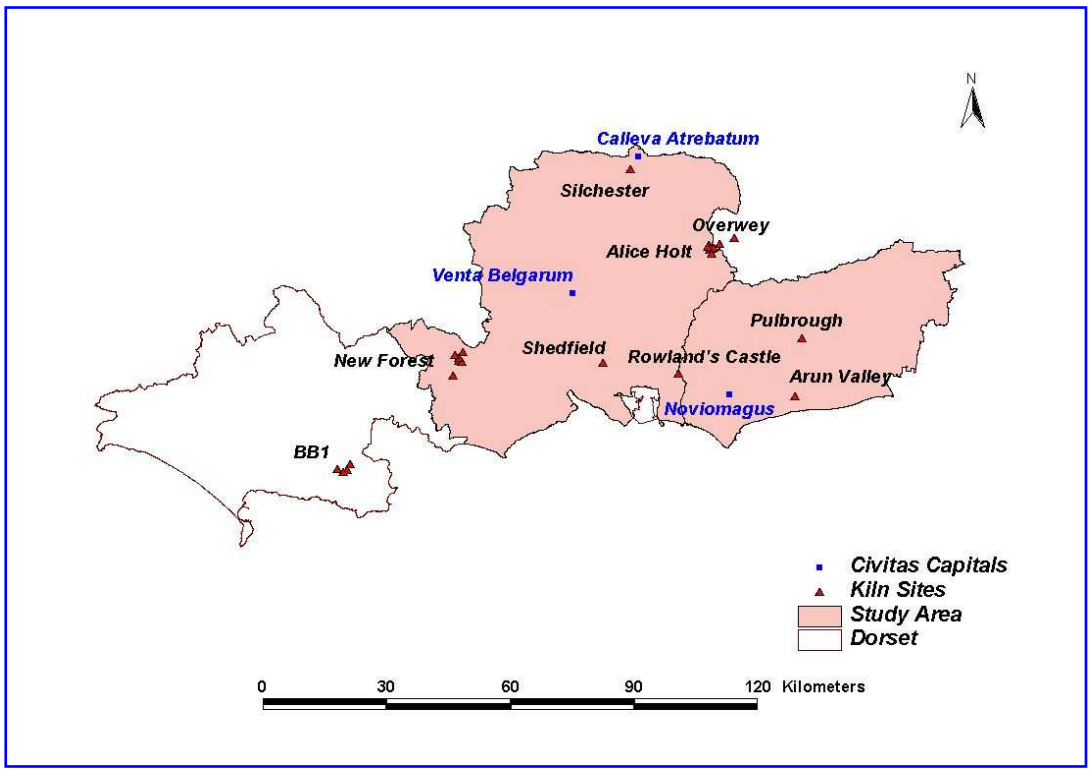

Figure 6: Location of the Pottery Kilns within the Study Area (Author)

The Romano-British pottery kilns at **Shedfield** were first excavated in 1960 at Hallcourt Wood (SU 549 127) (Cunliffe, 1961b). More kilns were discovered in 1989 during the construction of the golf course (SU 555 139) at the Meon Valley Country Club but this excavation is unpublished. The fabrics and forms of the pottery were consistent with a first century date and have many late Iron Age characteristics both in the rim forms and the use of crushed calcified flint as a temper. The vessels were hand made with signs that a turning table was used for finishing and burnishing (Dicks, Unpublished-d).

The **Rowland's Castle** Romano-British pottery kilns were situated on a promontory overlooking a river in the Chalton valley on the Hampshire-Sussex border (SU735 103). The potteries were near the crossing of two roads: the north-south road from Silchester (*Calleva Atrebatum*) to Hayling Island and the main east-west route from Chichester (*Noviomagus*) to Winchester (*Venta Belgarum*). These routes gave access to the markets of the local region for the grey coarse wares found on many sites in both East Hampshire and West Sussex. There is evidence of small-scale pottery production during the late Iron Age in the area (Cunliffe, 1961a, 58) but, during the Romano-British period, the potteries manufactured coarse grey kitchen ware. Rowland's Castle pottery has been recorded in first century contexts such as the cemetery at St Pancras, Chichester (Down, A and Rule, 1971, 53-126); Fishbourne Roman Palace (Manley and Rudkin, 2003); in late third to fourth century sites such as Portchester Castle (Cunliffe, 1975, 270-366) and, more recently, at a villa near Liss, north of Petersfield (Dicks, Unpublished-c).

A feature of some of the cooking pots is a 'batch mark' just beneath the rim. These 'batch marks' have mystified archaeologists for many years and there would still seem to be no satisfactory answer as to their meaning. The marks would seem to be Roman numerals and must have represented some form of measurement. They may have represented ownership, capacity or perhaps contents but none of these suggestions would seem to satisfactorily explain their function or meaning. A detailed

study of these enigmatic symbols in the future may be able to ascertain what function they served.

The kilns in the **Alice Holt** Forest have been the focus of attention of antiquarians and archaeologists for many years. In the early nineteenth century, local antiquarians noticed pottery fragments within the forest but it was not until the early twentieth century that kilns and waster dumps were excavated. A wealth of information has been established on the typologies of the products of the Alice Holt kiln sites (Lyne and Jefferies, 1979, Millett, 1979). Three kilns at Tilford, **Overwey** were excavated in 1947/8 (Clark, 1950). The fabric (Portchester Fabric D) was identified by the analysis of the Romano-British pottery from the excavations at Portchester Castle (Fulford, M. G, 1975b, Cunliffe, 1975).The kilns have been dated as operating in the fourth century AD (Millett and Graham, 1986).

Hampshire Grog Tempered ware, also know as Late Roman grog tempered ware, was prevalent in Hampshire, Sussex and Kent during the late third and fourth centuries AD. No kiln sites have been identified (Tyers, 1996, 192). The vessels were hand-made with a smooth burnished surface and zones of diagonal or lattice decoration. At Portchester this fabric accounted for about one-third of the non-colour-coated wares from the late third century until some time in the fifth century AD (Fulford, M. G, 1975b, 286).

The **Black Burnished** ware (BB1) industry had its heritage in pre-conquest Iron Age (*Durotrigian*) ceramic traditions, based around the Poole Harbour/Wareham region of south-east Dorset. Cooking pots and bowls in a dense black fabric with burnished lattice decoration were extremely popular throughout the period of Roman occupation. Evidence from the kiln site at Worgret indicates that the vessels were hand-made but the precision of some of the rims and flanges implies that they had been finished on a turn-table (Hearne and Smith, 1991, 99 - 100). The kiln site was in production from the late Iron Age through to the fourth century AD. This is consistent with evidence from the recently excavated kilns at Bestwell Quarry (Ladle, Unpublished).

The disruption to trade and communications on the continent during the third century has been blamed for the decline in the Gaulish samian industries and the start of the red slipped and colour-coated production in England (Young, 1977). The **New Forest** kilns, which produced both fine and grey wares, started manufacture c. AD 250 (Fulford, M. G, 1975a, 106) and ceased production around the first decade of the fifth century AD. The kilns were located in a rural location on badly drained alluvial deposits of Bracklesham sands and clays, some seventy kilometres east of Dorchester (*Durnovaria*) and fifty kilometres south-west of Winchester (*Venta Belgarum*). The kilns produced both red slipped and white coarse ware *mortaria* as well as a range of beakers, flasks, jugs, bowls, cups and jars in both fine and grey coarse wares.

2.5 EDXRF Fabric Analysis

The relative abundance of ceramic vessels in relationship to other cultural remains recovered from Romano-British sites affords an excellent opportunity to apply scientific methods of analysis to this material. The analysis of the pottery can provide a basis for deductions about both production and distribution; a hypothesis can then be constructed of the potential social organisation that may have existed during the Romano-British period. It is, however, important to establish accurately the characteristics of the typology and fabrics of the vessels before any distribution patterns can be postulated. There are several excellent publications on the typologies of the Oxford Industry (Young, 1977), the New Forest Roman Potteries (Fulford, M. G, 1975a), and the Alice Holt Industry (Lyne and Jefferies, 1979) but very limited published material on precise fabric descriptions. Since material from known production sites is ideal to establish these fabric characteristics pottery from the Romano-British pottery industries within the study area was analysed.

The justification for using fabric characteristics as well as typology is that, during the Romano-British period, many of the pottery production centres produced similar

vessel forms which can only be assigned to a particular kiln group by fabric analysis. This is not to negate information provided by typology criteria but to provide analytical tools to affirm these groupings and to consider typology and fabric together. It would be inappropriate to rely solely on form, as many undiagnostic sherds would be excluded from any classification, or to rely exclusively on fabric characteristics. A combination of the fabric and the typology can help in establishing kiln products and serialisation within kilns.

2.5.1 Method of Fabric Analysis

Energy Dispersive X-Ray Fluorescence (EDXRF) is a technique used for the chemical analysis of a wide range of inorganic materials including ceramics. The technique relies on the fact that when materials are exposed to ionising radiation they emit characteristic x-rays. EDXRF measures the intensity of the x-rays and can quantify the amount of an element in a ceramic sample and produce a profile of the proportion of each element present. The advantage of this technique is that it is relatively cheap, as there is no need for specific sample preparation. X-ray fluorescence (XRF) spectrometry is a rapid, quantitative multi-element non-destructive methodology technique that provides excellent accuracy and unparalleled long-term precision.

Whilst clearly there were many elements such as Iron (Fe), Silicon (Si) and Calcium (Ca) in the clays, a decision was made to compare rare elements because, whilst the proportions were significantly less than the major elements, it was felt that their presence was more significant. Each sample was subjected to a 200-second exposure to x-rays during which time the target was moved every five seconds. The results were collected in an Excel spreadsheet and the mean value with the standard deviation was calculated. The four rare elements of Strontium (Sr), Rubidium (Rb), Zirconium (Zr) and Yttrium (Y) were selected to categorise the chemical characteristics of the fired clay of the ceramic vessels.

An EDXRF machine was made available to the writer to undertake this study by English Heritage at Fort Cumberland, Portsmouth.

2.5.2 Selection of Material

In order to eliminate any possible confusion or contamination, pottery sherds used in this experiment were from the original excavations of the kiln sites. The sherds were obtained from various collections stored in Portsmouth City Museum, Hampshire County archive at Winchester and from the private collection of Malcolm Lyne. The Black Burnished ware was obtained from the site as the material has not yet been transferred to the Dorset County Museum.

2.5.3 Alice Holt Grey Wares

The kilns in the Alice Holt forest have been the focus of attention of antiquarians and archaeologists for many years. In the early nineteenth century local antiquarians noticed pottery fragments within the forest but it was not until the early twentieth century that kilns and waster-dumps were excavated. In 1979 Lyne and Jefferies published their report on the Romano-British pottery industry (Lyne and Jefferies, 1979) which has been used as the major reference document in this study. The material was obtained from Hampshire County Museum and came from both the Binsted excavations and Wade's excavation of the Goose Green Inclosure of 1945.

2.5.4 Black Burnished Ware 1

Samples of pottery material were obtained from the kilns at Bestwall which was excavated by Lilian Ladle between 2002 and 2005. All the material used in the experiment was from the kilns and not waster dumps. Eleven sherds were used from a date range of c. AD 200 to 400.

2.5.5 New Forest Wares

During the 1960s and 1970s there was much forestry activity in the New Forest which precipitated the excavation and re-excavation of several kiln sites. Lower Sloden and Pitts Wood were excavated by Vivien Swan in 1966 (Swan, 1971)and Amberwood was excavated by Michael Fulford in 1970 (Fulford, M. G, 1971). The material from the excavations was stored at the Hampshire Country Museum in Winchester. Material for this study was obtained from this source and contains examples from Sloden and Amberwood.

2.5.6 Portchester D/Overwey

Three kilns at Tilford, Overwey were excavated by A. J. Clark in 1947/8 (Clark, 1950) and the pottery was stored at Guildford Museum. The samples used in this research were donated by the museum.

2.5.7 Rowland's Castle Grey Ware

The Rowland's Castle pottery sherds used in the experiment were from the material excavated in 1963 by Margaret Rule and stored at Portsmouth City Museum. The material has no stratigraphic information and there was no site documentation but was marked with a site code of RC63. There was no kiln information. Recent work by the author suggests a date range of c. AD 75 to 350 is possible (Dicks, 2009).

2.5.8 Shedfield Grey Wares

The pottery kilns at Shedfield were first excavated in 1960 by Barry Cunliffe (Cunliffe, 1961b) and Grahame Soffe in 1989. Soffe's excavation is currently being prepared for publication and the pottery assemblage was archived at Winchester University. The samples selected for this experiment were taken from the 1989 excavation. The forms have been taken from the Cunliffe's 1960s excavation report. Archaeomagnetic dating of the baked clay of one of the kilns produced a date of c. AD 90 (G. Soffe pers comm.). The fabric and forms of the pottery were consistent with a

first century date and have many Iron Age characteristics both in the rim forms and the use of crushed calcified flint as a temper. All the vessels were hand-made with the use of a turning table.

2.5.9 Summary and Results

The results of the EDXRF fabric analysis from the range on samples above were inconclusive with a large variation in readings taken from different material from the same kiln wasters and very limited variation in the amounts of rare elements in the pottery from the six kilns. The results of the analysis for Rubidium were typical (*Figure 7*).

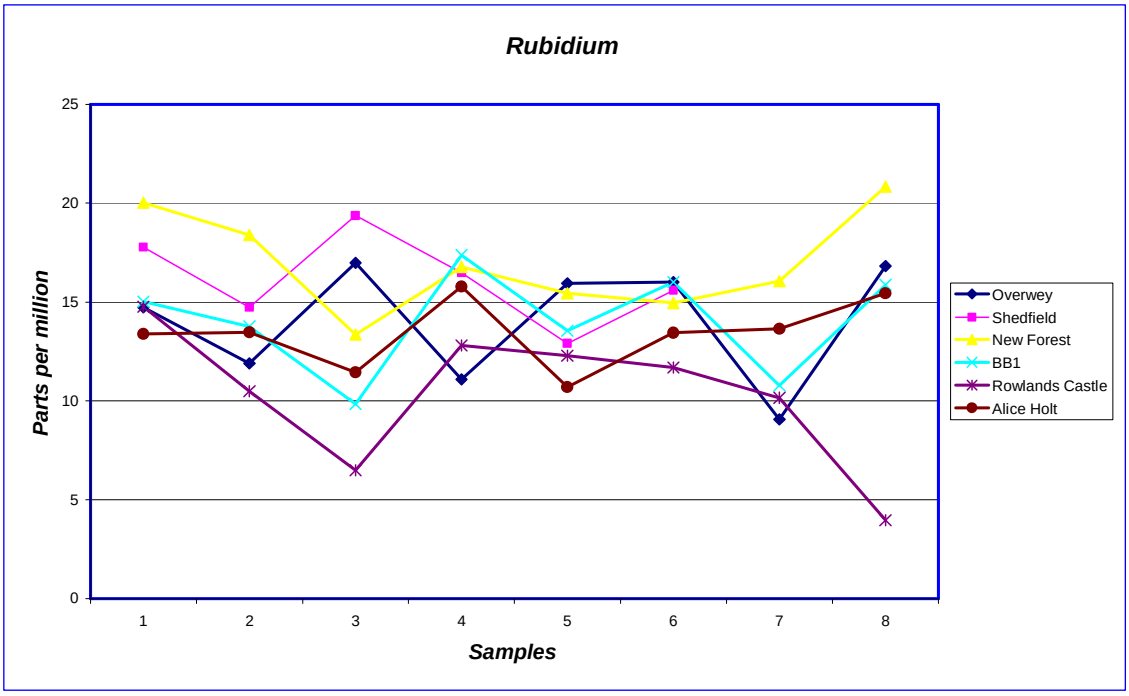

Figure 7: Parts per million of Rubidium

The result for Strontium, Zirconium and Yttrium were similar with again a large variation in readings. It was hoped that the processes of manufacturing of the ceramic vessels would have produced a homogeneous material which would give a consistent

set of results. This would seem not to have been the case and the variation in results would seem to suggest that the clays were far more heterogeneous.

It was, therefore, decided not to pursue this particular line of research any further as part of this study.

2.6 Villa Selection

The focus of this study has been limited to a number of villas within the rural landscape; other known sites such as temples and small settlements have not been considered. The selected study area can be defined as the region within which the villas to be sampled can be identified as primary units. This provides a theoretical framework within which to place the results of the analysis of the pottery and Romanised architectural features of each unit. The units were chosen to give a selection of villas from the period of the Roman occupation that was random in size and type, as well as being situated on various geologically different landscapes.

The selection of the villas, however, proved to be more problematical as it depended on sites having the correct level of information. The information required was an excavation report identifying the Romanised architectural features by occupational time period and access to the excavated pottery assemblage.

The Hampshire Historical Environment Records (HER) identified 105 possible villa sites but twenty-eight (26%) of these were based on information prior to 1900, with little detail and no pottery. Fifty-six sites (54%) were based on indicative field scatters and occupation debris which could have indicated the presence of a villa. There were only twenty-one locations (20%) where villas had been recorded and the excavated pottery archived (*Table 1*). A similar situation existed with the HER inventory for West Sussex where, of the 118 entries, ninety-eight (83%) were pre-1900 or again indicative, based on the presence of Romano-British (R-B) material found as field scatters.

Table 1: Villas Recorded in the County HER

	Hampshire	West Sussex	Total
Total	105	118	223
Pre-1900 reference	28	22	50
Reported R-B material	56	76	132
Actual R-B villas	**21**	**20**	**41**

The distribution of known villas was not uniform because the sites were not spread regularly across the landscape and only those villas that have been located are denoted. It does not, therefore, reflect those sites which have yet to be discovered or those that have been destroyed (*Figure 8*)

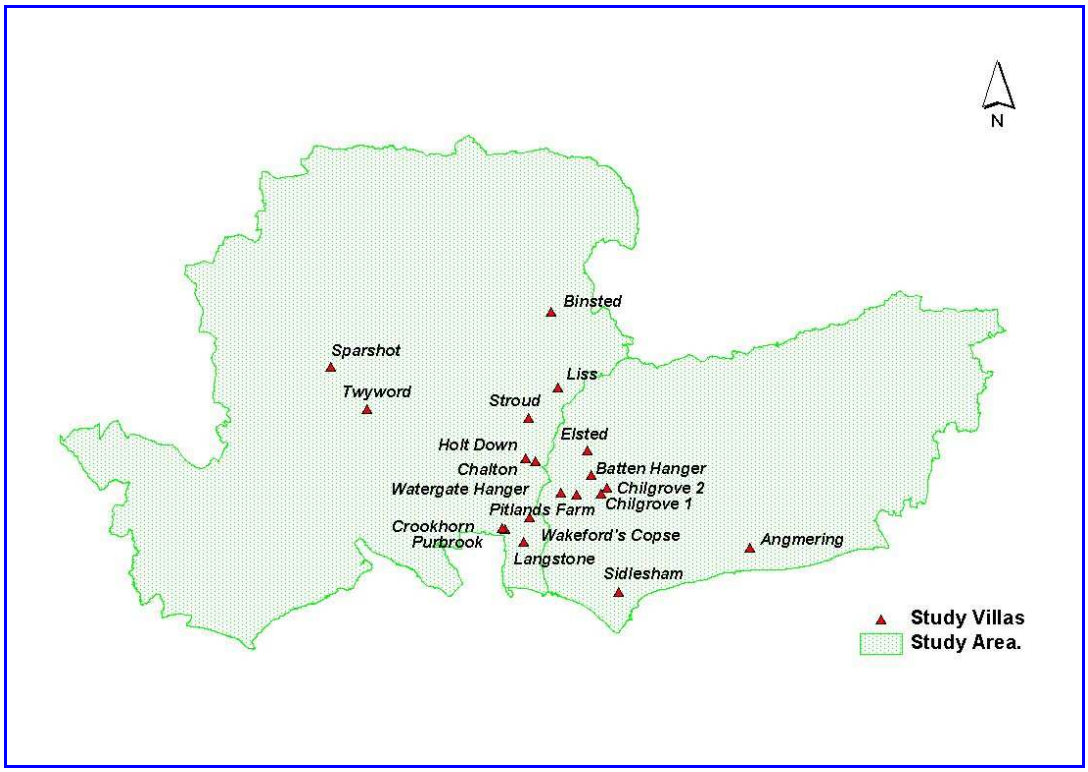

Figure 8: Location of Selected Villas in Hampshire and West Sussex (Author)

The twenty potentially suitable villas are listed in *Table 2*. Villas located on more fertile and productive land would have been able to produce surplus agricultural products that were sold in exchange for money at the local markets. The more

successful villa owners would then have had the option of spending their surplus income on luxury household goods.

Table 2: Summary of Villas

Villa	Grid Reference	Excavation Date	Excavator	Report
Angmering	TQ 0531 0451	1936 -38; 1939 - 46	Scott and Wilson	Yes
Batton Hanger	SU 8180 1534	1988 - 91	Magilton	No
Bignor	SU 9878 1469	1811-15; 1925; 1970s	Lysons and Wimbolt	Yes?
Binsted	SU 7857 3938	1818; 1975 - 76	Cole	Yes
Chalton	SU 73401730	1957; 1964	Budd and Cunliffe	Yes
Chilgrove 1	SU 8414 1364	1964 - 66	Down	Yes
Chilgrove 2	SU 8414 1364	1966 - 74	Down	Yes
Crookhorn	SU 6865 0738	1974 - 75	Soffe	Yes
Elsted	SU 8130 1910	1975	Millet	Yes
Holt Down	SU 7216 1768	1925 - 27	Hayling Arch Soc	No
Langstone	SU 7190 0540	1923 - 25; 1967	Adams and Rule	Yes
Liss	SU 7685 2800	2004 - 07	Liss Arch Soc	Yes
Pitlands Farm	SU 7970 1240	1966 - 69; 1992/3	Down and Magilton	Yes
Purbrook	SU 6915 0726	1926	Smith	Yes
Sidlesham	SZ 8550 9710	1951 - 57	Wilson	Yes
Sparsholt	SU 4150 3010	1965 - 72	Johnston	No
Stroud	SU 7252 2357	1907	Moray-Williams	No
Twyford	SU 4834 2439	1958	Biddle	No
Wakeford's Copse	SU 7270 0910	1968	Fox	No
Watergate Hanger	SU 7734 1269	1907 - 10; 1984 - 88	Ely and Kenny	No

Roman culture encouraged the Romanisation and urbanisation of the local tribal nobility after the Claudian invasion. Chichester and Winchester were both established shortly after the conquest as *civitas* with a degree of local autonomy. Romano-British towns were laid out with streets in a grid pattern and the centre was dominated by the administrative buildings of the forum. Most people lived in colonnaded terraces of simple houses but the wealthier built themselves town houses. Two such houses were discovered in during the 1968 - 1975 excavation of Chapel Street, Chichester (Down, A, 1978). The pottery assemblages from these houses have been examined and compared with the rural villas to establish if there are any similarities of wares and distribution. The houses (House 1 and House 2) were in the north-west quadrant and adjacent to the modern road of Chapel Street. The houses were found in Areas 2 and 4

and in trenches E, G, H, J and L. The pottery and other artefacts, as well as the original site note books, were stored at the Collections Discovery Centre at Fishbourne Roman Palace.

It was hoped that it would be possible to analyse the pottery assemblages from these two houses as part of a comparative study with rural villas. The objective of the comparisons was to identify if there were any apparent differences between the relative amount of fine wares in urban and rural sites.

The quality of the archived material from the Chichester excavation was variable and it was not clear which contexts were associated with the houses. The site being in an urban environment meant that the lower Roman levels had been disturbed by subsequent Saxon, Medieval and modern developments. The potential contexts associated with the houses produced limited amounts of pottery and annotations in the site note books indicated that not all the material had been kept (e.g. N.K.). The context recording was further complicated by the use of the same code for a layer, a pit, and a post hole; such that G3 could be an occupation layer, a pit and a post hole in area G. The pottery had been sent to various specialists but it was not clear where all the material was now in the store. Inspection of several assemblages that should have contained Romano-British fine wares from the New Forest and the Oxfordshire kilns identified that none was present.

The result of this review of the material suggests that any results obtained would be seriously corrupted and would not provide an accurate measurement of the pottery to be used in any further comparative studies.

The Palace at Fishbourne is within the Study area and represented a significant statement on Romanisation and the conversion of Southern England to Roman social and cultural values. An army supply base was established at Fishbourne at the time of the invasion c. AD 43. The first palace was constructed c. AD 75-80 and it has been hypothesised that it was built for the local client ‘king’ Cogidubnus. The main Flavian palace occupied an area exceeding ten acres and consisted of a formal garden

enclosed by four ranges of rooms. The west range with its central Audience Chamber and offices acted as the administrative centre of the surrounding area. The palace survived until the late third century when it was destroyed by fire (Cunliffe, 1971).

The high quality of the mosaics and interior decorations was compatible with a palace and were reflected in the opulence of the accompanying material culture. The published excavation report catalogues the many artefacts recovered but unfortunately there was little quantified data of the pottery. To obtain comparable data from Fishbourne material would require examining, cataloguing and quantifying the pottery stored in the hundreds of boxes of artefacts recovered from the excavations of the site. Unfortunately time precluded this. A sample of the material could have been measured but there was no way of guaranteeing that any sample would be random and not give biased results.

2.6.1 Local Geology

The study area was dominated by the steep hills of the South Downs, which were cut by deep dry valleys. These deep valleys were created by periglacial weathering of solifluxion and meltwaters during the Pleistocene interglacial period. The plateau of the Downs is capped by a geological deposit of clay-with-flints, giving an acidic soil contrasting with the well-drained alkaline chalk (Gallios, 1965).

The most dramatic geological feature is the narrow, steep, mostly northerly-facing scarp of the South Downs overlooking the Rother Valley. By comparison, the landscape of the coastal plain is a featureless, flat area of brickearths and alluvial soils (*Table 3*).

Table 3: Soil Geology (Chatwin, 1948, Gallios, 1965, Hopson, 2000, Hodgson, 1967)

Villa	Parent Geology	Surface Geology
Angmering	Brickearths	Alluvium
Batton Hanger	Lewes Chalk	Dry chalk valley with nearby stream
Bignor	Greensands	Lower Greensand
Binsted	Upper Chalk	Sand with clay
Chalton	Seaford Chalk	Clay-with-flints over chalk
Chilgrove 2	Newhaven and Seaford Chalk	Dry chalk valley
Chilgrove 1	Newhaven and Seaford Chalk	Dry chalk valley
Crookhorn	Witting Sand and Clays	Sandy loam on promontory
Elsted	Upper Greensand	Sand and chalk with nearby spring
Holt Down	Lewes Chalk	Clay-with-flints over chalk
Langstone	Aeolian Brickearths	Coastal plain with a river terrace
Liss	Upper Greensand	Sandgate sands
Pitlands Farm	Tarrant Chalk	Dry chalk valley
Purbrook	Witting Sand and Clays	Sandy loam on promontory
Sidlesham	London clays	Brickearths and alluvium
Sparsholt	Upper Chalk	Chalk Rendzinas
Stroud	Upper Greensand	Head deposits over river gravels
Twyford	Upper Chalk	Chalk Rendzinas
Wakeford's Copse	Bognor Sand	Sandy clays above a stream
Watergate Hanger	Newhaven and Seaford Chalk	Dry chalk valley with clay capping

2.6.2 The Coastal Plain

The villas at Langstone and Sidlesham were located on the Lower Coastal Plain. This low, gently featured platform, underlain by Pleistocene drift deposits, extends to a maximum of eight miles at Selsey before narrowing towards Portsmouth (Hodgson, 1967, 2). The Lower Coastal Plain rises from a low shore line cliff to about 20 metres O.D. at its northern limit, where it is bounded by a break of slope marking the degraded cliff-line of the lower Pleistocene marine beach that underlies it.

There are numerous small streams which drain the plain, most of which empty directly into the sea. The plain around Emsworth and Langstone is also dissected by a series of estuarine channels with extensive saltings and mud-flats which have not yet silted up sufficiently to be reclaimed. This flat landscape is windswept and relatively treeless but exposure decreases further inland. The soils of the coastal plain, which are

based on morphology and the parent material, consist of silty drift (Brickearth), brown earths and non-calcareous gley deposits.

The Upper Coastal Plain consists of a narrow gravel-covered belt at the foot of the South Downs. It ranges in surface level from 25 to about 50 metres O.D. and has a well-defined northern boundary, where the chalk of the South Downs rises sharply along the line of the degraded cliff, marking the northern limit of the Goodwood Raised Beach (Hodgson, 1967, 2).

2.6.3 The South Downs

The villas at Batten Hanger, Chilgrove 1 and 2 and Watergate Hanger were located on the soils of the chalk of the South Downs. The South Downs are composed of the Cretaceous System of Lower, Middle and Upper Chalk. The Lower Chalk is restricted to the north-east of the survey area and does not provide a soil parent material. The Middle and Upper Chalk are lithologically similar and can be regarded as a single parent material, both being white, permeable, limestone of exceptional purity (Hodgson, 1967, 6). The Upper Chalk is characterised by the frequent occurrence of irregular nodules and tabular masses of flint.

Rendzinas and brown calcareous soils dominate the chalk landscape of the South Downs. The chalk parent material produces calcareous soils which normally have a neutral or alkaline reaction throughout their soil horizon profiles. The uncultivated soils in woodlands or old grasslands result in a dark coloured base saturated A horizon of mull 100 mm thick. The high calcium status promotes humification and the formation of stable clay-humus complexes. Under cultivation the organic matter is considerably reduced by oxidation and admixture of the chalk substratum. This may result in the ploughed layer (Ap) resting directly on the undisturbed chalk (Hodgson, 1967, 40).

The account of the Domesday survey (Salzmann, 1905) shows that a large proportion of both the Coastal Plain and the Downs was under the plough, and the Lay Subsidy returns of 1327 demonstrate the overwhelming predominance of corn growing on the chalk during the early fourteenth century (Pelham, 1931).

2.6.4 Clay-with-flints

Clay-with-flints is widespread on the chalklands and has been described as homogeneous dark brown or reddish tenacious clay. The clay includes whole unworn or partially broken flints which rests with an irregular junction on the Chalk (Hodgson, 1967, 53). It has been suggested that this clay is the result of the action of periglacial and soil-forming processes on thin, pervious remnants of Reading Beds clay, accompanied by solution of the underlying chalk. These clays are a feature of the sloping landscape of the South Downs and the naturally acid brown earths are wooded. The villas at Chalton and Holt Down were situated on or near to clay-with-flints.

2.6.5 Hampshire Basin

The villas at Binsted, Sparsholt and Twyford are all within the Hampshire Basin which consists of a major deposition from Mesozoic times and is characterised by extensive exposed Tertiary sediments (Jarvis and Findlay, 1984, 1). The Portsmouth Anticline forms a pronounced ridge of chalk running east-west and the Hampshire chalklands in the north of the basin are contiguous with Salisbury Plain. Upper Chalk is the most extensive rock type of the area, which is exceptionally pure limestone containing less than 5% non-calcareous material. The Reading Beds are the oldest Tertiary deposit consisting of brightly mottled clays with subordinate sands and a layer of unworn flints at the base. The London Clay, which lies on top of the Reading Beds, is generally bluish grey clay succeeded by Bracklesham Beds, a group of sediments, of variable lithology though mainly composed of glauconitic sandy clays (Jarvis and Findlay, 1984, 3).

2.6.6 Cotswolds

The primary focus of this research has been on a specific selection of Romano-British villas in Hampshire and West Sussex. In order to establish viability of the hypothesis and the applicability of the methodology a small sample of villa sites has been selected as comparative candidates outside of the main geographical region. The villas at Frocester and Childswickham were identified in the Cotswolds to test the model.

The scarp formed by the Middle Jurassic limestones is the most outstanding topographical feature of this district. The upland segment of the dip slope has a distinctive limestone character, whilst the lower levels have a more varied landscape as a result of the thick clays (Findlay, 1976, 5). These clays are variable owing to the many inclusions of thin limestones and silty or fine sandy masses. The grey and calcareous clays resemble the Lower Lias clay but are more shaly in their unweathered state (Findlay, 1976, 13).

2.7 Recording Methods

The advent of a uniform recording system for Roman pottery in the 1990s has enabled assemblage compositions to be compared and analysed (Tomber and Dore, 1998, Webster, 1996, Tyers, 1996). This approach to a standard method of recording has been adopted in this study.

Fabrics were identified by using a x10 magnifying glass or an x20 microscope and by reference to *The National Roman Fabric Reference Collection: A Handbook* (Tomber and Dore, 1998). The vessel forms were established and classified by reference to the existing published typologies for the various industries represented, namely *Alice Holt* (Lyne and Jefferies, 1979); *New Forest* (Fulford, M. G, 1975a);

Oxfordshire (Young, 1977); *Roman Pottery in Britain* (Tyers, 1996); and *Rowland's Castle* (Dicks, 2009).

The main purposes for the quantification of any pottery assemblage can be to establish its chronological sequence, the spatial and distribution patterns of vessels from various kiln sites or the functional and social relationship associated with different types and styles of pottery. The method of quantification will depend upon what archaeological questions can and should be solved by analysis of the pottery assemblage. A fundamental tenet of this research was to develop a methodology of comparison of pottery assemblages from a range of villa sites across southern England. The criterion was therefore to select a method of measurement that would allow direct comparison of different pottery assemblages devoid of excessive bias. The different methods of quantifying pottery assemblages evaluated are sherd weight, sherd count and vessel equivalent. Sherd weight and sherd count are easy and simple to calculate and record but both methods will always be biased. The sherd weight of a large storage vessel will inevitably be heavier than a smaller fine ware drinking cup which can produce bias when taken as a measure of the proportion of a type. Heavy vessel types will be over-represented in comparison with lighter vessels. Sherd count is more a measure of brokenness than the quantitative amount of any number of vessels. Vessel types with a high brokenness will be over-represented in comparison to those with low brokenness.

The chosen methodology selected which would seem to be the less biased and as such the best technique of comparing proportions in different assemblages was Estimated Vessel Equivalents (Orton, 1989). Each rim sherd is a fraction of the original vessel. By measuring all the rims and adding together the percentages it is possible to calculate the number of vessel equivalents. The measurements can be accumulated by the different fabrics and forms to provide the basis of a numerical comparator. Estimated Vessel Equivalents (EVEs) can be calculated by measuring the rim diameter of the pottery sherds on a rim chart and recording the percentage present. This method of using rim sherds is based on the measurement of the part of the vessel that

can be most confidently assigned to a specific type. EVEs do not require the rim sherds to have come from the same vessel but from the same type so assisting with the speed and accuracy of recording.

Any archaeological excavation will inevitably only recover a proportion of the original pottery assemblage. The assemblage can be seen as a sample from the original population from which it was derived. The overall size of any pottery assemblage is only a measure of the amount of material recovered but the composition and the proportions of the various vessel types can be useful in both within site and between site spatial and functional comparative analysis (Orton et al., 1993, 168).

Other useful information can also be derived from the use of EVEs when related to sherd counts. The amount of brokenness can be calculated by dividing the number of sherds by the recorded amount of EVEs by vessel type. This statistic can be used to demonstrate the nature of the assemblage and potentially the amount of re-disposition that has occurred since its original deposition (Orton et al., 1993, 169-71).

Quantification of the assemblage was by sherd count and weight, by fabric and type, for each individual context. Rim count and, where possible, rim diameters and Estimated Vessel Equivalents (EVEs) were also recorded. EVEs were calculated by measuring the percentage remaining of the original circumference of rim of each sherd on a rim scale. The percentage of each rim sherd was recorded and summed for each category and expressed as EVEs. This method of recording has been accepted as the best basis for comparison of pottery assemblages from different sites (Orton, 1975). The condition of the sherds, any decoration and use wear were also noted. The data was entered into an Excel spreadsheet to facilitate a full detailed analysis of the assemblage and multi-site comparisons.

Samples of pottery from the individual villas were selected from a well-defined population according to rigorous statistical procedures (Orton, 2000). This enabled the construction of valid statements about the relevant populations, such as estimates of certain parameters like density within villa assemblages and distribution comparisons

across villa locations. Any excavation by its very nature must be a sample of the original villa as much of the cultural evidence has already been destroyed or removed over the centuries. Few excavations remove all the archaeology, either discovered or undiscovered, as it is recognised that the best method of preservation is to leave the evidence in situ. Modern excavations are now planned to sample the archaeology; total excavation is only undertaken when the site will be totally destroyed by future planned development.

The spatial patterns and distribution of ceramics can be used to interpret the trade and supply routes used during Roman times. In 1973, Ian Hodder used Rowland's Castle pottery in his study of markets and distribution patterns of two types of Romano-British coarse ware pottery in the West Sussex region (Hodder, 1974). His study was limited to everted-rimmed jars and large storage jars with internal finger impressions and used material from twenty-one museums in West Sussex but only fifteen in East Hampshire. Hodder's conclusion that Chichester was the marketing centre and Stane Street the major trade route must be questionable as his sample material is biased towards Chichester. Hodder admits to the unreliability of the archaeological samples that existed in the museums as it was only a selection of the excavated pottery. His samples were small and therefore any variation in numbers would have a disproportionate impact on his percentages. The pottery measurement that Hodder used was sherd count, which has been superseded by Estimated Vessel Equivalent (Orton and Tyers, 1990) as sherd count can give inconsistent results. Hodder only considered roads in his distribution study and no account was taken of other routes to market such as river and sea transport. All these important aspects should be taken into consideration in any study on distribution patterns.

Samian and other dated wares were used to establish the date ranges for the pottery assemblage and the occupation periods of the villas. A matrix was constructed comprising the absolute and percentage amounts of each pottery type to ascertain the patterns and relationships of the socio-economic status of the occupants.

2.8 Data Quality

Any study relies on the quality of the original data. The pottery assemblages analysed during this study were excavated under different archaeological regimes and timescales from 1907 until 2006. The material was archived under different conditions and standards, ranging from paper bags and cigarette tins to modern plastic bags. The archaeological methods and standards have changed considerably over these years and new standards of pottery archiving have now been initiated.

Several of the villas were excavated using a grid method. This has a major disadvantage in that it was more difficult to assign artefacts to their correct single context. This could result in artefacts from the same contexts potentially being allocated to different phases. The ability to assign material to different phases was further complicated in that there was no record maintained of context number by phases. This had the major disadvantage that in many cases it was impossible to recreate this relationship and the whole pottery assemblage had to be considered as a single phase.

There was clear evidence that some material was missing from a few of the pottery assemblages. This problem was minimised by using EVEs as this is a comparative measurement which relies on rims. Rims and other diagnostic material were usually retained by the excavators and archived for future analysis. This archive strategy can, therefore, be exploited in developing an empirically based methodology.

3 Results: Romano-British Architectural Styles

The classification of villas has created much discussion and debate (Branigan and Miles, 1989, 23) but for the purposes of this study it was necessary to define and establish the relative socio-economic status of each of these rural structures. Details of the construction, decoration and associated Romanised features of each villa were used to determine the relative sophistication, wealth and status of the occupants. This was achieved by establishing the architectural features of each villa from excavation reports and any other published material, such as *Sussex Archaeological Collections* (SAC) and *Hampshire Studies* (HS).This information was used to create a hierarchy of villa sites.

All villas were unique and varied in size and shape but most followed certain basic principles. The simplest villa was a rectilinear building with perhaps just two rooms and at the other extreme the building was a large multi-roomed winged-corridor villa with extensive bath houses constructed around an enclosed courtyard. In archaeological terms, villas had masonry footings, tessellated or mosaic floors, brick and tile construction, window glass, painted wall-plaster, hypocaust heating and baths (Percival, 1976, 14-15). Most buildings that contained some of the features of this definition would have been considered to be villas by their owners.

A division has been used to categorise the villas into comparable groups. This classification was based on location within the landscape and was *villa maritima*, *villa rustica* and *villa suburbana*. It has been possible to evaluate both *villa maritime* and *villa rustica* but unfortunately it was not possible to evaluate any *villa suburbana* site. Chichester was at the centre of the study area but no suitable sites were identified.

3.1 Villa Maritima

The villas located in the coastal area (*villa maritima*) formed an economic link between the sea-shore and the countryside. These coastal villas probably had maritime interests considerably greater than the simple pursuit of local fishing and salt production and may have invested in trading expeditions. Their owners would have managed the exportation of agricultural products and the importation of local products from around the coast.

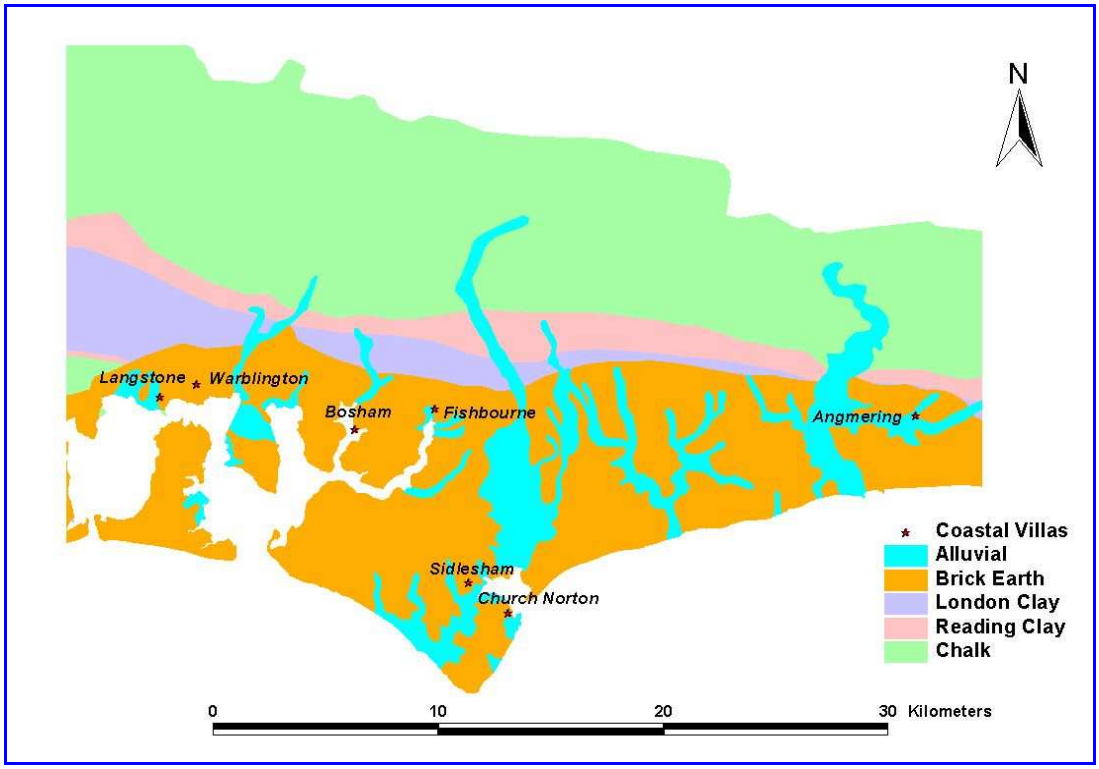

Figure 9: Location of Villas on the Coastal Plain (Author)

Erosion, siltation, fluctuations in sea-level and changing currents have all, either individually or collectively had an effect on ancient coastal and riverine sites. Some villa sites are buried beneath many metres of silt while others, conversely have been partly, or in some cases totally, destroyed (Mason, 2003, 9). There were, however, five known villas which fall into this category within the study area (*Figure 9*) but only three,

Sidlesham, *Langstone* and *Angmering*, had suitable ceramic and architectural data required to produce quantifiable and comparative information.

3.1.1 Sidlesham

The villa at *Sidlesham* (SZ 855971) lies on the edge of Pagham Harbour and The Park: The Park is an offshore anchorage lying in the eastern lee of Selsey Bill. It was suitable for ships that were obliged to bear up for anchorage due to contrary winds (Hobbs, 1972 (reprint), 25). Pagham Harbour offered no more than mud and shoals to nineteenth century navigators but this might not have precluded its usefulness in earlier times when it may have functioned as a river mouth (Aldsworth, 1987, 43).

The villa was excavated by A.E.Wilson over a number of years between 1951 and 1955, however, the excavation was not published until 1973 (Collins et al., 1973). The authors suggest that there were three phases to the occupation of the site. The earliest evidence was a boundary ditch underneath Rooms 7, 8 and 9 (*Figure 10*). There was a timber construction on simple un-mortared stone foundation which had a construction date of the late first to early second century. This building was replaced in the late second century by a stone built construction which continued until its destruction in the middle of the fourth century AD (Collins et al., 1973, 19).The majority of the later structures were identified as a bath-house which would have been part of a much larger complex of buildings (*Figure 10*).

The article provides a detailed description of all the structural remains uncovered but there were no separate sections detailing the finds. The excavation report (Collins et al., 1973) records four coins: a coin of Vespasian (AD 69 - 79) was recovered from the *Phase II* foundations of Room 3; a coin of Gordianus (AD 238) just outside the foundation walls of Room 3; a coin of Allectus (AD 293 - 6) in Room 1, and a coin of Constantius (AD 351 - 354) in Room 1b. The current location of these coins is unknown. This pottery report, some 50 years after the excavation, was based on the archived material which is now stored at the Fishbourne Discovery Centre. The

excavation of the villa at *Sidlesham* was carried out over a number of years which has generated inconsistencies that have created difficulties in comprehending the data. The lack of any site documentation also adds to the complexity of interpreting the results.

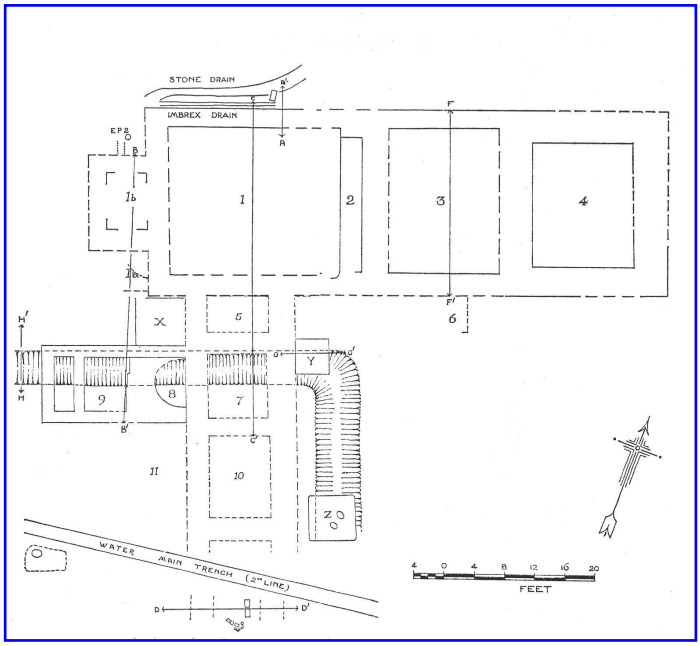

Figure 10: Site Plan of the Villa at Sidlesham (Collins et al., 1973)

3.1.1.1 Geology

The site lies on the Selsey peninsula at the head of Pagham Harbour. The peninsula is formed by Tertiary deposits dipping gently to the south. The solid geology is London clays on chalk with a surface geology of fine grained decalcified Brickearth (British Geological Survey, 1996a).

3.1.1.2 Architectural Features

The only evidence of *Phase I* was a ditch underneath the *Phase II/III* building. There were no architectural features associated with the ditch but the pottery recovered from the ditch suggests a date of mid- to late first century AD.

The *Phase II* building foundations consisted of unmortared, irregularly shaped blocks of local mixen stone which suggest that walls may well have been of timber

construction. There was evidence of wall plaster, stone and tiles in the demolition layers. The floors were either tiled, tessellated with black and white tesserae (Rooms 1, 3 and 4) or mortared. A coin of Vespasian (AD 69 - 79) was recovered from a foundation trench suggesting that the date of construction of the *Phase I* building was in the late first century or later.

The *Phase III* building was constructed on foundations of well dressed mortared stone laid on a bed of cobbles, flints or shingle. This suggests that the *Phase III* building was more substantial with a tiled roof. (Large amounts of *imbrices* and *tegulae* were recovered from the demolition rubble.) There was a red tessellated floor in Room 1 but no mosaics were uncovered. The other floors were either tiles or mortared. In Rooms 10 and 11 there was a considerable amount of painted wall plaster. The *pilae* of a hypocaust were still in situ in Rooms 3 and 4 and Rooms 1 and 2 contained an apsidal plunge pool but no box-flue tiles were recovered. A coin of Contantius (AD 351 - 354) was found in the demolition rubble suggesting that the buildings had gone out of use by the mid-fourth century AD.

There was evidence that the rooms were around a central cobbled courtyard but with no corridor. This would seem to indicate that the *Phase III* building was a simple courtyard villa (*Table 4*).

Table 4: Romanised Architectural Features of the Villa at Sidlesham

Phase	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Phase II	?	-	✓	-	-	✓
Phase III	✓	✓	✓	-	✓?	✓

3.1.2 Langstone

The villa at *Langstone* (SU 719 054) is located on the rich coastal littoral plain on the north-east edge of a natural harbour. *Langstone* was an exceptionally fine natural

harbour and with knowledge of the tidal limitations and of local pilotage of its extremely shallow interior, the site was very well situated for maritime enterprise (Tomalin, 2006, 41).

The villa, '*Spes Bona*' was originally excavated in the 1920s by Mr. Owen Adames with further excavations being undertaken in 1967 by Margaret Rule. In 1998, Oliver Gilkes published an assessment of the two excavations based on the original site plans and the finds which were stored at Portsmouth Museum and Fishbourne Palace (Gilkes, 1998,49-77).

3.1.2.1 Phasing and Architectural Feature

The villa at *Langstone* had a two-phased occupation. The *Period I* building was probably constructed in the late first century AD and was demolished in the third century. The *Period II* building was constructed overlaying the *Period 1* building in the early to mid-third century on the same alignment as the *Period 1* structure. The complex was apparently demolished in the fourth century (Gilkes, 1998, 56).

The *Period I* building was built on foundations of flint and rammed chalk. This type of unmortared foundations would have probably have supported a wooden superstructure (Gilkes, 1998, 56). The *Phase I* structure was principally unearthed by Adames whose haphazard method of excavation may have missed or misinterpreted many features. It is, therefore, very unlikely that a wooden structure would have contained a bath suite. The amount of wall plaster recovered does suggest that the building had plaster walls.

The *Period II* building was never fully excavated but was built around a courtyard. The walls were constructed on foundations of mortared flint surmounted by a course of tiles and the ashlar blocks. The abundant amount of *tegulae* and *imbrex* indicate that the buildings had tiled roofs. The floors were tiled or tessellated. Gilkes' assessment suggests that there might have been mosaics but this was based on an illustration by Adames showing several small tessarae (Gilkes, 1998, 72). The walls

were covered with painted plaster and the rooms were fronted by a corridor which surrounded a walled courtyard. The suite of baths and heated rooms occupied the southern range.

A large portion of the site remains uninvestigated and the exact nature of the complex is still open to interpretation but it was a substantial Roman building. The identifiable Romanised architectural features by phase are shown in *Table 5*.

Table 5: Romanised Architectural Features of the Villa at Langstone

Phase	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Period I	–	✓	✓	–	–	?
Period II	✓	✓	✓	–	✓?	✓

3.1.3 Angmering

The site of the villa at *Angmering* (TQ 054 045) is some distance from the modern shoreline. Nevertheless, the sea may have provided a vital role in its economy. The villa stood on ground about 5 metres above sea level and was situated between two tidal tributaries of the River Arun. The tributaries ran up to *Angmering* until the sixteenth century after which they became progressively silted leaving two small streams known as Black Ditch. The villa could therefore be accessed by ships entering the Arun and branching off at a main tributary (Black Ditch). The villa can be described as a 'coastal villa' sited at a location that afforded a fundamental link with the sea.

The first recorded excavation of the villa was 1819 but modern excavations were undertaken in 1937 (Scott, F., 1939). Other smaller excavations took place in 1945 (Keef and Scott, 1944-5) and 1947 (Wilson, A.E., 1947).

3.1.3.1 Phasing and Architectural Features

There was not just a single villa but a dispersed complex consisting of the main villa in its own enclosure, the bath house, and a cluster of four additional buildings with perhaps a fifth building being added in the third century. The extent of the main building is unknown as much of the site has been ploughed up over the centuries.

The bath house was built at the beginning of the Flavian period (AD 69 - 96) and lasted until the middle of the second century AD. The walls were built of chalk and flint constructed on flint foundations. The floors were covered with *opus signinum* or large hexagonal Sussex marble stone tiles. One room had a geometric mosaic made from triangular, kite shaped, square and oblong coloured stones (*opus sectile pavement*). There was a considerable amount of both *imbrex* and *tegula* roof tile and box flue tiles.

The enclosed courtyard was cobbled with chalk, mortar, brick and pebbles. This suggests that the villa at *Angmering* could be classified as a *courtyard villa* containing all the elements of the winged-corridor villa with the buildings arranged around a court yard (*Table 6*).

Table 6: Romanised Architectural Features of the Villa at Angmering

Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
✓	✓	✓	✓	✓	✓

3.1.4 Summary

All these sites show signs of early beginnings in the first century AD. This suggests it is probable that vital knowledge of local pilotage was drawn from a resident tradition well-rooted in the pre-Roman Iron Age.

Table 7: Summary of Villa Maritima Romanised Architectural Features

	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Sidlesham	✓	✓	✓	–	✓?	✓
Langstone	✓	✓	✓	–	✓?	✓
Angmering	✓	✓	✓	✓	✓	✓

There were other known villa sites such as Bosham and Warblington which have not been excavated under scientific archaeological conditions and as such do not provide any quantifiable data. The number of villas on the coastal plain suggests that these sites were financially viable and could generate overt displays of economic success (*Table 7*).

3.2 Villa Rustica

The term *Villa rustica* was used by the ancient Romans to denote a villa set in the open countryside, often as the hub of a large agricultural estate *(latifundium)*. The adjective *rusticum* was used to distinguish it from an urban or a maritime villa. Villa rustica would serve both as a residence of the landowner and as a farm management centre. It would often comprise separate buildings to accommodate the farm labourers with sheds and barns for animals and crops (Smith, J.T., 1997).

These villas, located in the rural hinterland, formed an economic link between the urban towns and the countryside. The *civitates* capitals of Chichester (*Noviomagus*) and Winchester (*Venta Belgarum*) did not operate in isolation but were dependent on the surrounding countryside to supply food to the urban inhabitants. The *civitates* capitals were established in the first century AD to administer the area and developed a social and financial structure which was dependent on the agricultural success and economic viability of the villas. Roman Britain was an agricultural community and farming was the basic provider of wealth, with the majority of the population working in the countryside. The establishment of markets for agricultural products in the

civitates linked by good roads provided the economic stimulus to change the farming community from one of subsistence to industry. The increase in agricultural production allowed the villa owners to convert their saleable surpluses into a profit so creating new wealth. This new wealth could be used by the farmers to improve their domestic living condition. The Romanisation of the rural environment was most evident in the architecture of their villas.

3.3 Downland Villas

Very few rural villas were excavated under scientific archaeological conditions and even fewer used methods that would be acceptable today. Publication has been spasmodic, mainly consisting of plans, mosaics and sculptures. The villas at *Batten Hanger*, *Chilgrove 1*, *Chilgrove 2*, *Pitlands Farm* and *Watergate Hanger*, which are all on the Chalk Downlands, do have suitable ceramic and architectural data required to produce quantifiable and comparative information (*Figure 11*). These villas were selected for functional analysis and comparison.

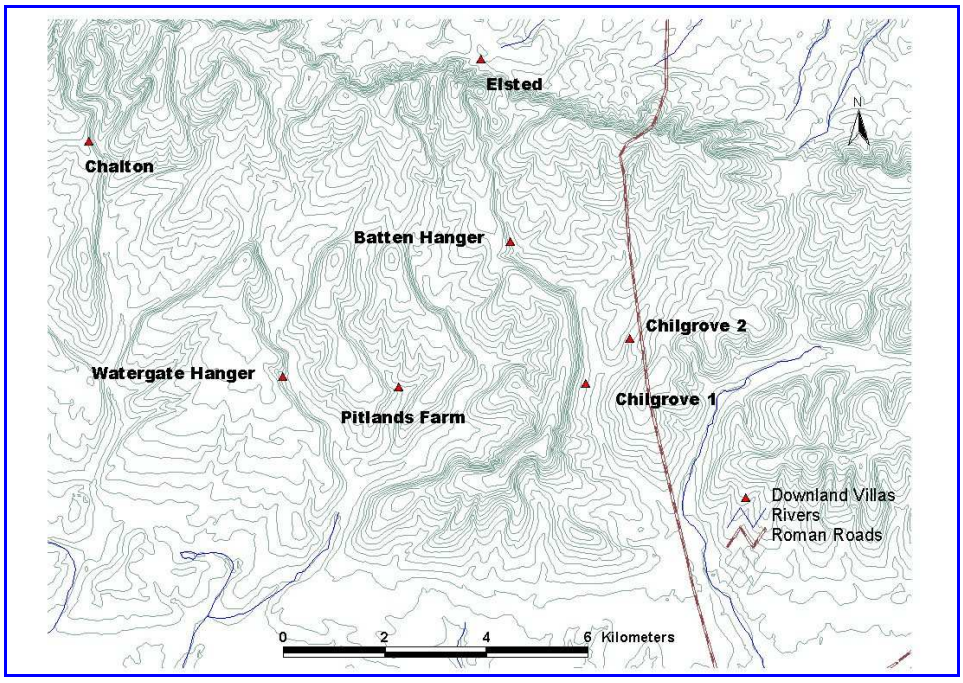

Figure 11: Location of Villas on the Chalk Downlands (Author) Base map © crown copyright/database right 2011. An Ordnance Survey/EDINA supplied service.

The South Downs are composed of the Cretaceous System of Lower, Middle and Upper Chalk. The Lower Chalk is restricted to the north-east of the survey area and does not provide a soil parent material. The Middle and Upper Chalk are lithologically similar and can be regarded as a single parent material both being white, permeable, limestone of exceptional purity (Hodgson, 1967, 6). The Upper Chalk is characterised by the frequent occurrence of irregular nodules and tabular masses of flint.

Rendzinas and brown calcareous soils dominate the chalk landscape of the South Downs. The chalk parent material produces calcareous soils which normally have a neutral or alkaline reaction throughout their soil horizon profiles. The uncultivated soils in woodlands or old grasslands result in a dark coloured base saturated A horizon of mull 100 mm thick. The high calcium status promotes humification and the formation of stable clay-humus complexes. Under cultivation the organic matter is considerably reduced by oxidation and admixture of the chalk substratum. This may result in the ploughed layer (Ap) resting directly on the undisturbed chalk (Hodgson, 1967, 40).

There are no direct references to the agricultural regimes that were practised during the Roman occupation but it would seem reasonable to assume that cereals were a major part of the farming tradition. The excavation reports of several of the villa sites recorded the presence of corn driers.

3.3.1 Batten Hanger

The villa at *Batten Hanger* (SU 8180 1534) was excavated over three seasons between 1988 and 1991 (Magilton, 1991, 27-32). The villa, which is situated at the head of the dry Chilgrove valley, is only a kilometre from the major Roman road from Chichester (*Noviomagus*) to Silchester (*Calleva Atrebatum)*. The *civitas* of Chichester is 11 kilometres to the south along the road with the trading post (m*ansio*) of Ipling a further 11 kilometres away to the north from the villa. These roads would have

provided easy access to the local markets for the sale of agricultural surpluses and the purchase of basic commodities and luxury items.

The development of *civitates* such as those centered on Chichester and Winchester elevated a class of society within the urban environment which was no longer agriculturally self-supporting. This group of society would have relied on the farmers in the local rural countryside for their foodstuff, so creating a market for agricultural products. Coinage had been in use for some years prior to the Claudian invasion of AD 43 but the full integration of Britain into the Roman Empire linked the population in to a state-backed monetary economy. Coinage allowed the easy transaction of day-to-day business and the accumulation of portable wealth. This economic liberation introduced by the use of coinage permitted the population to participate in the luxuries of Romanisation (Casey, 1994, 7). For some, however, coins could have been their only method of paying taxes and as such the accumulation of money would have been a legal responsibility and not a liberating factor.

3.3.1.1 Local Geology

The downland location of the villa at *Batten Hanger* was on calcareous soils of humic brown and grey rendzinas in a steep sided dry coombe valley. These free draining soils would have supported grasslands ideally suited for the grazing of sheep, goats and cattle during the Romano-British period (Tansley, 1968). The soils in the valley floors contained relatively large quantities of organic matter incorporated into the mineral horizon and were humic rendzinas (Smith, C.J., 1980). The deep, moist, fertile alluvial soils on the valley floors would have been ideal for the cultivation of cereals in the Romano-British period and may have resembled the modern landscape.

3.3.1.2 Phasing and Architectural Features

The functional analysis of the villa has been restricted by the limited amount of available published material. The only information was the site plan and a brief

description of the excavation given in the annual Chichester and District archaeological report (Magilton, 1991, 27-32). The main villa building consisted of an aisled structure containing domestic rooms and an extensive range of farm buildings within an enclosed farmyard (*Figure 12*). The farmyard was surrounded by a ditched enclosure.

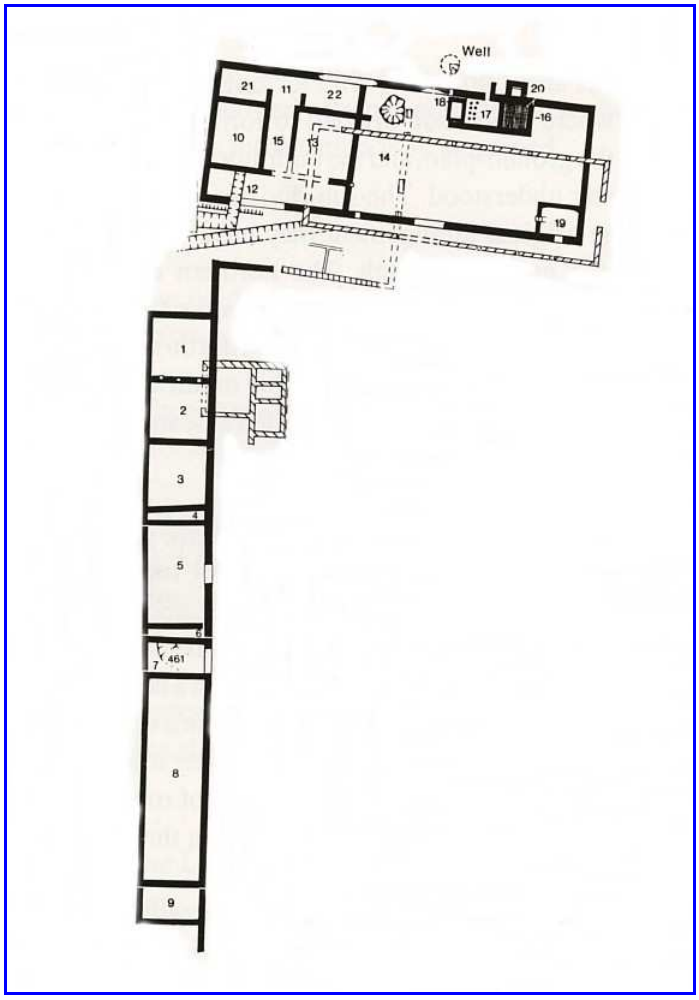

Figure 12: Site Plan of the Villa at Batten Hanger (after Magilton)

There were no date ranges given for the different phases of the villa but the pottery indicated that the site was occupied from the late first century or early second century until at least the end of the fourth century AD. *Tegulae*, *imbrex* and Horsham stone tiles recovered from the site suggest that the buildings were tiled. The walls were constructed from mortared flint, Horsham and Greensand stone and some of the

walls were plastered. Some floors were tessellated and there was a small mosaic with the bath suite which contained the only heated rooms in the aisled villa (*Table 8*).

Table 8: Romanised Architectural Features of the Villa at Batten Hanger

Phase	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
All phases	✓	✓	✓	–	?	✓

3.3.2 Chilgrove 1

The villa know as *Chilgrove 1* (SU 8414 1364) was excavated from 1964 to 1966 (Down, A, 1979) and is situated in the dry Chilgrove valley. As with the villas at *Batten Hanger* and *Chilgrove 2,* the *civitas* of Chichester (*Noviomagus*) was in a convenient position for the villa owners to supply the urban market with both arable and dairy products. The villa was situated on a small terrace in the bottom of a dry valley at 50 metres O.D. Hillwash from the steep sides of the valley has filled the valley bottom leaving the chalk exposed on the upper slopes. The Iron Age encampment of Goosehill is situated directly above the villa on the top of the escarpment. The soils were brown calcareous alluvial deposits created by hillwash. This deposition from the steep sides of the valley has produced a fertile valley floor which would have been exploited during the Romano-British period and may have looked very similar to the modern landscape.

The villa was excavated at a time when the importance of accurate recording was understood but not to the same level of scientific archaeological attention to detail of today. The main objective was to recover the structural plan of the buildings with pottery and coins providing the dating evidence. Stratigraphic relationships were noted but there was little attempt to record this relationship to the archived pottery. The development of the villa over its lifespan of four centuries was recorded by different phases. It was, however, impossible to assign the pottery to these different phases as there was no documented stratigraphic relationship.

3.3.2.1 Phasing and Architectural Features

The functional analysis of the villa by the different phases has been constructed from the documented excavation report and the site plans (Down, A, 1979). *Phase 1* was represented by several sherds of Iron Age flint tempered pottery but no building structures could be specifically assigned to this period. *Phase II,* which was dated by the samian pottery to the Trajanic-Hadrianic period (c. AD 96-138), consisted of a timber building (Down, A, 1979, 56). This early timber construction was replaced in the late second or third century AD (*Phase III*) by a rectangular building with low narrow flint walls in shallow flint footings. These low walls would have formed cills for a timber-framed building. The villa peaked in the late third to late fourth century AD (*Phase IV*) with a building of masonry walls of flint and a roof tiled with Horsham stone. The walls had red painted plaster and the floors were either mortared or tessellated with one simple polychrome mosaic. The villa contained a bath suite and at least one living room heated by a hypocaust. The rooms were accessed from a corridor with a tessellated floor and the courtyard was enclosed by a masonry wall (*Table 9*).

Table 9: Romanised Architectural Features of the Villa at Chilgrove 1

Phase	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Phase I	–	–	–	–	–	–
Phase II	–	–	–	–	–	–
Phase III	✓?	–	–	–	–	–
Phase IV	✓	✓	✓	✓	✓	✓

3.3.3 Chilgrove 2

The villa called *Chilgrove 2* is situated only a kilometre to the north of *Chilgrove 1* on the west slope of a small spur off the Chilgrove valley (SU 8414 1364). It was excavated over a number of seasons from 1966 to 1974 (Down, A, 1979). The Roman Road from Chichester to Silchester is less than 150 metres from the villa with Chichester some 9 kilometres to the south.

The soils surrounding the villa were calcareous rendzinas with Calcium Carbonate in the form of chalk fragments present within the cultivated humus. The Newhaven and Seaford chalks, which form the bedrocks (British Geological Survey, 1996a), are alkaline producing friable and fertile soils. These well drained soils would have been ideally suitable for farming during the Romano-British period.

3.3.3.1 Phasing and Architectural Features

The villa was excavated at the same time as *Chilgrove 1* and the same lack of clear stratigraphic information applies to the available data. The excavator did, however, identify four different phases to the villa, with broad timeframes applied to the periods.

There was no pre-Roman conquest evidence at the site and occupation commenced during the second century AD (*Period 1*). The villa consisted of a timber building surrounded by a ditched enclosure. The building has been assigned to the second century by the presence of samian pottery from the Antonine period (AD 138 - 192) recovered from the site. Sometime during the third century AD (*Period II*) the villa was rebuilt on narrow flint footings, suggesting timber-frame construction and consisted of range of five rooms connected by a corridor. A barn was added on the north side of the enclosure next to the villa. A coin of Claudius II (AD 268 - 270)

recovered from the demolition rubble suggests a terminal date for the building of the late third century AD.

The late third and early fourth centuries AD were a time (*Period III*) of continuing development of the villa complex. The villa was rebuilt with masonry flint walls and the ditched enclosure was replaced with a stockyard wall. A separate masonry bath house was constructed and the barn rebuilt with masonry flint walls. Many of the rooms had red tile tessellated floors and there were two very simple childish mosaics (Down, A, 1979, 111). The walls were covered with painted plaster and the roofs were tiled with Horsham stone. There was a hypocaust system for the bath house but there was no evidence of any heating system for the main villa or the attached barn (*Table 10*). During the late fourth century the barn and possibly the villa were destroyed by fire.

Table 10: Romanised Architectural Features of the Villa at Chilgrove 2

Phase	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Phase I	–	–	–	–	–	–
Phase II	–	–	–	–	–	–
Phase III	✓	✓	✓	✓?	–	✓

3.3.4 Pitlands Farm

The villa at *Pitlands Farm* was excavated over three seasons from 1966 - 9 (Down, A, 1979) and again in 1992/3 (Down, A. and Magilton, 1993, 21-4). The villa is situated on a spur of land overlooking a dry valley (SU 797 124), which is linked to the coastal plain by the Ems Valley. This would have given the villa owners easy access to the coastal plain and the major Roman routes to the *civitates* of both Chichester (*Noviomagus*) and Winchester (*Venta Belgarum*). The easy movement of agricultural products was made possible by these interconnecting road networks between the provincial *civitates.* The roads were initially constructed as military and imperial

communication routes but later were adopted and maintained by the civic community for commercial purposes. These roads formed an important means of communication between the rural agricultural landscape and the urban capitals.

3.3.4.1 Local Geology

The villa was situated at the junction of Tarrent and Newhaven Upper Chalk with a head of variable deposits of sandy silty clay in the bottom of the dry valley (British Geological Survey, 1996a). This diverse geology demanded certain approaches to agricultural practice in order to succeed. Romano-British farmers did not have modern soil sciences to help in identifying the better settlement locations but the light sandy soils of similar fertility to the heavy clay soils would have been more attractive to the farmers operating relatively simple ox- or horse-drawn ploughs.

3.3.4.2 Phasing and Architectural Features

Agricultural activities on the site of the villa from Saxon times onwards have severely damaged the earlier Romano-British buildings and much of the structures had been destroyed by ploughing. This restricted the amount of structural evidence available for any functional analysis. It was, however, possible to establish the major domestic components from the excavation reports.

The occurrence of samian pottery from the late first century AD recovered from the site would seem to indicate the existence of domestic occupation but no traces were found of any early buildings. The excavator suggests that the absence of any earlier timber buildings below the only areas excavated was no proof that none existed. The buildings of the villa complex were arranged around an enclosed courtyard (*Figure 13*).

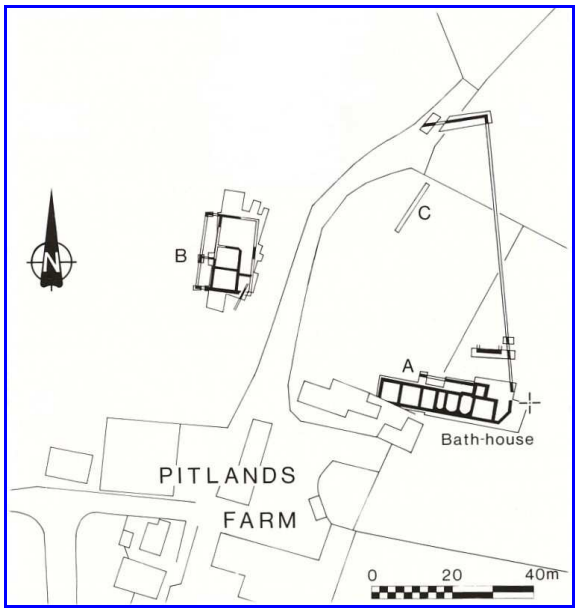

Figure 13: Site Plan of the Villa at Pitlands Farm (Down, A. and Magilton, 1993)

The 1966 - 9 excavation identified a range of domestic rooms (A) constructed around the mid-third century AD which were modified by the addition of a simple bath suite in the late third century AD (Down, A, 1979, 101-5). The building comprised a series of eight rooms and an external corridor. The walls were of flint construction on a foundation of rammed chalk in trenches. The floors were either mortared or tessellated with red tiles. There was evidence of a hypocaust and box flue tiles still in the walls. *Tegulae* and *imbrices* were found in the demolition rubble, indicating that the villa had ceramic roof tiles (*Table 11*).

The 1992/3 excavation identified a six-room building (B) again with a corridor (Down, A. and Magilton, 1993, 21-2). *Tegulae* and Horsham stone roof tiles recovered from the site indicated that the walls were of masonry and that the roof was tiled. A large amount of *tesserae* and painted wall plaster was recorded, stratified within the rooms, suggesting domestic use of the building (*Table 11*). The wall foundation trenches contained hard packed chalk similar to building A. The pottery recovered from both excavations would seem to indicate that both buildings were contemporary and were occupied from the mid-third century to the late fourth century AD.

Table 11: Romanised Architectural Features of the Villa at Pitlands Farm

	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Building A	✓	✓	✓	–	✓	✓
Building B	✓	✓	✓	–	–	–

3.3.5 Watergate Hanger

The villa at *Watergate Hanger* was first excavated in 1907 and 1911 and the only known reference was published in the *Archaeological Journal* (Ely, 1913). The excavation took the form of 'following the walls' which was typical of Victorian and Edwardian antiquarians. The published report was in the form of presentation of a paper to the Royal Archaeological Institute in 1912. There was no description of the finds or any pottery. The villa was again excavated in 1984 and 1986 (Aldsworth, 1985) and the architectural functional analysis of the villa is based on both reports. The location of the villa site lies on the south-east side of a hill overlooking a dry valley at 70 metres O.D. (SU 7734 1269).

3.3.5.1 Local Geology

The villa lies just below a stratum of clay-with-flint on a steep valley escarpment (hanger) on the junction of Tarrent and Newhaven Upper Chalk in a dry valley, which connects to the Ems Valley and consists of a head of variable deposits of sandy silt clays (British Geological Survey, 1996a). The valley would have given easy access to the coastal plain and the markets of Chichester and Winchester. There were three types of roads during the period of the Roman occupation of southern England. There were those constructed initially for military and imperial purposes by the army: there were those built by the governing bodies (*Curia*) of the local *civitates:* and those built by the local communities for their own convenience. The farmers at *Watergate Hanger* would

probably have had to create roads or track-ways to access the more major routes on the coastal plain.

3.3.5.2 Phasing and Architectural Features

There was limited information about the construction of the villa but a detailed plan of the rooms from the 1984 - 6 excavation was published (*Figure 14*). The walls, which were still standing up to a metre high, were constructed of mortared flints and the abundance of both *tegulae* and *imbrices* suggest that the roof was tiled. Both reports detail tessellated floors constructed from red tiles and two rooms contained small simple designs of a geometric pattern in the middle of the tessellation. Neither excavation identified any form of bath house or hypocaust system.

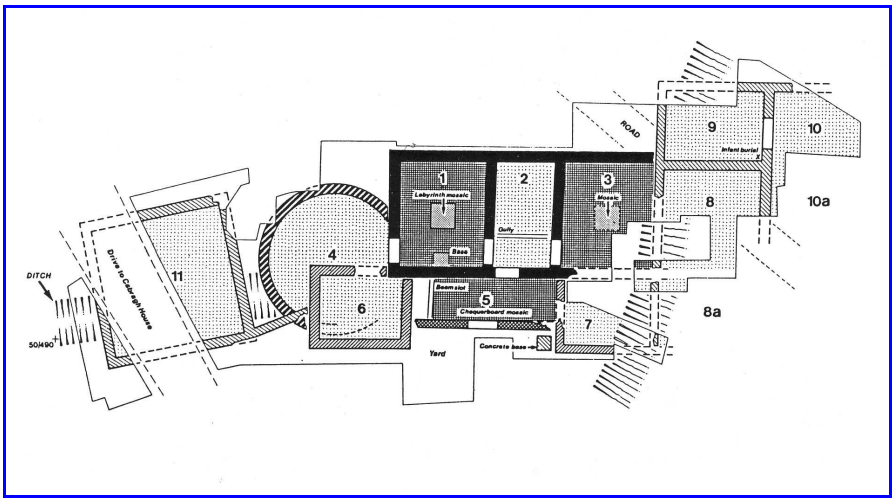

Figure 14: Site Plan of the Villa at Watergate Hanger (after Kenny, J.)

The villa has been described as a simple row-type house to which a circular room of unknown function has been added. The villa was further extended by the addition of rectangular rooms joined by a corridor (*Table 12*). The lack of detailed excavation reports limits the amount of architectural and phasing information that can be gleaned

from the site but the pottery suggests that the villa was occupied from the middle of the second century until at least the middle of the fourth century AD.

Table 12: Romanised Architectural Features of the Villa at Watergate Hanger

	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
All phases	✓	✓	✓	✓?	–	–

3.3.6 Summary of Downland Villas

The architectural features of the villas in the Downlands would seem to indicate a high degree of conversion to Roman cultural values (*Table 13*). It can be seen that all had painted wall plaster. Walls of Roman houses were decorated with paintings of mythological and literary subjects, mainly with a Hellenistic focus. Wall paintings tended to be found in houses of the upper class and were used to differentiate spaces devoted to public and private life (Revell, 2009). Public rooms were decorated in reserved and unostentatious colours and scenes whilst the private rooms were much freer both in colour and styles.

Table 13: Summary of Romanised Architectural Features of Downland Villa Rusticas

	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Batten Hanger	✓	✓	✓	–	?	✓
Chilgrove 1	✓	✓	✓	✓	✓	✓
Chilgrove 2	✓	✓	✓	✓?	–	✓
Pitlands Farm	✓	✓	✓	–	✓	✓
Watergate Hanger	✓	✓	✓	✓?	–	–

The concept of wealth was founded upon the possession of goods and not necessarily money. It was the display of wealth and the investment of money in fine villas that would have been an indicator of the status of a villa owner. All the villas on

the Chalk Downlands would seem to have been displaying indicators of wealth. This wealth must have been generated from the agricultural activities of the villa estates and suggest that land was highly productive. It has been suggested that during the Roman period the environment of the Chalk Downlands was open country with few woodlands (Fasham and Whinney, 1991, 142). The soils of the downs were easily ploughed and ideal for cultivation of wheat both Spelt and Emmer. Spelt wheat needs to be dried before the grains can be released from the husks. Corn driers would have been used to dry the wheat prior to threshing. The excavation reports on the Downland villas do not describe finding and identifying any corn dryers. This would seem to suggest that the Downland villa farmers were cultivating Emmer wheat as it can be threshed without drying (Dark, K. and Dark, 1997).

3.4 Villas Located on the Greensand Bench

The villas at *Elsted*, *Liss* and *Stroud* were all situated on the Upper Greensand bench at the junction between the Wealden Clays to the south and the Chalk Uplands of the Downs (*Figure 15*). Upper Greensand is a soft, grey-green calcareous sandstone with a high silica content formed into a bench about half a mile wide (Hopson, 2000, 7) and a scarp which falls away to the north to a vale of Upper Gault Clay. The Gault Clay and Greensand junction would have been the spring line. Gault Clay is a formation of stiff blue clay deposited in a calm, fairly deep water marine environment during the Lower Cretaceous Period. It overlays the Lower Greensand formation, and is found on the south side of the North Downs and the north side of the South Downs (Gallois, 1965). These heavy clay soils were unlikely to have been ploughed before the seventeenth or eighteenth century and would have supplied summer pasture or woodland resources during Romano-British times (Wade Martins, 2004). This diverse geology demanded a different agricultural approach in order to succeed. This approach probably involved more reliance on livestock than on arable farming.

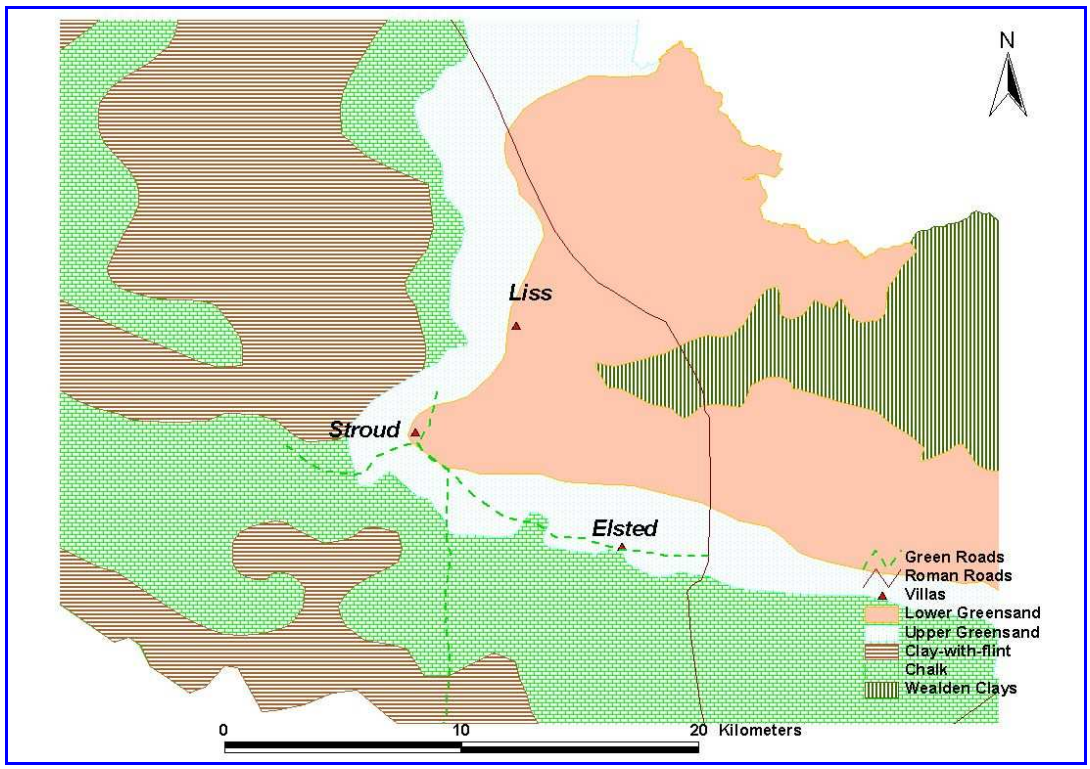

Figure 15: Location of Villas on the Greensand Bench (Author)

Their position relative to the known major Roman roads and communication links was noticeably different. Roman roads were built to give access to the Roman settlements across southern England and to connect the *civitates* and *coloniae*. Local roads connected the villas to the major communication links and tended to follow the regional terrain and could meander. It is probable that most of these local roads continued to follow and use the already existing track-ways used by the indigenous population prior to the Roman conquest of southern England. All of the selected villas would probably have had track-ways linking them to the major Roman road between Chichester and Silchester (*Figure 15*). The rural villa settlement patterns and the associated trade networks would have exploited river transportation as well as roads and track-ways. Thus these villas in the hinterland would have been able to share market access and the ability to buy fashionable ceramic pottery.

3.4.1 Elsted

The villa at *Elsted* (SU 813 191) was excavated in 1975 (Redknap and Millett, 1980, 197-229) under scientific methods but very few structural features had survived plough damage. The pottery recovered from the site was also severely abraded with an average sherd weight of only 4 grams but indicated that the site had been occupied from the first to late third centuries AD.

3.4.1.1 Local Geology

The Upper Greensand bench is only approximately one kilometre wide at this point with the Upper Chalk scarp rising steeply to the south and the Gault Clays to the north. This narrow strip of Upper Greensand would have provided land for arable cultivation whilst the Downs would have afforded suitable pasture for rearing sheep (Tansley, 1968). The soils of the Upper Greensand consisted of sandy silts with a pH value of 6.5 to 7.5.

There are no known Roman roads connecting the site to the major markets but it has been suggested that a 'Greensand Way' ran along the foot of the escarpment connecting the rural settlements (Redknap and Millett, 1980, 201).

3.4.1.2 Phasing and Architectural Features

The limited architectural evidence from the excavation suggests that the villa at *Elsted* consisted of a simple three-roomed stone row-type house fifteen metres square with a cobbled courtyard surrounded by an enclosure ditch. Whilst the pottery suggests occupation on the site from the first to at least the third century, it was impossible to ascribe any of these features to different phases. The masonry walls may well have been low to support a timber construction with a thatch roof as no ceramic or stone tiles were recovered during the excavation (*Table 14*).

Table 14: Romanised Architectural Features of the Villa at Elsted

	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
All phases	✓	–	–	–	–	–

3.4.2 Liss

The villa at *Liss* (SU 768 280) was excavated under modern archaeological condition over three seasons in September of 2005, 2006 and 2007. The excavation, undertaken by the Liss Archaeological Group, uncovered the remains of a late third to fourth century Roman villa. The villa appears to have been developed in three main phases from a single aisled building, to at least two complexes of buildings with attached baths around a central courtyard (Liss Archaeological Group, 2008).

The villa was located near the major Roman road from Chichester (*Noviomagus*) to Silchester (*Calleva Atrebatum),* which lies less than 4 kilometres to the east with the small town of Neatham 13 kilometres to the north. The major pottery kilns at Alice Holt lie just to the east of Neatham, which may have acted as a marketing centre for the distribution of the pottery (Millett and Graham, 1986).

3.4.2.1 Local Geology

The villa was situated on the Greensand bench at the junction between the Upper and Lower beds (British Geological Survey, 1981). The local surface geology is the Sandgate sands overlain by a thin layer of flinty gravels in clay (Clay-with-Flints). The site is next to a tributary of the Rother River which lies only 5 kilometres to the east. These light sands have been ploughed for many years and this has caused considerable damage to the few remaining structures of the villa.

3.4.2.2 Phasing and Architectural Features

There were a number of small pits or post-holes which contained Iron Age pottery with no Roman material. There was, however, no clear pattern of their distribution or any recognisable structures. It is probable that buildings did exist, but that their presence has not left any discernible archaeological evidence. The presence of limited amounts of late first century and second century pottery mainly samian would also suggest that the site was occupied during this period but again there was no evidence of any structures. This would seem to suggest that they were constructed from wood with limited use of ceramic building material or stone.

The most significant structure discovered during the course of the excavation was an aisled barn or hall house which had stone built structures at either end (Liss Archaeological Group, 2008, 10). Hall houses comprised a single large room open from ground to roof and heated by a hearth built wholly or partially of stone (Smith, J.T., 1997, 23). The survival of the walls of the buildings was generally poor due to the ploughing of the site and as a result of stone robbing. The foundation trench for the walls of the barn only survived on the north side and comprised of unmortared stones, suggesting that the walls were constructed on wooden frames. The function of the two masonry constructed buildings at either end at a later stage was unclear but there was evidence of under-floor heating (hypocaust) and painted wall plaster. A building to the south of the aisled barn, which may have been connected to it, again had a hypocaust which may have supplied heat to a simple bath house. *Tegulae, imbrices* and stone tiles recovered from the ploughsoil suggest that at least parts of the villa were tiled. No *tessarae* were found but two rooms had the remains of *opus signinum* floors. The villa has been dated by both pottery and coin evidence to the late third to the late fourth century AD (Liss Archaeological Group, 2008, 57). The Romanised architectural features of the villa at *Liss* are shown in *Table 15*.

Table 15: Romanised Architectural Features of the Villa at Liss

	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
3rd–4th Century	✓	✓	–	–	✓	✓

3.4.3 Stroud

The villa at *Stroud* (SU 7252 2357) was excavated in the 1907 by A. Moray-Williams. The only documentary evidence of the excavation was a report in the *Archaeological Journal* (Moray-Williams, 1909) which was a transcript of a paper presented to the Institute. The early twentieth century excavators did not adopt modern archaeological techniques but tended to be preoccupied with villa structures. This is demonstrated in the production of a detailed plan of the villa (*Figure 16*) but with limited reference to any phasing of the villa or material culture that may have been recovered during the excavation.

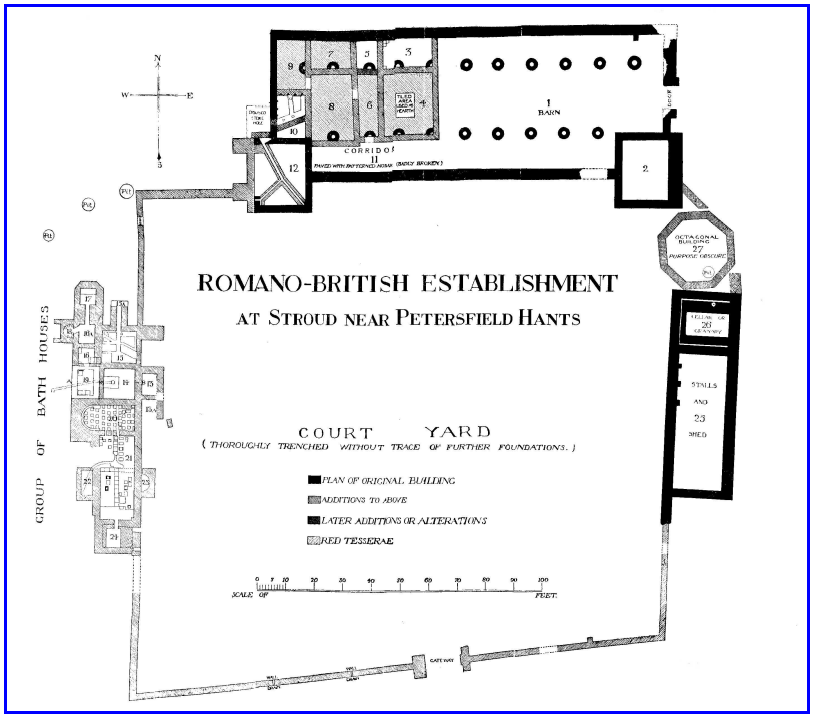

Figure 16: Plan of the Villa at Stroud (Moray-Williams, 1909, 33)

The report states that the coin series was from Victorinus (AD 268 – 271) to Constantine (AD 306 – 337), suggesting that the villa was occupied from the late third century until at least the mid-fourth century AD. This is supported by the statement in the report that there was no 'embossed' samian. An illustration of a 'Romano-British vase of the New Forest' (Moray-Williams, 1909, 49), which is a Fulford Type 30 beaker, can be dated from c. AD 320 – 375, supporting a fourth century date for the villa.

3.4.3.1 Local Geology

The villa at *Stroud* was located on the edge of the Weald on Upper Greensand. The Wealden Greensands follow the outcrop of the Upper and Lower Greensand which curve around the western end of the Wealden anticline and form a conspicuous ridge (British Geological Survey, 1988). The villa was located on the edge of the Upper Wealden Clays and the Upper Greensand in a river valley on a small gravel terrace at 80 metres OD below the Iron Age enclosure on Butser Hill. The river valley is at the western end of the Weald and gives access to the Meon Valley and the Hampshire Basin. Many ancient woodlands have survived though often in fragmented patches and on steeper slopes including the Hangers of Hampshire on the steep chalk and Upper Greensand escarpment. The Wealden Greensands contain several river valleys including the Rother. The villa at *Stroud* was situated on a tributary of the Rother. These river valleys supported a series of wetland habitats including alluvial grazing meadows with drainage ditches, marshy grassland, reed beds and wet woodlands (Yates, 1972).

3.4.3.2 Phasing and Architectural Features

The villa comprised of an aisled hall (barn), a west block including a bath house, and an eastern wing with an Octagonal Building all of which were contained within a walled courtyard (*Figure 16*).

The **Aisled Hall** was 84 feet by 50 feet and contained several rooms at the western end of the building. The building had been supported on circular sandstone

'bosses' 4 feet round and 12 feet apart. There was evidence of burnt mortar and charred wood suggesting that the pillars supporting the roof were of wood. This burning may suggest that the building had been destroyed by fire. Five of the nine rooms, which had been inserted into the barn as a later alteration, had red tessellated floors and the connecting corridor may have had a patterned mosaic floor. Two of the rooms (Rooms 10 and 12) were heated by a hypocaust (*Table 16*).

The excavator has concluded that the **Western Block** was a bath house which consisted of thirteen rooms. The central hall or 'reception' (Room 14) was 11 feet by 10.50 feet and had a water feature in the middle. Room 15 was 12 feet by just over 11 feet wide and was heated by a hypocaust. Rooms 16 and 16A were two rooms with a tiled floor set in *opus signinum* and may well have been part of a bath suite as they were adjacent to the stoke hole for the hypocaust. Rooms 20 and 21 were the largest rooms (19 feet by just over 8 feet wide and over 28 feet by 12 feet wide respectively). These rooms are large to be part of a bath suite but may well have been dining rooms as they had geometrically patterned mosaic floors and painted wall plaster (*Table 16*). There are similarities between this building and the houses at both *Sparsholt* and at *Chilgrove 2*.

The **Eastern Wing** was 71 feet long by over 24 feet wide, the foundations of which were thick double wall. Attached at the north end of the building was an octagonal structure 20 feet in diameter. The thickness of the wall foundations suggests that this building may have had two storeys and a tiled roof (*Table 16*). The construction of a circular room at the northern end of the building has some similarities to the villa at *Watergate Hanger*.

The villa complex was surrounded by a courtyard wall with an entrance on the southern side over the stream via a bridge. The southern wall would seem to follow the edge of the stream which is a tributary of the River Rother.

The excavator suggests that the establishment may have been a communal bath house or a *hospitium*. All travellers were treated as guests and upon arrival the

stranger was clothed and entertained with no inquiry being made as to his name or antecedents until the duties of hospitality had been fulfilled. This rather fanciful suggestion is based on Greek mythology and not Roman. The more likely explanation is that the villa was strategically positioned at the junction of two rural path ways or routes. The north-south route connected the communities on the coastal plain with the hinterland and the east-west route connected the Weald in the west and the Hampshire Downs in the east. The River Rother and its tributaries create a natural passage between the two geological and possibly territorial districts.

Table 16: Romanised Architectural Features of the Villa at Stroud

	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Aisled Hall	✓	–	✓	?	✓	–
Western block	✓	✓	✓	✓?	✓	✓
Eastern wing	✓	–	–	–	–	–

The only material evidence of the excavation that can be ascribed to the villa is stored at Winchester City Museum under accession number Arch 47.00. This is a very small amount of pottery (forty sherds) of very uncertain provenance. The lack of artefacts from the excavation seriously limits the amount of information about the role and the lifestyle that this very important villa could have played within the study area. It may be worthwhile re-excavating the site at some future date to try and establish if any dating evidence and any material culture was still within the site. This would allow the villa to be better compared with the evidence of the material culture from other similar villas such as *Chilgrove 2* and *Sparsholt*.

3.4.4 Bignor

The villa at *Bignor* was outside the study area but has been included in this section as it may well have exerted an influence on villas within the study group. The villa was discovered in 1811 and excavated by John Hawkins and Samuel Lysons. It was further excavated in 1925 (Wimbolt, 1926), 1956 – 62 (Frere, 1982), the 1970s (Aldsworth, 1983), and more recently in the 1980s (Rudling, 1998). *Bignor* was a large courtyard villa well-known for its high quality mosaic floors, which are some of the most complete and intricate in the country. Courtyard villas had domestic rooms including bath houses on three sides of an enclosed yard (Smith, J.T., 1997, 163). Courtyard shapes were varied and the yard at *Bignor* was trapezoidal (*Figure 17*).

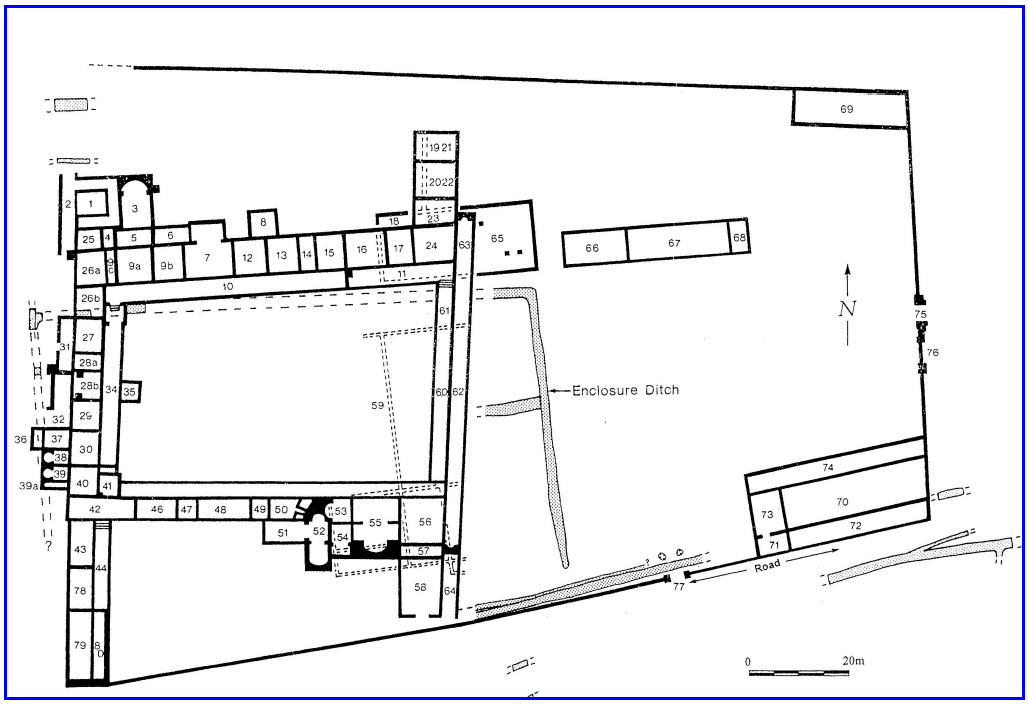

Figure 17: Plan of the Villa at Bignor (after Rudling)

The villa is situated just north of the South Downs close to the Roman road of Stane Street, about 16 kilometres north-east of Chichester (*Noviomagus Regnensium*). *Bignor* is on the south-facing crest of a ridge of Upper Greensand just north of the

scarp slope of the South Downs. Direct communication with the market town of Chichester and the high quality and fertility of the soils of the surrounding greensand, which provided better conditions for agriculture than the nearby chalk, meant that the villa owners had the opportunity to become wealthy from farming. This wealth was reflected in the size of the villa and the quantity and quality of the mosaics. These fourth century mosaics, which depicted mythical scenes and complex geometric patterns, adorned all the public rooms. They were there as an expression of wealth and placed in the public rooms for all to admire and be overwhelmed by their profligacy.

It has been suggested that large late third and fourth century AD villas were owned by rich landlords who controlled great estates (Wacher, 1998, 136). This was a society dominated by landowners operating in a market in which land was freely bought and sold. Beneath them was a class of farmers whose more prosperous members aspired to the higher status of the elite whilst others were mere tenants. The smaller and less Romanised villas such as those at *Elsted* and *Liss* may have been run by such tenant farmers with the majority of the wealth generated from the agricultural produce going to the elite estate owners.

3.4.5 Summary of Villas on the Greensand Bench

Any attempt to predict a social structure on a typology of villa plans encounters a potential problem of chronology. The majority of Romano-British rural villas were located at the centre of a fertile agricultural landscape which has been continually farmed up to the modern day. This continuity of farming activity over the centuries has resulted in the fact that many villas have been significantly damaged by the plough and consequently it has proved difficult to provide stratigraphical clarity. As a result many villas, including those excavated under modern scientific archaeological conditions, present problems in relation to a clear chronology of the various phases of their development. This is the case with the villas at both *Elsted* and *Liss.*

Table 17: Summary of the Romanised Architectural Features of Villas on the Greensand Bench

	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Elsted	✓	–	–	–	–	–
Liss	✓	✓	–	–	✓	✓
Stroud	✓	✓	✓	✓	✓	✓
Bignor	✓	✓	✓	✓	✓	✓

The simple villas at *Elsted* and *Liss* contrast significantly with the affluent villas at *Stroud* and *Bignor* (*Table 17*). This variation in opulence must signify more than just location within the landscape or the fertility of the agricultural land. The social elite would have set the cultural standards and this would have been proclaimed both in their villas and their luxurious material culture. Wealth and power were displayed and demonstrated by the acquisition of fashionable, high quality items. The design and construction of the villas at *Stroud* and *Bignor* must surely be advertising the cultural and economic status of the owners through the ostentatious declaration of wealth and power. The contrast between the villas at *Elsted* and *Liss* could be an indicator of the relationship connecting these more opulent villas which perhaps represented wealthy land owning aristocracy and tenant farmers. This theory is beyond the scope of this study but may be worth further investigations at a future date.

3.5 Villas Located on the Clay-with-Flint

Clay-with-flints is widespread on the chalklands and has been described as homogeneous dark brown or reddish tenacious clay. The clay includes whole unworn or partially broken flints which rests with an irregular junction on the Chalk (Hodgson, 1967, 53). It has been suggested that this clay is the result of the action of periglacial and soil-forming processes on thin, pervious remnants of Reading Beds clay, accompanied by a solution of the underlying chalk. These clays are a feature of the sloping landscape of the South Downs and the naturally acid brown earths are wooded. The villas at *Chalton*, *Crookhorn*, *Holt Down, Purbrook* and *Wakeford's Copse* were

situated on or near to Clay-with-Flints and the soils surrounding the villas would have been influenced by the clays overlaying the chalk bedrock. Whilst the chalk is calcareous and porous, the soils derive their characteristics from the clay deposits which are acidic and poorly drained (Courtney and Trudgill, 1984). These conditions create a gleyed impermeable clay loam which would have been difficult to cultivate in Roman Britain. It was not until the introduction of field drains and the plough technology of the late eighteenth century that these soils would have been cultivated (Wade Martins, 2004). The landscape would have been wooded with grass pastures on the steeper dry valley sides. The soils at *Chalton, Holt Down* and *Wakeford's Copse* would have supported pastoral agriculture with pigs, sheep and goats rather than arable.

3.5.1 Chalton

The site of the village at *Chalton* (SU 7340 173) was excavated between 1954/5 and again in 1964/5. The results of both excavations have been recorded in a single publication (Cunliffe, 1977, 45-67). The two excavations uncovered three separate buildings which have been interpreted as part of a 'village'. The limit of the 'village' was defined by a set of lynchets and was reached by a track-way leading up from the valley bottom (*Figure 18*).

3.5.1.1 Local Geology

The 'village' was located in the Chalton Valley on the shoulder of an east-facing slope which falls steeply to the bottom of a dry valley at a height of 120 metres OD. The local surface geology to the east of the 'village' is a layer of Clay-with-Flints overlaying the chalk bedrock.

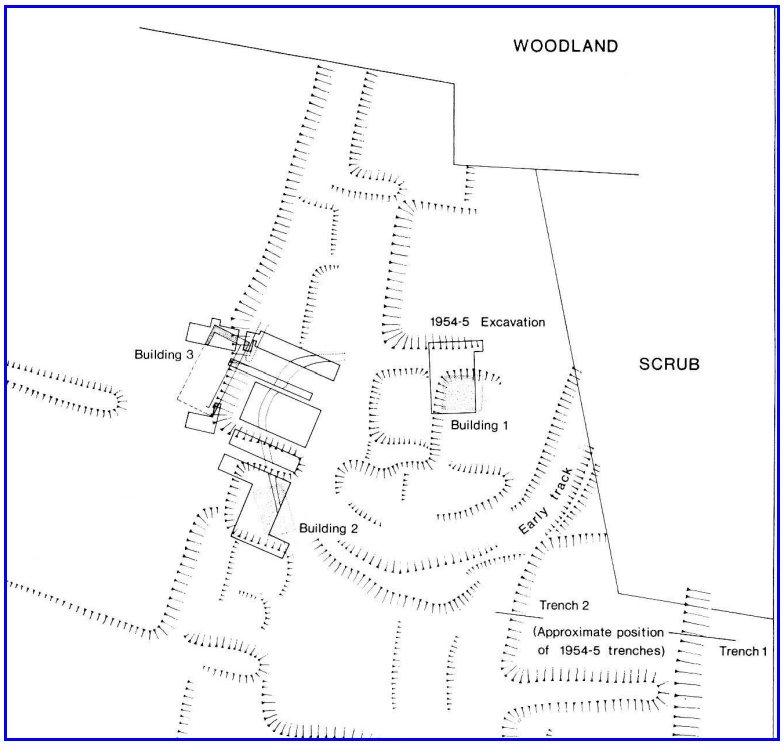

Figure 18: Site Plan of the 'Village' at Chalton (Cunliffe, 1977)

3.5.1.2 Phasing and Architectural Features

Three buildings were discovered during the two separate excavations (Cunliffe, 1977, 65).

Building 1 was a wooden rectangular construction 7.6 metres by 6.1 metres with shallow foundation trenches and a simple puddled earthen floor. No other features survived except two post holes. A silver Denarius of Gordian III (AD 238 – 244) was recovered from the floor of the building. Eight fragments of quern stones recovered from Building 1 would seem to suggest that there was corn processing on the site.

Building 2 was a wooden barn type structure with a series of post holes suggesting that this may have been an aisled barn. The floor was of puddled chalk. Pottery recovered from the building suggests a late third to early fourth century date for the building.

Building 3 was a rectangular timber-framed structure on masonry flint foundations in a shallow trench. There were no ceramic or stone roof tiles suggesting that the roofing material may have been thatch.

The three buildings were enclosed by a simple bank and ditch. This would seem to suggest that the three buildings were related and may have been the villa and farm buildings of a simple farmstead (*Figure 18*), (*Table 18*).

Table 18: Romanised Architectural Features of the villa at Chalton

	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
3rd-4th Century	✓	–	–	–	–	–

The remote nature of this site would suggest that there may have been little contact with the major markets of Chichester (*Noviomagus*) or Winchester (*Venta Belgarum)*. An alternative suggestion could be that the villa was part of a much larger estate and that the farmers were mere tenants. Land ownership during Roman times was an important expression of wealth but archaeologically it has been impossible to identify the true extent of any estates to particular villa sites. It would, however, be reasonable to assume that some estates were larger than others. The large estates may well have been split into smaller tenancies and *Chalton* may well have been part of an, as yet, unidentified estate.

3.5.2 Holt Down

The villa at Holt Down (SU 7216 1768) was excavated between 1925 and 1927 (Taylor and Collingwood, 1927) without the benefit of modern archaeological techniques. The excavators seemed to be preoccupied with a possible Roman road and track-ways and less interested in the villa. The villa was located on a small natural plateau on the steep hillside overlooking a dry valley at the head of the Chalton Valley.

The site is overlooked by the Iron Age enclosure of Butsers which stands on top of a promontory guarding the route to the north.

3.5.2.1 Local Geology

The surface geology was Clay-with-Flints overlaying the chalk bedrock. The chalk escarpment surfaces to the north and west are now covered by beech woodlands, which present an impression of how the landscape may have looked in Romano-British times. The Clay-with-Flint is currently covered by a fir plantation which obscures the gentle south sloping ground but a topographical survey undertaken in 1997 (Hunt, 1997) identified that this area contained several field lynchets suggesting that the land had been used for arable cultivation in the past (*Figure 19*).

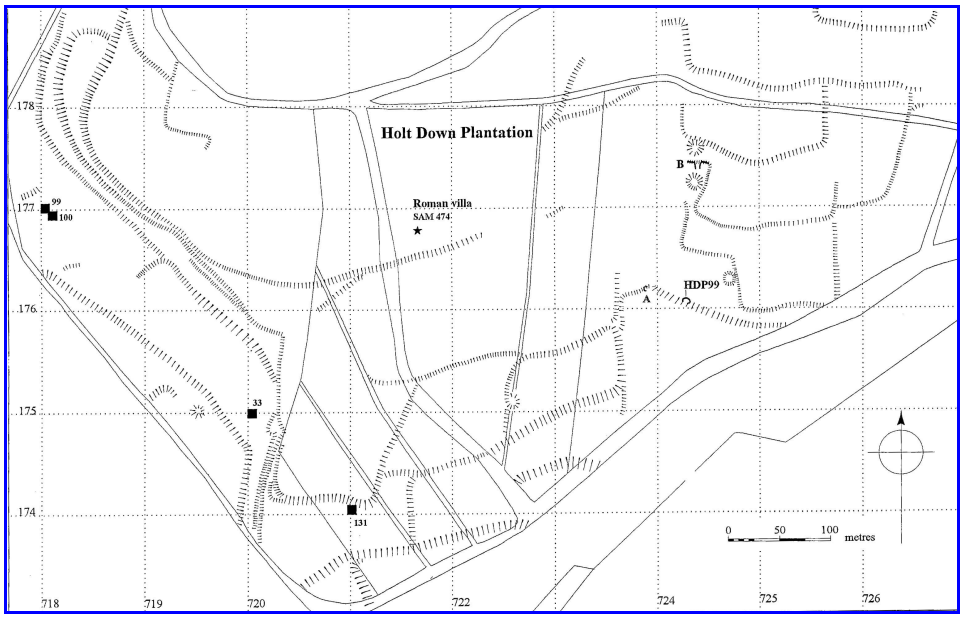

Figure 19: Plan of Villa Site at Holt Down (Hunt, 1997)

3.5.2.2 Phasing and Architectural Features

The excavation revealed three separate rectangular rooms with low mortared flint walls which supported a timber framed building. There were signs of painted wall plaster with a geometrical pattern. The roofing had been of hexagonal sandstone-shale tiles and the floors were made of beaten clay on crushed chalk. A rubbish pit to the east contained coins of Trajan (AD 98 - 117), Caracalla (AD 211 - 7), Gallienus (AD 253 - 68), Tetricus (AD 271 - 3), and Constantine I (AD 306 - 37) in good condition (Taylor and Collingwood, 1927, 208). The villa was approached by two track-ways metalled with flint, which diverge westwards from an old road called the Greenway. The pottery and coinage suggest that the villa was inhabited from the late first century until at least the middle of the fourth century AD but there was no stratigraphical information or indication of possible phases of occupation. There were few Romanised architectural features to the villa (*Table 19*).

Table 19: Romanised Architectural Features of the Villa at Holt Down

	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
1st –4th Century	✓	✓	–	–	–	–

The villa at *Holt Down* would seem to have consisted of a simple Hall House (Smith, J.T., 1997, 23). The main villa consisted of a rectangular room 4 metres by 3.65metres. No internal structures were identified by the excavators but if these were of wooden construction they would have left little archaeological evidence. A much larger rectangular building 8.5 metres by 36 metres may have been a barn.

The villa had access to a diverse geology of arable calcareous soils of humic brown and grey rendzinas ideally suitable for cereal production and acidic clay soils for pastoral farming. This combination of agricultural regimes would have been potentially lucrative and permitted a greater degree of Romanisation and display of wealth. This affluence, however, was not reflected in the architectural features of the villa buildings.

This suggests that the occupants of the villa may, perhaps, have been tenant farmers under the control of the luxurious villa at *Stroud* less than 6 kilometres to the north.

3.5.3 Crookhorn

A rectangular aisled building and an associated tilery were excavated at *Crookhorn* (SU 6865 0738) between 1974 and 1975 (Soffe et al., 1989). The site of the tilery was only 80 metres south of the Roman road between Chichester (*Noviomagus*), Bitterne (*Clausentum?*) and Winchester (*Venta Belgarum*) which would have been the main communications links to the major markets.

3.5.3.1 Local Geology

The villa was situated on the sands of the Bagshot Beds which lie above the beds of London and Reading Clays. The Reading Beds are the oldest Tertiary deposit consisting of brightly mottled clays with subordinate sands and a layer of unworn flints at the base. The London Clay, which lies on top of the Reading Beds, is generally bluish grey clay succeeded by Bracklesham Beds, a group of sediments, of variable lithology though mainly composed of glauconitic sandy clays (Jarvis and Findlay, 1984, 3).
It would have been these clays that were used to produce tiles in the tilery.

3.5.3.2 Phasing and Architectural Features

Attached to the tilery was an aisled barn which was probably the workshop and home for the workers. The barn was 19 metres long and 12 metres wide and the roof was supported by six pairs of large timber posts. The foundations for the walls were unmortared flint nodules set in clayey soil, suggesting that the villa had a timber frame. There were no other Romanised architectural features recorded (*Table 20*) but the aisled barn had a hearth at its southern end and a structure that has been

interpreted as a T-shaped corn dry. Corn driers were familiar features of the Romano-British agriculture landscape used to dry spelt wheat prior to threshing.

Table 20: Romanised Architectural Features of the Villa at Crookhorn

	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
2nd-4th Century	✓	–	–	–	–	–

Romano-British aisled barns combined shelter for the family, stock and crops (Smith, J.T., 1997, 15). A simple aisled barn was a long timber building with two internal rows of posts set in the ground and no structural partitions. Functional divisions were marked by the position of the hearth and by the floors. Hard crushed and smoothed clay or chalk was used for the domestic areas and rougher surfaces for the working areas (Smith, J.T., 1997, 36).

The output from the tilery included bonding tiles, *tegulae*, *imbrices*, box-flue tiles and *pilae*. The tilery and the site have been dated from the second to fourth centuries AD (Soffe et al., 1989, 96).

3.5.4 Purbrook

The villa at *Purbrook* (Littlewood Park) was excavated in 1925 by George Smith but was never fully published although the archived notebook of the excavation has survived (Smith, G., Undated). The villa (SU 6915 0726) lies on the south-east facing brow of a valley overlooking Langstone Harbour and the narrow coastal plain. The Roman road from Chichester (*Noviomagus*) to Bitterne (*Clausentum?*) was located about 100 metres to the south of the villa.

3.5.4.1 Local Geology

The local geology is a Tertiary stratum of the Bagshot Beds which lies above the beds of London and Reading Clays and belongs to the upper Eocene formation of the Hampshire basin (Jarvis and Findlay, 1984). The Upper Bagshot Beds of Barton sands would have produced poor infertile sandy soils which would have been difficult to farm productively in Roman times.

3.5.4.2 Phasing and Architectural Features

The notebook, which took the form of a diary describing the day-to-day discoveries, forms the basis of an assessment of the excavation (Soffe, 1973). The excavation was a typical 'follow-the-walls' with no regard to stratification. However, it has been suggested that there were two periods to the villa: the Period 2 building overlaying an earlier Period 1 building.

The Period 1 building has been dated to c. AD 150 – 200, based on the evidence of the samian pottery recovered from an associated midden. There was little evidence of the construction of the villa as all that remained was the foundation of mortared flints set on chalk blocks.

The Period 2 building consisted of a series of rooms connected by a portico facing south looking out over Langstone Harbour (*Figure 20*).

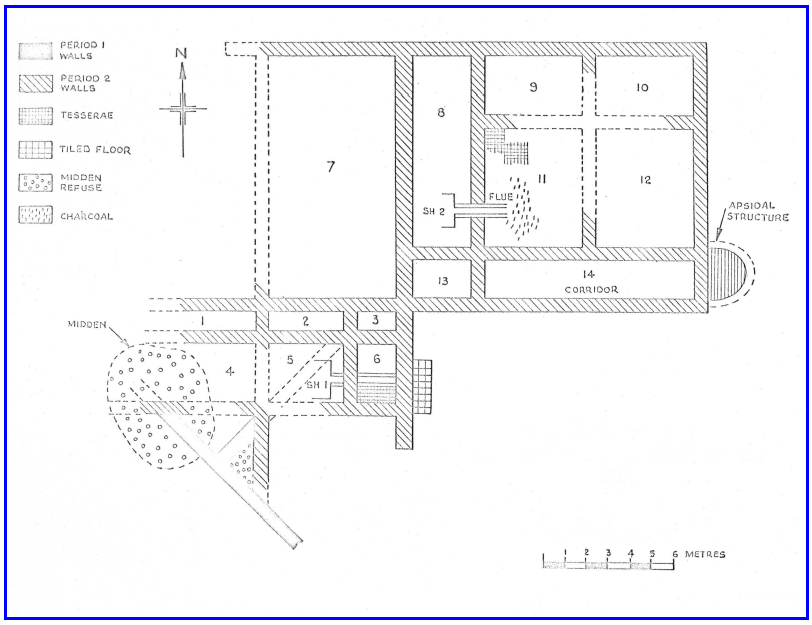

Figure 20: Plan of Villa at Purbrook (after Soffe)

The foundations were made of mortared flints and the presence of both *tegulae* and i*mbrices* suggest that the villa had a tiled roof. Painted wall plaster recovered from the sites indicated that the walls were decorated and at least one room (Room 11) had a tessellated floor. There was evidence of a hypocaust which seemed to provide under-floor heating to Room 11 but there would seem to have been no bath house. A coin of Tetricus (AD 271 – 3) recovered from occupation debris in Room 8 and a coin of Claudius II (AD 268 – 70) found in an associated midden suggest a mid-third century AD construction date for the Period 2 villa. The pottery evidence would seem to indicate a final demolition of mid- to late fourth century.

The lack of structural and architectural features of the Period 1 building has not allowed separate analysis of the two periods. The lack of stratified pottery also limits this analysis and as such the Romanised architectural features have only been identified for the Period 2 villa (*Table 21*).

Table 21: Romanised Architectural Features of the Villa at Purbrook

	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
3rd –4th Century	✓	✓	✓	–	✓	–

The villa at *Purbrook* and the aisled house at *Crookhorn* were only 500 metres apart and it would be surprising if there was not some relationship between the two sites. The poor quality of the agricultural land may have encouraged the villa owner to diversify into tile production and manufacture. The money economy introduced by the Romans and changing attitudes to manufacturing and commercial activities may also have persuaded the owners to establish the tilery. There would seem to have been an expanding social stratum for whom work and enrichment was a source of pride and the hope of future advancement in social status (Grant, 1960). Rural industrial sites were not uncommon as can be testified by the large pottery manufacturing sites such as Alice Holt, New Forest and Rowlands Castle. Any industrial site must have had some form of hierarchical structure to the workforce. There may well have been an overall owner or bailiff of the tilery at *Crookhorn* who occupied the villa at *Purbrook*. There is insufficient proof to substantiate this hypothesis conclusively but the close proximity of the two sites would seem to provide at least some circumstantial evidence to support this theory.

3.5.5 Wakeford's Copse

The villa at *Wakeford's Copse* (SU 727091) was excavated in 1968 (Wilson, D. R., 1969) and again in 1970 (Wilson, D. R. , 1971) prior to the site being levelled to create the playing fields for a new school. The results of these excavations have never been published but some of the site documentation is stored at Portsmouth City Museum (Lewis, 1968) and has been examined and studied as part of this analysis.

3.5.5.1 Local Geology

The site of the villa lies near the top on the southern slope of a hill overlooking the Chalton valley. The local geology is a Tertiary stratum of London Clay overlaid by river gravels and sands. The London Clay consists of grey pyretic bioturbated silts and fine grain sandy clays with interbedded seams of calcareous cementstone and rounded flint pebble beds (Hopson, 2000, 15). This geology would have produced soils that would have been difficult to cultivate during the Roman period. It would not have been possible to cultivate these heavy soils even with iron tipped ploughs introduced by the Romans (Dark, K. and Dark, 1997, 94). The villa owner would probably, therefore, have had to rely on a pastoral farming economy.

3.5.5.2 Phasing and Architectural Features

A rectangular building was recovered which was 14 metres long and 8 metres wide with substantial mortared flint walls. The building was divided into five rooms which were accessed from a corridor on the south side. The north side of the villa was a courtyard with a cobbled enclosure wall. Amongst the artefacts recovered were several *tegulae* suggesting that the building had a tiled roof and coloured plaster from the painted walls (*Table 22*). No other significant archaeological features or artefacts were reported except an onyx cameo head of Medusa (Lewis, 1968). The pottery would seem to indicate that the villa was occupied from the mid-first century until at least the mid-fourth century AD.

Table 22: Romanised Architectural Features of the Villa at Wakeford's Copse

	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Mid 1st –mid 4th Century AD	✓	✓	–	–	–	–

This villa can be classified as a simple row house with no dominant room. There was no known functional purpose for any of the rooms and it was not clear from the excavation documentation if the rooms were interconnecting or if access was only

gained from the portico. Porticos were an architectural feature synonymous with the Romanisation of Romano-British buildings (Smith, J.T., 1997, 117).

3.5.6 Summary of Villas on Clay Geology

The limited amount of Romanised architectural features incorporated into the villas would seem to indicate that their owners were less wealthy with restricted disposable income to spend on the aggrandisement of their homes (*Table 23*). This may well be associated with the agricultural character of the clay soils. These heavier soils, which would be cold and wet during the winters and hard during the summers, would have been difficult to cultivate during Roman times. It was not until the seventeenth century that simple field drains were first employed to improve the heavy clay soils (Wade Martins, 2004, 26).

Table 23: Summary of Romanised Architectural Features of Villas on Clay Geology

	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Chalton	✓	–	–	–	–	–
Holt Down	✓	✓	–	–	–	–
Crookhorn	✓	–	–	–	–	–
Purbrook	✓	✓	✓	–	✓	–
Wakeford's Copse	✓	✓				

The exception was the villa at *Purbrook* which was associated with the industrial production of tiles and possibly did not rely on agriculture as a source of income. *Purbrook* would seem to represent a relatively large individual workshop (Peacock, D. P. S.. 1982, 9) with the close proximity of the road giving access to the markets. By contract the other rural villas were not only on poor agricultural soils but some way from the major communication routes.

3.6 Villas Located on the Hampshire Downs

The villas at *Binsted, Sparsholt* and *Twyford* are all located within the Hampshire Basin (*Figure 21*). The geology of the Basin consists of a major deposition from Mesozoic times and is characterised by extensive exposed Tertiary sediments (Jarvis and Findlay, 1984, 1). The Portsmouth Anticline forms a pronounced ridge of Chalk running east-west and the Hampshire chalklands in the north of the basin are contiguous with Salisbury Plain. Upper Chalk is the most extensive rock type of the area which is exceptionally pure limestone containing less than 5% non-calcareous material. The Reading Beds are the oldest Tertiary deposit consisting of brightly mottled clays with subordinate sands and a layer of unworn flints at the base. The London Clay, which lies on top of the Reading Beds, is generally bluish grey clay succeeded by Bracklesham Beds, a group of sediments, of variable lithology though mainly composed of glauconitic sandy clays (Jarvis and Findlay, 1984, 3).

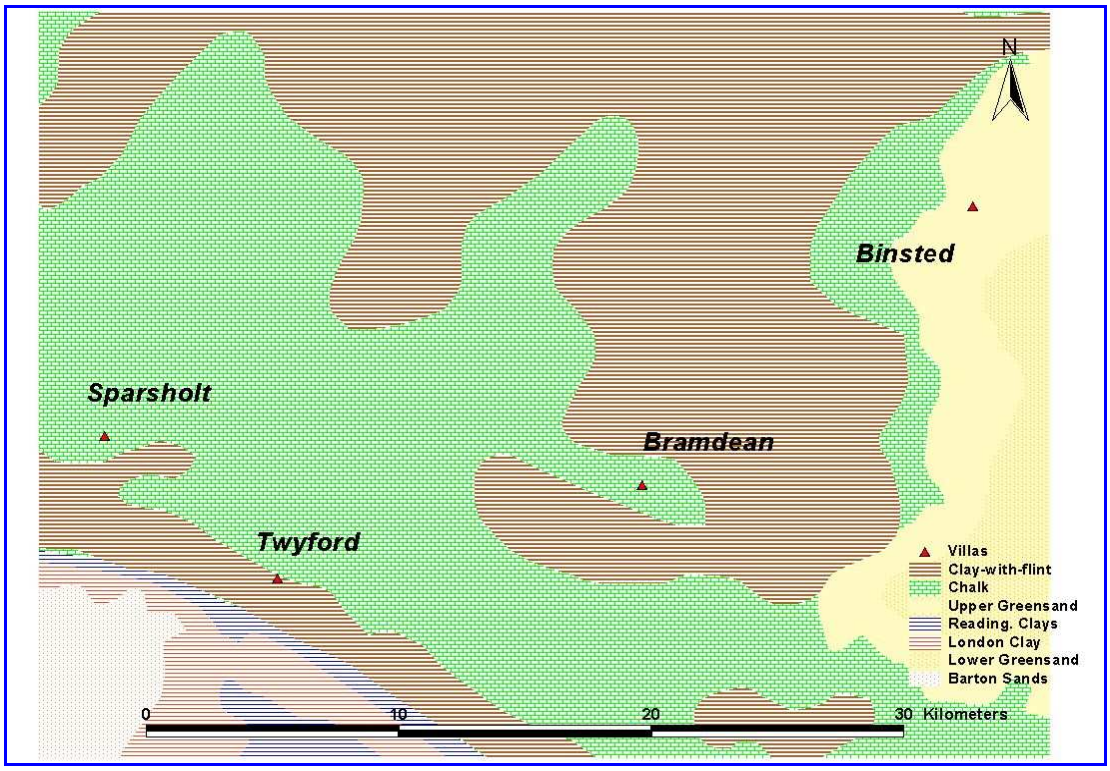

Figure 21: Location of Villas in the Hampshire Basin (Author)

3.6.1 Binsted

The villa at Wyck Place, *Binsted* was originally discovered in 1818 (Cole, 1988, 25-39) but there are few records from the excavation. A re-evaluation of the bath house was undertaken between 1975 and 1976 and this report is based on the archived pottery from that excavation.

The villa is located only 0.6 kilometres from the major Roman road from Chichester (*Noviomagus*) to Silchester (*Calleva Atrebatum)* and 5 kilometres from the centre of the Roman pottery kilns at Alice Holt.

The 1975/6 excavation was limited to the removal of the nineteenth century backfill to uncover the bath house, which consisted of a rectangular building approximately 100 metres by 40 metres containing four rooms. The *apodysterium* had a tessellated floor and gave access to the *frigidarium*, the *tepidarium* and the *caldarium*. The bath house was heated by a furnace at the eastern end of the building (*Figure 22*). The only surviving stratigraphy was in the stokehole of the furnace (Layers 10, 11, 14, 15 and 16).

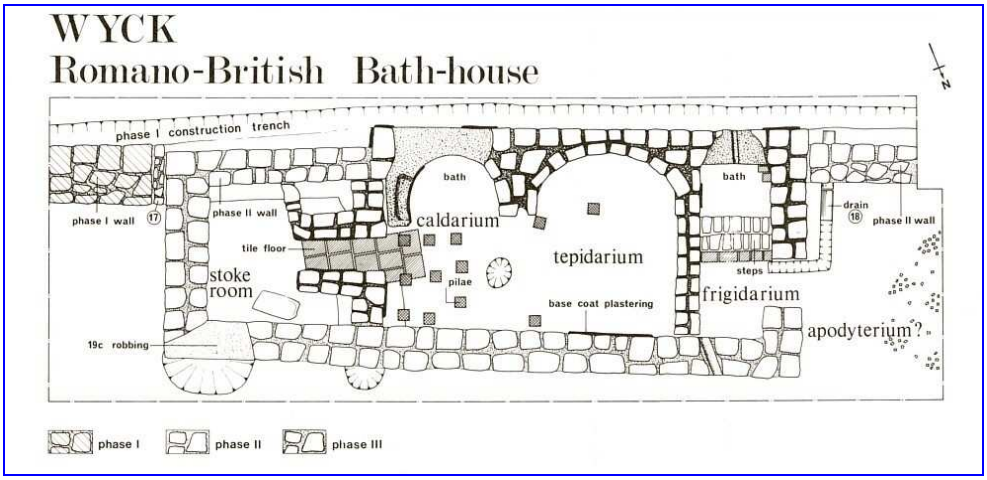

Figure 22: Plan of the Bath House at Wycke Place, Binsted (Cole, 1988, 30)

3.6.1.1 Local Geology

The villa was situated (SU 757393) on the southern edge of a band of Upper Greensand overlooking a steep drop onto Gault Clay and one kilometre south east of a band of chalk (British Geological Survey, 1996b).

3.6.1.2 Architectural Features

There would seem to be no detailed account of the 1818 excavation of the villa but it is possible to postulate the architectural features of the villa from the surviving historical manuscripts and drawings. The bath house was 'inserted into the enclosure wall' indicating that there was a courtyard associated with the villa (Cole, 1988, 38). The bath house was constructed from mortared dressed 'clunch' blocks set in substantial foundations which would suggest that the villa would have been constructed in a similar style. The archived material from the 1975 and 1976 excavations included both *tegulae* and *imbrices* indicating that the villa was constructed with a ceramic tiled roof. There was no mention in the documents of any mosaics but the bath house did contain a tessellated floor. There was much evidence of painted wall plaster again indicating that the walls of the villa may have been decorated (*Table 24*).

Table 24: Summary of the Romanised Architectural Features of the Villa at Binsted

	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Late 2nd –mid 4th	✓	✓	✓	–	?	✓

3.6.2 Sparsholt

The villa at *Sparsholt* was excavated over several seasons between 1966 and 1972. The villa complex comprised several separate buildings each of which had its own archived artefact assemblage. Although the excavation has never been published,

the pottery could be related to each building. This provided a unique opportunity to test whether this methodology could be applied across several buildings on the same site. The results of this analysis are documented as part of this research as a separate section.

3.6.3 Twyford

This analysis of the Romano-British villa at *Twyford* (SU 48340 24390) has been undertaken some fifty years after the original excavation by Professor Martin Biddle in 1958 and is based on archived material.

The principal market was the Roman town (*civitas*) of Winchester (*Venta Belgarum*), 5 kilometres to the south, which would have been both the main market for the agricultural products of the villa and the source of the majority of the pottery found on the site. The Roman road from Winchester to Chichester (Noviomagus) lies just 2 kilometres to the east, giving good access to the site and opening up the rural areas.

3.6.3.1 Local Geology

Southern Britain has a considerable diversity of landscapes and the villa at *Twyford* was influenced by the local geology, regional resources, markets and population density. The local geology is one of Upper Chalk, which produces a calcareous soil with a pH value over 7.50 and has a shallow soil profile. The sides of the valley overlooking the River Itchen have a thin A/C soil horizon and non-humic brown and grey rendzinas. These free draining soils would have supported grasslands ideally suited for the grazing of sheep, goats and cattle during the Romano-British period (Tansley, 1968). The soils in the valley floor contain relatively large quantities of organic matter incorporated into the mineral horizon and were humic rendzinas (Smith, C.J., 1980). The deep, moist, fertile, alluvial soils on the valley floors would

have been ideal for the cultivation of cereals in the Romano-British period and may have resembled the modern landscape.

3.6.3.2 Phasing and Architectural Features

The archived documentation indicated that the excavator had identified eight different phases of occupation of the site (*Table 25*).

3.6.3.3 Phases

Phase I has been dated to the mid-first to early second century and there would seem to have been no Romano-British architectural features to the buildings. The archaeological evidence of post holes and earth floors suggest that this was a Late Iron Age site.

Phase II has been dated from the late first to the mid-second century AD and there would seem to be little change from *Phase I*.

Phase III has been dated to the middle to late second century AD and there were now signs of Romanisation. There was evidence of a timber house with plaster walls and crushed chalk and mortar floors.

Phase IV has been dated to the mid-third century AD and the villa now had flint mortar walls with a tiled roof. Some of the floors were tessellated. It is highly possible that it was during this phase that the bath house was constructed and the mosaic floor put down (Johnston, 1994).

Phase VI has been dated to the early to mid-fourth century. The villa has been modified by the addition of a hypocaust to the south wing of the house.

Phase VII has been dated to the mid-fourth century but there were no discernible architectural changes to the villa in this phase.

Phase VIII, has been defined as the destruction period and has been dated to late fourth century.

Table 25: Summary of the Architectural Features of the Villa at Twyford

	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Phase I and II	–	–	–	–	–	–
Phase III	✓	✓	–	–	–	–
Phase IV and V	✓	✓	✓	–	–	–
Phase VI and VII	✓	✓	✓	✓?	✓?	✓
Phase VIII	–	–	–	–	–	–

3.6.4 Summary of Villas Located on the Hampshire Downs

The two villas that produced the comparative analysis was too small a sample to provide any conclusive hypothesis (*Table 26*). Both villas, however, would seem to have had a number of Romanised architectural features.

Table 26: Summary of the Romanised Architectural Features of Villas on the Hampshire Downs

	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Binsted	✓	✓	✓	–	?	✓
Twyford	✓	✓	✓	✓?	✓?	✓

The agricultural soils of the Hampshire Downs would have been similar to the chalk soils of the South Downs. In Roman times these soils would have been ideally suited for the cultivation of wheat. Wheat was a key factor in the emergence of an agriculturally based economy. It was one of the first crops that could be easily cultivated on a large scale and had the additional advantage of yielding a harvest that could be stored as a long-term food (Dark, P., 2000, 83).

The villa at *Binsted* may, however, have been influenced by the close proximity of the pottery kilns at Alice Holt and could have been more associated with an industrial economy. There was insufficient evidence to substantiate this assertion.

3.7 Summary of Romanised Architectural Features of Study Villas

To understand the ways in which Romano-British society responded to the rule of Rome, this part of the research has concentrated on the functional analysis of rural villas. This analysis of the Romanised architectural features of the twenty villas in the study are summarised in *Table 27*. The design and construction of Romano-British villas within the study area would have developed their own versions based on local conditions and materials. The villas in the study area used flint, local sandstones and limestones producing distinctive vernacular buildings. Whilst the villas may have been built of different materials, many contained classical Romanised architectural features. By the analysis and comparisons of the Romanised architectural features present in each villa it is possible to develop a very simple method of ranking.

Table 27: Summary of the Romanised Architectural Features of All Villas

	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Angmering	✓	✓	✓	✓	✓	✓
Batten Hanger	✓	✓	✓	–	?	✓
Bignor	✓	✓	✓	✓	✓	✓
Binsted	✓	✓	✓	–	?	✓
Chalton	✓	–	–	–	–	–
Chilgrove 1	✓	✓	✓	✓	✓	✓
Chilgrove 2	✓	✓	✓	✓?	–	✓
Crookhorn	✓	–	–	–	–	–
Elsted	✓	–	–	–	–	–
Holt Down	✓	✓	–	–	–	–
Langstone	✓	✓	✓	–	✓?	✓
Liss	✓	✓	–	–	✓	✓
Pitlands Farm	✓	✓	✓	–	✓	✓
Purbrook	✓	✓	✓	–	✓	–
Sidlesham	✓	✓	✓	–	✓?	✓
Sparsholt	✓	✓	✓	✓	✓	✓
Stroud	✓	✓	✓	–	✓	✓
Twyford	✓	✓	✓	✓?	✓?	✓
Wakeford's Copse	✓	✓	–	–	–	–
Watergate Hanger	✓	✓	✓	✓?	–	–

Villas were constructed and built in an enormous variety of scale and styles and those chosen for analysis in this study are a small cross-section of the population of villas. The development of the villas changed over time during the Roman occupation and it has not been possible to identify the different phases of all the villas by periods as that data was not available in the majority of cases. The earlier excavations were less scientific and stratigraphical relationships were either inadequately recorded or not recorded at all.

The establishment of firm central authority and peaceful conditions in the late first century encouraged a period of rapid growth and prosperity. This prosperity continued into the second century with the adoption and introduction of more Romanised architectural standards and decorative styles. The first and second century AD villas were largely owned by the native aristocracy who had adopted the Roman social and cultural values (White, 2007, 125). The late Romano-British villas were, however, the outcome of an extended period of growth and they represent the long-term development of the villa estate over many decades. This can been seen in the development of the villa estates at *Bignor*, *Chilgrove 1*, *Chilgrove 2*, *Sidlesham*, and *Twyford,* all of which were significantly enhanced during the fourth century AD.

The deliberate production of an agricultural surplus that could be actively marketed to a wider population required a market where the produce could be exchanged. The major markets in the study area were Chichester (*Noviomagus*) and Winchester (*Venta Belgarum)* and easy access to these market places was vital to the financial success of the villa economy.

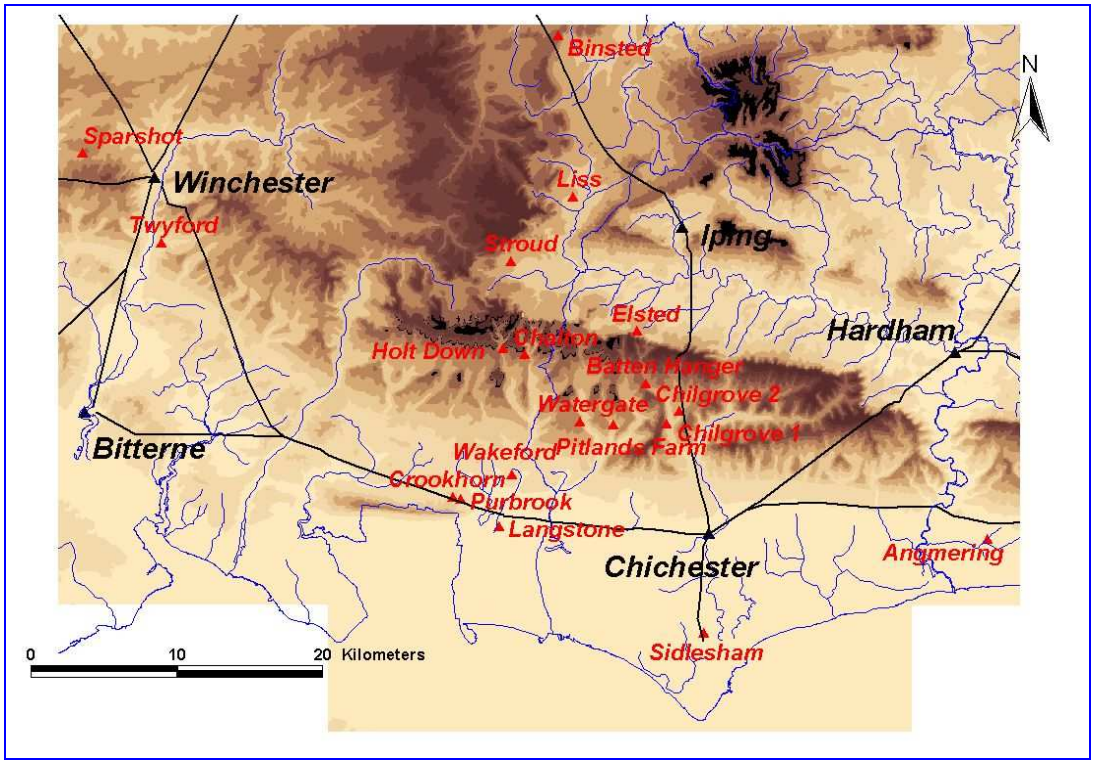

Figure 23: Location of Villas and Major Communication Routes (Author) Base map © crown copyright/database right 2011. An Ordnance Survey/EDINA supplied service.

Access to the markets for the rural villas would have been via the road network and it would have been this same network that the pottery manufacture would have utilised (*Figure 23*). This relationship between these markets and the location of the more wealthy villas was one of the important factors in their success and economic development.

The different types of soil structures would have governed the agricultural value of the land and influenced the farming regime. Soils that have high clay content tend to have a poor structure and hold excessive water. This excess moisture held within the clay soils can be accountable for decreasing agricultural productivity by reducing aeration and limiting root development of plants (Courtney and Trudgill, 1984, 77). These heavy acid soils would have been difficult to farm successfully during the period of the Roman occupation of Britain.

By contrast the brown calcareous alkaline earths of the chalk downlands were far more open and free draining and produced fertile agricultural soils ideal for a mixed farming regime. These light calcareous soils were easier to plough, which would have been necessary to break up the soils to permit the sowing of cereals. The fertility of these thin upland soils would have been a balance between cereal cultivation and stock production. The fields of stubble would have been grazed by cattle, sheep and pigs.

The fertility of the soil would have benefited from this natural manuring process and it would have allowed the land to be productively farmed throughout the year. Adopting this mixed farming regime would have been highly productive and potentially profitable for the land owners.

The more Romanised villas would seem to have been those located on the more fertile and easily cultivated soils of the chalk downs whilst those with less Romanised features were to be found on the poorer clay soils. The coastal villas may well have been more influenced by their position close to access to the sea and trade routes.

This analytical approach to the Romanisation of Romano-British villas has demonstrated an underlying empirical principle that could be applied to other villas to better understand the social and economic significance of the cultural conversion to Roman social and economic values. It might be possible to further refine this model by ranking and rating each of the Romanised architectural features. This refinement could be achieved by the development of a methodology which calculated an empirical value for each of the various architectural features. This would have the benefit of ranking the features such as bath suites which were clearly not equivalent in every villa. This, however, is beyond the scope of this study.

4 Results: Pottery Analysis

The most common and prolific artefact recovered from any archaeological excavation of a Roman site in Britain is pottery. Well-fired ceramic is one of the most indestructible materials and will survive with little obvious physical deterioration for many centuries. This durability is a result of the chemical changes which take place during the firing process of the clay.

The durability and proliferation of pottery makes it an ideal subject for detailed analytical investigation and study. The primary use of pottery on archaeological sites has been as a dating tool. Pottery, however, is not inherently dateable but relies on connections to other archaeological material evidence that can be related to historical event, inscription or coinage. The establishment of a dated model of different pottery forms such as samian can then be applied to material from other sites thereby providing indicative date ranges.

This study will use all the techniques developed by archaeological ceramic specialists over the years to identity and date pottery assemblages from a series of Romano-British villa sites. The major aim, however, will be to endeavor to extract social and economic data from the pottery assemblages and apply this information to the various villa sites in the study.

There are very few villa sites that have been excavated using modern scientific archaeological methods and even fewer sites where the pottery assemblages have been quantified to detailed standards. It was, therefore, necessary to analyse all the archived pottery assemblages from the selected villa sites that formed part of this study to obtain the requisite information and data (*Table 28*).

Table 28: Source of Archived Pottery

Villa	Museum	Accession Number	Site Codes
Angmering	Littlehampton	Material not available	-
Batten Hanger	CDM	A20164	ES 88-91
Bignor	Bignor	Material not available	-
Binsted	WM	Arch 43.27	WP74-6
Chalton	PCM	1957/205	205/57
Chilgrove 1	CDM	A20023	C/64-6/1
Chilgrove 2	CDM	A20022	C2/65-70
Crookhorn	PCM	1976/52	LPW 74-76
Elsted	CDM	A20007	EL75
Holt Down	PCM	1964/29	1964/29
Langstone	PCM	1967/34	1967/34
Liss	Liss	Not yet deposited	BH05-7
Pitlands Farm	CDM	A20017-19	UP/P/65-69
Purbrook	PCM	1969/230	PU 25
Sidlesham	CDM	A20033	AK54
Sparsholt	WM	-	SPA-L
Stroud	WM	Arch 47.00	47.01-5
Twyford	WM	Arch 22.34	TW58
Wakeford's Copse	PCM	1968/194 &1970/377	WC 68 and WC 70
Watergate Hanger	CDM	A20036	WH84 - WH86
Key: CDM = Chichester District Museum; PCM = Portsmouth City Museum; WM = Winchester Museums			

The objective of this analysis has been to develop a method of comparative assessment whereby pottery assemblages can be ranked in a sequence that reflects the relative socio-economic status of the villas. The approach was to differentiate on the basis of the proportion of fine wares between each pottery assemblage. These fine wares represented non-essential vessel types acquired as a matter of choice.

This choice has been interpreted as expressing a representation of a socio-economic status. It has been assumed that villas represented a socio-economic stratum of Romano-British society and therefore the pottery assemblages associated with these sites contained a similar range of fine and kitchen wares.

4.1 Pottery and Clay

The significant characteristic of clay is the presence of various minerals having specific compositions and crystallographic structures (Rye, 1981, 16). These minerals react in a different way at various temperatures. Pottery can be fired below 800° C with varying degrees of success but no fusion of the clay will occur below 900° C irrespective of the composition of the clay. Many natural clays and tempers are unsuitable when fired at temperatures between 1150° C and 1300° C as they can fuse and warp (Rye, 1981, 27). Most Romano-British grey wares would have been fired in the 900° C to 1100° C range. Controlling this narrow temperature range would require skill and any change to the clay by the addition of tempers may have affected the ceramic characteristics of the vessels. Prehistoric and Iron Age pottery was fired in a bonfire or in a simple clamp kiln with limited control over the temperatures achieved. The maximum temperature in a clamp kiln is unlikely to exceed 1000° C and pottery tempered with shell or chalk inclusions is weakened by firing above 800° C. The introduction of the up-draught kiln into Britain in the first century AD gave great control over firing temperatures and the atmosphere surrounding the vessels within the kiln (Swan, 1984, 29). The kiln consisted of a firebox and a chamber. The advantages of the updraft kiln were greater control of the rise and fall of the temperature in the chamber, a maximum temperature range of 1000° C to 1100° C, and control of the atmosphere in the chamber.

Natural clays that fire satisfactorily may not be sufficiently plastic to allow the material to be formed in to suitable vessels. Similarly highly plastic clays that are easily formed may have a high degree of shrinkage and cracking during the drying and firing process. Highly natural plastic clays can be modified by the addition of tempers such as sand, shell or grog. It is important to differentiate between the natural inclusions of the clay and those added by the potters when analysing Romano-British pottery. Most tempering material and natural inclusions are sufficiently large to be identifiable in thin section. It may be possible to understand the manufacturing techniques used by

the Romano-British potters if the material added by the potters can be distinguished from the inclusions already in the natural clays.

The atmosphere in a kiln and the chemicals in the clay have an affect on the colour of the fired vessel. This atmosphere is controlled by the amount of air available within the kiln. An oxidising atmosphere is created when the air is allowed free access to the kiln. A reducing atmosphere is created when after achieving the desired firing temperature all air is excluded and any remaining oxygen is converted to carbon monoxide. In oxidising atmospheres clays containing iron not incorporated in crystal structures of other minerals will be converted to Fe_2O_3 which is orange, red or brown. In a reducing atmosphere above about 900^o C FeO or Fe_3O_4 is formed which is either grey or black. Clay with little or no ferrous oxides will produce white vessels in both atmospheres (Gale, 2001).

The clays used and the tempers added may have varied with the functional requirements of the vessels. Domestic vessels would have included cooking pots, storage jars for dry material and storage vessels for liquids. These functional needs require different vessel properties such as thermal conductivity or non-porosity. Mineral inclusions added to the natural clays help achieve resistance to thermal shock both in production and in daily use as cooking pots. Analysis of the inclusions of different vessel types may help in understanding cultural traditions and the functionality of pottery vessels.

4.2 Sampling Strategy

Samples of pottery from the individual villas were selected from a well-defined population according to rigorous statistical procedures (Orton, 2000). This enabled the construction of valid statements about the relevant populations, such as estimates of certain parameters like density within villa assemblages and distribution comparisons across villa locations. Any excavation by its very nature must be a sample of the

original villa as much of the cultural evidence has already been destroyed or removed over the centuries. Few excavations totally remove all the archaeology either discovered or undiscovered as it is recognised that the best method of preservation is to leave the evidence in situ. Modern excavations are now in themselves planned as sampling the archaeology and total excavation is only undertaken when the site will be entirely destroyed by future planned development.

4.3 Methodology

The advent of a uniform recording system for Roman pottery in the 1990s has enabled assemblage compositions to be compared and analysed (Tomber and Dore, 1998, Webster, 1996, Tyers, 1996). This approach to a standard method of recording has been adopted in this study.

Fabrics were identified by using a x10 magnifying glass or a x20 microscope and reference to *The National Roman Fabric Reference Collection: A Handbook* (Tomber and Dore, 1998).

Quantification of the assemblage was by sherd count and weight, by fabric and type, for each individual context. Rim count and, where possible, rim diameters and Estimated Vessel Equivalents (EVEs) were recorded. Sherd condition, decoration and use wear were also noted. The data was entered into an Excel spreadsheet to facilitate a full, detailed analysis of the assemblage. The vessel forms were established and classified by reference to the existing published typologies for the various industries represented, namely *Alice Holt* (Lyne and Jefferies, 1979), *New Forest* (Fulford, M. G, 1975a), *Oxfordshire* (Young, 1977), *Roman Pottery in Britain* (Tyers, 1996) and *Rowland's Castle* (Dicks, 2009).

4.4 Villa Maritima

Three villas located in the coastal area, *Sidlesham*, *Langstone* and *Angmering*, had suitable ceramic assemblages necessary to produce quantifiable and comparative data.

4.4.1 Sidlesham

The pottery was stored at the Discovery Centre, Fishbourne, in an assortment of cardboard boxes, tins, paper bags and cigarette packets along with other artefacts such as bone, glass, painted wall plaster, and metal objects. The packaging dates from the original excavation by Wilson in the 1950s. Whilst some of the containers gave details of the trench and features from which the pottery came, this was not always the case. All sherds were marked, e.g. AK54, but without the site documentation it was not possible to assign all sherds to a feature. The assemblage consisted of 886 sherds weighing 23,357 grams and 27.62 EVEs (*Table 29*).

Table 29: Summary of Pottery from the Villa at Sidlesham

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Fine Wares	149	2842	3.06	***16.82***	***12.17***	***11.08***	19.07
Coarse Wares	737	20515	24.56	***83.18***	***87.83***	***88.92***	27.84
Total	**886**	**23357**	**27.62**				**26.36**
Rowland's Castle	185	9200	15.32	***25.10***	***44.85***	***62.38***	49.73
Alice Holt	77	2659	4.05	***10.45***	***12.96***	***16.49***	34.53
BB1	40	1132	1.18	***5.43***	***5.52***	***4.80***	28.30
Misc.	435	7524	4.01	***59.02***	***36.68***	***16.33***	17.30
Subtotal	***737***	***20515***	***24.56***				***27.84***

4.4.1.1 Phase I

The *Phase I* ditch produced 110 sherds of pottery weighing 3,760 grams and an Estimated Vessel Equivalent of 6.78. The majority of the pottery was Rowland's Castle wares which accounted for over 61% by EVEs (*Table 30*).

Table 30: Summary of Pottery recovered from the Ditch

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Fine Wares	6	78	0.15	***5.45***	***2.07***	***2.21***	13.00
Coarse Wares	104	3682	6.63	***94.55***	***97.93***	***97.79***	35.40
Total	**110**	**3760**	**6.78**				**34.18**
Rowland's Castle	56	2330	4.06	***53.85***	***63.28***	***61.24***	41.61
BB1	2	126	0.42	***1.92***	***3.42***	***6.33***	63.00
Misc.	46	1226	2.15	***44.23***	***33.30***	***32.43***	26.65
Subtotal	***104***	***3682***	***6.63***				***35.40***

The comparatively high sherd weight of over 34 grams would indicate that the material has been subject to some selectivity whereby smaller sherds have been discarded. The majority of the sherds consisted of rims, large body/base pieces and decorated examples. The selective policy of retaining rim sherds pottery lends itself to quantification by EVEs. This method introduces less bias and invariance particularly when the results are used from comparative measurements (Orton, 1989).

The Rowland's Castle wares contained several first century D1 bead-rimmed jars and B1 carinated bowls. The presence of Gallo-Belgic ware suggests there may have been cross-Channel contacts; and a sherd of a Dragendorff 24/25 South Gaulish dish helps date this ditch to the mid-first century AD. The very low occurrence of fine wares would indicate that during this phase the enclosure ditch contained a low status dwelling.

4.4.1.2 Phase II/III

The lack of any stratigraphical information or documentation has dictated that the pottery from *Phases II* and *III* should be combined. There were 776 sherds weighing 19,597 grams and 20.84 EVEs (*Table 31*).

Table 31: Summary of the Pottery from Phases II and III

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Fine Wares	143	2764	2.91	*18.43*	*14.10*	*13.96*	19.33
Coarse Wares	633	16833	17.93	*81.57*	*85.90*	*86.04*	26.59
Totals	**776**	**19597**	**20.84**				**25.25**
Rowlands Castle	129	6870	11.26	*20.38*	*40.81*	*62.80*	53.26
Alice Holt	77	2659	4.05	*12.16*	*15.80*	*22.59*	34.53
BB1	38	1006	0.76	*6.00*	*5.98*	*4.24*	26.47
Misc.	389	6298	1.86	*61.45*	*37.41*	*10.37*	16.19
Subtotals	*633*	*16833*	*17.93*				*26.59*

Very few rural villas were excavated under scientific archaeological conditions, which may well apply to this villa. There may have been some contamination during excavation, as the fine wares in many contexts were a mixture of late first to mid-second century samian and mid-third to late fourth century New Forest wares. Indeed, contamination is the only explanation for these apparent anomalies regarding the pottery. The method of using grids as an excavation technique can result in earlier and later contexts being mixed together as a single layer. It is, also, more difficult to identify the relationship between contexts in different grids. These anomalies, combined with some very small groups of material in certain contexts, have had a serious impact upon accurate dating. However, such limitations do not restrict use of the data for comparative studies on the social and marketing implications arising from the relative amounts produced by different pottery manufacturers.

Fine wares represented nearly 14% of the pottery assemblage of *Phases II/III*, of which nearly 60% were samian and 18% were products from the New Forest kilns. The samian assemblage contained a Dragendorff 37 bowl with an eagle in the decoration (*Figure 24*). This decoration can be associated with the potter *Avitvs* who was working in Lezoux in c. AD 120 - 150 (Stanfield and Simpson, 1958, 136). The remaining fine wares consisted mostly of Oxfordshire wares. The relatively high proportion of samian is unusual on rural sites and may indicate that the second century AD was a time of prosperity for the villa owners.

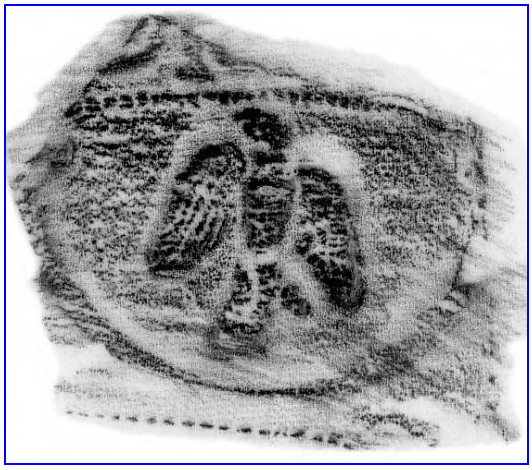

Figure 24: Eagle Decoration on a Dragendorff 37 Bowl

The coarse wares were still dominated (62.80%) by Rowland's Castle wares (*Table 31*) but during this phase the other major supplier was the Alice Holt (including some from the Overwey) kilns (22.59%). The majority of the Alice Holt wares can be dated to the late third to mid-fourth century AD and Overwey products to the fourth century AD. There were only two Oxfordshire and one North Gaulish *mortaria* present, suggesting limited adoption of Roman culinary habits.

4.4.2 Langstone

The villa at Langstone, *'Spes Bona'* was originally excavated in the 1920s by Mr. Owen Adames with further excavations being undertaken in 1967 by Margaret Rule. In 1998, Oliver Gilkes published an assessment of the two excavations based on the original site plans and the finds which were stored at Portsmouth Museum and Fishbourne Palace (Gilkes, 1998,49-77). The haphazard method of excavation, the unstratified nature of the material and the lack of any phasing plans preclude meaningful detailed quantification and allocation of pottery to the two different phases of the villa. The pottery report has therefore been produced based on all the known available pottery and is summarised in *Table 32*. The notes from the 1920s excavation stored in Portsmouth Museum indicated that some samian pottery was recovered but unfortunately only a few sherds were found in the surviving material.

Table 32: Summary of the Pottery from the Villa at Langstone

	Number	Weight	EVEs	% number	% weight	% EVEs
Fine Wares	204	3434	6.31	*4.67*	*5.19*	*8.70*
Coarse Wares	4166	62746	66.23	*95.33*	*94.81*	*91.30*
Total	*4370*	*66180*	*72.54*			
Rowland's Castle	3202	51007	53.85	*76.86*	*81.29*	*81.31*
BB1	421	4708	4.80	*10.11*	*7.50*	*7.25*
Miscellaneous	543	7031	7.58	*13.03*	*11.21*	*11.44*
Subtotal	*4166*	*62746*	*66.23*			

The assemblage was dominated by Rowland's Castle wares (81.31% by EVEs). Dorset Black Burnished ware (BB1) represented 7.25% of the assemblage and would probably have been transported to the villa by coastal trade. This would, also, have

been the case of the products from the New Forest kilns and Vectis ware from the Isle of Wight. The presence of these products at the villa site could indicate that the occupants may have been involved in coastal trading activities.

4.4.3 Angmering

The pottery from the excavation of the villa at Angmering is currently stored at Littlehampton Museum. Unfortunately the store rooms containing the pottery have been found to be contaminated with asbestos. Until such time as the store rooms are decontaminated the pottery is unavailable for examination.

4.5 Villa Rustica

The majority of the villas that formed the basis of this study could be classified Villa Rustica. The main source of economic wealth for these rural villas would have been produced from the cultivation of the land. The light wooden ard of the Iron Age continued to be used but the introduction of metal coulter ploughs enabled more and heavier soils to be cultivated for the production of cash crops (Dark, P., 2000, 84). The ability to cultivate more land and the fertility of the soils would have been a major influence on the economic viability of the villa estates. Those villas on the agriculturally more productive soils would have been able to produce more surplus cash crops and have more disposable income to spend on luxury items. The pottery recovered from these villas should reflect their economic viability and wealth.

4.6 Downland Villas

The villas at *Batten Hanger*, *Chilgrove 1*, *Chilgrove 2*, *Pitlands Farm* and *Watergate Hanger*, which are all on the Chalk Downlands, have suitable ceramic assemblages required to produce quantifiable and comparative information.

4.6.1 Batten Hanger

The assemblage from *Batten Hanger* consisted of 9,393 Romano-British pottery sherds weighing 150,479 grams with and average sherd weight of 16.02 grams (*Table 33*). This analysis is based on material stored at the Discovery Centre, Fishbourne. The majority of the sherds were of good condition although the softer-fired fine wares, particularly Oxfordshire and New Forest red slipped wares, were often heavily abraded probably indicating some degree of re-deposition. The Iron Age and Saxon pottery in the assemblage have been excluded from these figures. The date range for the Romano-British pottery was from the mid-second century until the end of the fourth century AD but the presence of both Iron Age and Saxon Pottery suggests that there was perhaps a continuity of occupation on the site over many centuries.

Table 33: Summary of the Pottery from Batten Hanger

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Fine Wares	636	7120	12.85	*6.77*	*4.73*	*10.14*	11.19
Coarse Wares	8757	143359	113.84	*93.23*	*95.27*	*89.86*	16.37
Total	9393	150479	126.69				16.02

Unfortunately there is no documented excavation report so it was not possible to allocate the pottery to different phases of development of the villa complex. Fine ware comprised 10.14% by EVEs of the assemblage of which 76.11% were either products of the New Forest or Oxfordshire kilns (*Table 34*). This would seem to indicate that the major occupation period was during the middle of the third century to the end of the fourth century AD. The main source of fine wares was, however, from the New Forest industry. These vessels were probably acquired from the *civitas* capital and market at Chichester (*Noviomagus*).

Table 34: Summary of the Fine Wares from the Villa at Batten Hanger

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Samian	191	1477	2.46	***30.03***	***20.74***	***19.14***	7.73
New Forest	354	4434	6.86	***55.66***	***62.28***	***53.39***	12.53
Oxford	48	917	2.92	***7.55***	***12.88***	***22.72***	19.10
Miscellaneous	43	292	0.61	***6.76***	***4.10***	***4.75***	6.79
Total	636	7120	12.85				11.19

There was a remarkable number of *mortaria* present in the assemblage. Both Central and East Gaulish Dragendorff 45 *mortaria*, which can be dated to c. AD 170 – 230, were present as well as both New Forest and Oxfordshire colour-coated and white ware forms. *Mortaria* were used in food preparation but it has been suggested that the samian and colour-coated versions had a different culinary function from the much larger white ware types (Cool, 2006, 43). Samian *mortaria* and the indigenous colour-coated versions are associated with table wares whilst the white ware forms were regarded as kitchen wares used as food preparation vessels. The fact that the two different forms were well represented at *Batten Hanger* would seem to indicate that both cookery practices were employed by the villa occupants, suggesting a high degree of acceptance of Roman culinary lifestyle.

Amphorae were noticeable by their absence from the assemblage but this could be due to the fact that by the middle of the third century the most common forms of Baetican oil and Gauloise wine *amphorae* were no longer in production (Tyers, 1996).

Alice Holt and Rowland's Castle vessels dominated the coarse wares with 47.05% and 40.86% by EVEs respectively (*Table 35*). The slightly larger proportion of Alice Holt wares, which includes Overwey products, may reflect the decline of the Rowland's Castle kilns in the fourth century. Overwey vessels, which can be dated c. AD 320 – 410 (Millett, 1979) and the increase in Alice Holt products suggest that the villa was in continuous occupation until at least the end of the fourth century.

Table 35: Summary of the Coarse Wares from Batten Hanger

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Rowland's Castle	3851	70924	46.52	***43.98***	***49.47***	***40.86***	18.42
Alice Holt	4003	58449	53.56	***45.71***	***40.77***	***47.05***	14.60
BB1	112	3166	8.05	***1.28***	***2.21***	***7.07***	28.27
Miscellaneous	791	10820	5.71	***9.03***	***7.55***	***5.02***	13.68
Total	**8757**	**143359**	**113.84**				16.37

The functional classes of vessels represented were storage jars, cooking pot, with a small number of flanged bowls and dishes. There were several large Rowland's Castle finger-impressed 'storage jars' with an external rim diameter greater than 300 mm. which have been estimated to weigh in excess of 120 kilograms when empty (Dicks, 2009). The characteristic deliberate finger-marks on the inside of the vessels, which do not appear to be part of the forming process, suggest some sort of special function for these very large containers. The functional use of these vessels is unknown but it was probably associated with some form of specialised food production.

4.6.2 Chilgrove 1

The assemblage recovered from the excavation at *Chilgrove 1* consisted of 1,716 sherds weighing 51,085 grams with a very high average sherd weight of 29.77 grams (*Table 36*). This analysis is based on the material stored at the Discovery Centre, Fishbourne. This high average sherd weight may reflect the archive and retention policy that the excavator applied to the pottery as the assemblage contained rim sherds but very few body sherds. The chosen comparative method of using Estimated Vessel Equivant (EVEs) replies on the size of a rim sherd as expressed as a percentage of a complete rim (Orton, 1989, 95) and this technique overcomes the potential bias of the lack of body sherds.

Table 36: Summary of Pottery from the Villa at Chilgrove 1

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Fine Wares	509	9392	15.81	***29.66***	***18.39***	***17.15***	18.45
Coarse Wares	1207	41693	76.40	***70.34***	***81.61***	***82.85***	34.54
Total	**1716**	**51085**	**92.21**				29.77

Fine wares represented 16.86% by EVEs of the assemblage which would seem to be a relatively high proportion of the pottery. The pottery dates from the mid-second century AD Central Gaulish samian to late fourth century New Forest and Oxfordshire wares. This would seem to show a continuity of occupation during the Romano-British period of at least 250 years. There was a high proportion of white ware *mortaria* present with examples of at least six different styles of both imported and indigenous vessels. They were one of a class of vessels used as an important indicator of the spread of Romanised food preparation methods (Cool, 2006). There were four sherds of a Dressel 20 *amphora* amongst the assemblage.

Table 37: Summary of the Coarse Wares from the Villa at Chilgrove 1

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Rowland's Castle	535	20929	31.2	***44.32***	***50.20***	***40.84***	39.12
Alice Holt	477	15378	34.92	***39.52***	***36.88***	***45.71***	32.24
BB1	51	2098	3.24	***4.23***	***5.03***	***4.24***	41.14
Miscellaneous	144	3288	7.04	***11.93***	***7.89***	***9.21***	22.83
Total	**1207**	**41693**	**76.40**				

The majority of the coarse wares were either from the kilns at Alice Holt (45.71% by EVEs) or Rowland's Castle (40.84% by EVEs) and consisted of the normal kitchen wares vessels associated with a rural villa site (*Table 37*).

There was a limited amount of Dorset Black Burnished ware (4.24% by EVEs) the majority of which were Gillam Type 45 flanged bowls. These bowls are dated from the mid-third century to the end of the fourth century AD (Tyers, 1996).

4.6.3 Chilgrove 2

There was approximately twice as much pottery recovered from the excavation of *Chilgrove 2* than from *Chilgrove 1* even though they were dug at the same time by the same excavator. The analysis of the pottery is based on the material stored at the Discovery Centre, Fishbourne. There were 3,833 sherds weighing 98,623 grams but again with a high average sherd weight of 25.73 grams (*Table 38*). The difference could be due to a contrasting pottery retention policy as there are far more body and base sherds as a proportion than amongst the assemblage from *Chilgrove 1*.

Table 38: Summary of the Pottery from the Villa at Chilgrove 2

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Fine Wares	787	11806	22.21	*20.53*	*11.97*	*14.83*	15.00
Coarse Wares	3046	86817	127.53	*79.47*	*88.03*	*85.17*	28.50
Total	**3833**	**98623**	**149.74**				**25.73**

There were 787 fine wares sherds which represented 14.83% by EVEs of the assemblage. Central and East Gaulish samian from the mid-second century until the early-third century accounted for 23.64% and vessels from the New Forest and Oxfordshire kilns 60.47% (*Table 39*).

Table 39: Summary of the Fine Wares from the Villa at Chilgrove 2

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Samian	147	2236	5.25	*18.68*	*18.94*	*23.64*	15.21
New Forest	200	3041	8.18	*25.41*	*25.76*	*36.83*	15.21
Oxford	192	4086	5.25	*24.40*	*34.61*	*23.64*	21.28
Miscellaneous	248	2443	3.53	*31.51*	*20.69*	*15.89*	9.85
Total	**787**	**11806**	**22.21**				**15.00**

This would suggest that the villa at *Chilgrove 2* was occupied from the mid-second century until at least the late fourth century AD. The collapse of the Gaulish samian industry and the decline of imported pottery in the early third century AD saw the start of the fine ware industries in Roman Britain. The Oxfordshire kiln started to

produce red colour-coated copies of samian forms c. AD 240 (Young, 1977, 237) and the New Forest industries in c. AD 270 (Fulford, M. G, 1975a, 39).

Vessels from the kilns at either Rowland's Castle or Alice Holt dominated the coarse wares at *Chilgrove 2* (*Table 40*) and represented over 92% of the vessels. There were several examples of flanged bowls and hook-rimmed jars from the kilns at Overwey, which can be dated to c. AD 320 - 400 (Millett and Graham, 1986), supporting the fine ware evidence that the villa was occupied well into, if not to the end of, the fourth century AD. The assemblage contained six sherds of a Dressel 20 *amphora*.

Table 40: Summary of Coarse Wares from the Villa at Chilgrove 2

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Rowland's Castle	1438	45538	58.12	***47.21***	***52.45***	***45.57***	31.67
Alice Holt	1343	34812	59.57	***44.09***	***40.10***	***46.71***	25.92
BB1	124	3280	4.74	***4.07***	***3.78***	***3.72***	26.45
Miscellaneous	141	3187	5.10	***4.63***	***3.67***	***4.00***	**22.60**
Total	**3046**	**86817**	**127.53**				**28.50**

4.6.4 Pitlands Farm

The villa at *Pitlands Farm* was excavated on two separate occasions from 1966 to 1969 and again in 1992/3. The 1960s excavation was centred on the bath house and the 1990s excavation was on a possible row type house. The pottery assemblage from both excavations only produced 904 sherds and has been combined for the purposes of this analysis in order to provide more meaningful statistics (*Table 41*). This analysis is based on the material stored at the Discovery Centre, Fishbourne.

Table 41: Summary of the Pottery from the Villa at Pitlands Farm

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Fine Wares	113	1017	2.69	***12.50***	***7.99***	***16.38***	9.00
Coarse Wares	791	11705	13.73	***87.50***	***92.01***	***83.62***	14.80
Total	**904**	**12722**	**16.42**				**14.07**

Fine wares represented 16.38% by EVEs which was approximately equally divided between imported wares from the Gaulish samian industry and Romano-British vessels from the New Forest Oxfordshire kilns. The date range of the pottery covered the period from the late first century until the late fourth century. Late Iron Age and Saxon pottery has been excluded from the analysis but would seem to indicate a continuity of occupation on the site over many centuries.

There were only four sherds of a Dressel 20 *amphora*. The Dressel 20 *amphorae* were large globular vessels with two handles and a thick rounded rim, which were predominantly for the storage and transportation of olive oil from southern Spain between the early first century and c. AD 260 (Tyers, 1996, 87, Peacock, D. P. S. and Williams, 1986, 136). The limited number of pieces of *amphorae* sherds present prevents ascertaining whether the villa owner was purchasing whole vessels or if these items were being reused for other purposes.

Table 42: Summary of the Coarse Wares from the Villa at Pitlands Farm

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Rowland's Castle	392	5974	7.01	***49.56***	***51.04***	***51.06***	15.24
Alice Holt	240	3280	4.22	***30.34***	***28.02***	***30.74***	13.67
BB1	92	1276	1.51	***11.63***	***10.90***	***11.00***	13.87
Miscellaneous	67	1175	0.99	***8.47***	***10.04***	***7.21***	17.54
Total	**791**	**11705**	**13.73**				**14.80**

As at other Downland villas, the coarse wares are dominated by the pottery from Rowland's Castle and Alice Holt (*Table 42*) but there was an increase in the amount of Dorset Black Burnished wares.

Black Burnished ware (BB1) was most probably transported from Poole Harbour by sea to Chichester (*Noviomagus*) from where it was marketed to the local rural villas. Transportation costs would have been a major expense and only certain ceramic vessel types were transported over any distance. It would seem that BB1 was one of those vessel types as it is distributed all across Roman Britain and transportation by sea would have been the cheapest way. It has also been suggested that some of the more common BB1 jars may have started life as salt containers (Cool, 2006, 58) thereby counterbalancing the transportation costs. A study of the distribution of BB1pottery vessels has however shown the possible supply routes which included roads (Allen and Fulford, 1996, 252-256).

4.6.5 Watergate Hanger

The excavation of the villa at *Watergate Hanger* in 1984 and 1986 produced 6,697 sherds weighing 88,360 grams, and 85.02 EVEs. This relatively recent excavation has never been published and the analysis of the pottery is based on the material stored at the Discovery Centre, Fishbourne. The majority of the assemblage was in good condition and the fine wares accounted for 352 sherds and 9.64% EVEs (*Table 43*).

Table 43: Summary of the Pottery from the Villa at Watergate Hanger

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Fine Wares	352	4293	8.20	***5.26***	***4.86***	***9.64***	12.20
Coarse Wares	6345	84067	76.82	***94.74***	***95.14***	***90.36***	13.25
Total	**6697**	**88360**	**85.02**				**13.19**

The average sherd weight was comparatively high and suggests that some of the material had come from relatively undisturbed contexts. There were examples of twelve different samian vessel forms from both Central and East Gaul, with a date range from the early second century to the early-third century AD, including a rare globular beaker (Dragendorff form 72) with incised cut-glass decoration (*Figure 25*).

The purpose of these small beakers would have been more decorative than functional and may well have contained special oils or unguents (Bulmer, 1980).

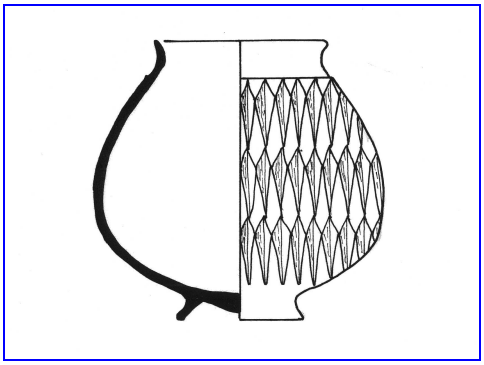

Figure 25: Small Globular Beaker with Incised 'Cut-Glass' decoration

The assemblage contained 165 sherds of fine wares from the New Forest and Oxfordshire industries with an average sherd weight of 13.33 grams and 2.38 EVEs (*Table 44*). The date range of the pottery spans the mid-third to late fourth centuries, suggesting that the villa was in continued occupation from the early second century through to the end of the fourth century AD. There were no *amphorae* sherds present amongst the pottery assemblage.

Table 44: Summary of Fine Wares from the Villa at Watergate Hanger

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Samian	120	1392	3.73	***34.09***	***32.42***	***45.49***	11.60
New Forest	123	1774	2.94	***34.94***	***41.32***	***35.85***	14.42
Oxford	42	425	0.44	***11.93***	***9.90***	***5.37***	10.12
Miscellaneous	67	702	1.09	***19.03***	***16.35***	***13.29***	10.48
Total	**352**	**4293**	**8.20**				**12.20**

The pottery assemblage was dominated by the local Rowland's Castle grey wares (52%) which were supplied from the pottery kilns only 10 kilometres to the south-west (*Table 45*). The Rowland's Castle pottery industry may have had its origins in the late Iron Age but it was supplying kitchen ware to Fishbourne Roman Palace as early as c. AD 45 (Manley and Rudkin, 2003). It continued to be a significant supplier of coarse

wares in the markets around Chichester until the early fourth century AD when it was replaced by products from the Alice Holt kilns (Dicks, 2009).

Table 45: Summary of Coarse Wares from the Villa at Watergate Hanger

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Rowland's Castle	3715	53624	44.72	***58.55***	***63.79***	***58.21***	14.43
Alice Holt	1407	15630	17.26	***22.17***	***18.59***	***22.47***	11.11
BB1	771	10031	9.49	***12.15***	***11.93***	***12.35***	13.01
Miscellaneous	452	4782	5.35	***7.12***	***5.69***	***6.96***	10.58
Total	**6345**	**84067**	**76.82**				**13.25**

4.6.6 Summary of Downland villas

The Romano-British countryside benefited during the 400 hundred years of the Roman occupation from a relatively stable government and historically a relatively high level of peace which allowed the agricultural economy to grow and flourish by investing, saving, and spending that would have been impossible in less secure times (Branigan and Miles, 1989).

Within this environment, villas represented an acceptance and conversion of the local rural population to the Roman style of life. It is the hypothesis of this study that the greater the percentage of fine wares represented a measurement of the conversion to and acceptance of Romanised lifestyles. The variety of vessel forms represented the affluence of the villa owner. This acceptance of Roman cultural and culinary habits by individual villa owners can be measured by the quantity and variety of fine wares found on each site.

The Downland villas of *Batten Hanger*, *Chilgrove 1*, *Chilgrove 2*, *Pitlands Farm* and *Watergate Hanger*, represented a particular rural population that was situated on similar geological soils and probably had comparable agricultural regimes. The pottery

from this small sample of villas can be used to evaluate this hypothesis by comparing the percentage of fine wares identified in each assemblage (*Table 46*).

Table 46: Summary of Fine Wares from the Downland Villas

Villas	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Batten Hanger	636	7120	12.85	*6.77*	*4.73*	*10.14*	11.19
Chilgrove 1	509	9392	15.81	*29.66*	*18.39*	*17.15*	18.45
Chilgrove 2	787	11806	22.21	*20.53*	*11.97*	*14.83*	15.00
Pitlands Farm	113	1017	2.69	*12.50*	*7.99*	*16.38*	9.00
Watergate Hanger	352	4293	8.20	*5.26*	*4.86*	*9.64*	12.20
Total	**2397**	**33628**	**61.76**				**13.19**

The percentage range of 9.65% to 17.17% by EVEs would seem to indicate that there could well be a relationship. This relationship can be further investigated by examining specific types of fine wares and culinary vessels. All of the pottery assemblages contained samian and *mortaria* which have been associated with Romanisation in England. By comparing this relationship it may be possible to further define the degree of acceptance and conversion to Roman culinary lifestyle (*Table 47*).

Table 47: The Occurrence of Mortaria on Downland Villas

Villas	Number	Weight	EVEs	Number of types
Batten Hanger	58	1552	1.94	*9*
Chilgrove 1	45	2684	3.44	*8*
Chilgrove 2	51	2686	2.64	*13*
Pitlands Farm	8	222	.32	*5*
Watergate Hanger	26	1444	1.43	*6*

The spread of *mortaria* can perhaps be equated to the spread of the Roman way of life. *Mortaria* seem to represent a set of culinary practices that were apparently absent before their arrival with the Romans in England in the first century AD (Hartley, 2006). The shapes and sizes of *mortaria* vary greatly and this may reflect the different uses and functions in which they were utilised. It would seem probable that the large,

heavy, mortaria would have been used for different culinary proposes from the smaller samian Dragendorff 45 versions introduced in the late second to early third century AD. All, however, can be classified as iconic Roman culinary vessels which reflect an adoption of Roman social and cultural values.

4.7 Villas Located on the Greensand Bench

The villas at *Elsted*, *Liss* and *Stroud* were all situated on the Upper Greensand bench at the junction between the Wealden Clays and the Chalk Uplands and had accessible pottery assemblages

4.7.1 Elsted

There were 9,189 sherds of pottery recovered from the *Elsted* site but most were severely abraded and with an average sherd weight of less than 6 grams (*Table 48*) and a brokenness of 404 sherds per vessel. The abrasion of the material was probably caused by the continual re-deposition of the pottery and the abraded nature of the pottery has limited the amount of information that can be obtained. In many instances the surfaces of the sherds were lost, which limited the potential to assign accurately certain material to a specific ware group. This has resulted in a relatively high proportion of the grey wares having to be categorised as miscellaneous. Similarly many un-featured fine ware sherds were made difficult to distinguish by their lack of any remaining surfaces.

Table 48: Summary of Pottery from the Villa at Elsted

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Fine Wares	129	349	0.86	*1.40*	*0.68*	*3.78*	2.71
Coarse Wares	9060	51233	21.90	*98.60*	*99.32*	*96.22*	5.65
Total	***9189***	***51582***	***22.76***				***5.61***

The small amount of fine wares and the lack of later pottery would seem to confirm that the villa was of limited affluence which went out of use during the third century. There were a surprising number of sherds (seven) of *amphorae* with both Dressel 2-4 and 20 types but no *mortaria* present amongst the assemblage. It could be that the *amphorae* were being reused for some type of agricultural industrial process.

Table 49: Summary of the Coarse Wares from the Villa at Elsted

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Rowland's Castle	235	5393	13.20	***2.59***	***10.53***	***60.27***	22.95
Alice Holt	247	2584	7.18	***2.73***	***5.04***	***32.79***	10.46
BB1	3	64	0.21	***0.03***	***0.12***	***0.96***	21.33
Miscellaneous	8575	43192	1.31	***94.65***	***84.31***	***5.98***	5.04
Total	***9060***	***51233***	***21.90***				***5.65***

The majority of the coarse wares were supplied by the local Rowland's Castle (60.27%) kilns and the Alice Holt (32.79%) kilns. The amount of Alice Holt was surprising considering the close proximity of the Rowland's Castle kiln site (*Table 49*). This anomaly could be due to other factors rather than the normal marketing reasons. The possibility that *Elsted* was part of a larger estate and that the farmers were tenants could imply that the estate influenced the pottery supply. This would require further study and analysis to verify such a proposition.

4.7.2 Liss

The pottery assemblage from *Liss* consisted of 6,623 sherds weighing 73,407 grams with an average sherd weight of 11.08 grams (*Table 50*). The condition of much of the assemblage was poor. Often sherds were small and abraded, particularly with regard to the fine wares which by their very nature were less durable in many instances than the coarse wares. The average sherd weight of 11 grams is higher than expected, given the condition of the sherds, and may in part be a reflection of large storage jar body sherds present in the assemblage. The site has suffered severely from plough

damage, resulting in problems with residual and intrusive material. A significant proportion of the assemblage was derived from the ploughsoil.

Table 50: Summary of the Pottery from the Villa at Liss

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Fine Wares	379	4792	8.35	*5.72*	*6.53*	*11.08*	12.64
Coarse Wares	6244	68615	67.03	*94.28*	*93.47*	*88.92*	10.99
Total	**6623**	**73407**	**75.38**				**11.08**

Small quantities of early and late Iron Age pottery were identified, often residual within later, Roman, features. The substantial Roman pottery assemblage ranged in date from the late first to the late fourth century AD, but was predominantly mid-third to late fourth in date.

There was a general dearth of imported wares within the assemblage. Samian occurred most frequently, but still comprised less than 1% by EVEs of the total assemblage. The condition of many sherds precluded definite identification to production area, but vessels from Central and East Gaul would appear to outnumber the earlier South Gaulish products.

Table 51: Summary of the Fine Wares from the Villa at Liss

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Samian	66	375	1.12	*17.41*	*7.83*	*13.41*	5.68
New Forest	121	1477	4.84	*31.93*	*30.82*	*57.96*	12.21
Oxford	175	2677	2.03	*46.17*	*55.86*	*24.31*	15.30
Miscellaneous	17	263	0.36	*4.49*	*5.49*	*4.31*	15.47
Total	**379**	**4792**	**8.35**				**12.64**

There were no imported *mortaria* or *amphorae* within the assemblage. The large regional pottery industries at the New Forest and Oxford dominated supply of fine wares to the villa from the mid- to late third century into the fourth century (*Table 51*).

The Oxfordshire kilns were again a main supplier of colour-coated, white slipped and white ware *mortaria* all present in varying proportions within the assemblage. New Forest *mortaria* were restricted to just two body sherds and two rim sherds of Fulford types 103 and 104, thought to date from the late third to mid-fourth, and early to late fourth centuries respectively.

Table 52: Summary of the Coarse Wares from the Villa at Liss

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Rowland's Castle	128	2952	4.89	*2.05*	*4.30*	*7.30*	23.06
Alice Holt	3064	38859	48.83	*49.07*	*56.63*	*72.85*	12.68
BB1	28	400	0.38	*0.45*	*0.58*	*0.57*	14.29
Miscellaneous	3024	26404	12.93	*48.43*	*38.48*	*19.29*	8.73
Total	**6244**	**68615**	**67.03**				**10.99**

The abraded nature of many of the coarse ware sherds did not allow all the material to be classified to specific ware groups, which accounts for the large proportion that has been allocated to Miscellaneous. The Alice Holt kilns were the major pottery supplier (72.85% by EVEs) to the villa, which was only 11 kilometres from the production sites to the north. There were several examples of the white wares from the Overwey kilns which are dated to c. AD 320 - 400 (Millett and Graham, 1986).

Rowland's Castle wares were present although they form only a minor component of the assemblage (7.30% by EVEs), which was probably a reflection of the relatively late date of much of the activity at *Liss* (*Table 52*). Surprisingly there were very few products from the Dorset Black Burnished ware industry (0.57% by EVEs).

4.7.3 Stroud

The villa at *Stroud* was dug up in 1907 and not excavated using any scientific archaeological techniques that would be expected today. The excavator would seem to have been preoccupied with villa structural features and it would seem that very little

pottery was either recovered or retained. The only material available was forty sherds stored at Winchester City Museum under accession number Arch 47.00. This amount of pottery is, unfortunately, far too small to draw any conclusion. The methods and archive procedures that were adopted by early excavators have severely restricted the amount of quantifiable data that can be extracted from the very limited archived material.

4.7.4 Bignor

The villa at *Bignor* was first excavated by John Hawkins and Samuel Lysons in 1811 with further work undertaken in 1925 (Wimbolt, 1926, 84-8). Parts of the villa were re-excavated between 1956 and 1962 (Frere, 1982) and again between 1975/6 (Aldsworth, 1983). There have been subsequent excavations by the University College of London which have not been fully published (Rudling, 1998).

This multiple excavation policy over more than a century has made it impossible to use the pottery from the villa at *Bignor* for any analytical purpose. A vast amount of pottery is stored by the owners in a barn at the site but the limited archaeological records relating to the many excavations reduce the usefulness of the material. No analysis was therefore attempted to categorise the pottery.

4.7.5 Summary of Villas Located on the Greensand Bench

The archive strategy of pottery from the villas at *Stroud* and *Bignor* has limited the amount of comparative data available from the villas located on the Greensand bench. The comparison in the amount of fine wares of the two other villas, however, has produced a notable difference (*Table 53*).

Table 53: Summary of the Fine Wares from Villas on the Greensands

Villa	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Elsted	129	349	0.86	*1.40*	*0.68*	*3.78*	2.71
Liss	379	4792	8.35	*5.72*	*6.53*	*11.08*	12.64
Total	**508**	**5141**	**9.21**				

The marked difference between Liss with 11.08% by EVEs and only 3.78% fine wares at *Elsted* would seem to indicate that the farmers at *Liss* were able to purchase a greater percentage of non-essential culinary vessels. This could indicate that the *Liss* farm was more economically viable and produced a greater agricultural surplus. This agricultural surplus would have created more disposable income for the household to spend on non-essential luxury items such as fine wares.

4.8 Villas Located on the Clay-with-Flint

The villas at *Chalton*, *Crookhorn*, *Holt Down, Purbrook* and *Wakeford's Copse* were selected as they had suitable ceramic assemblages required to produce quantifiable and comparative information. The surface geology of clays and flints would have produced soils that were agriculturally poor and difficult to cultivate.

4.8.1 Chalton

The pottery from *Chalton* was stored at Portsmouth City Museum in cardboard boxes and consisted of twenty-four sherds of fine wares and 652 sherds of coarse wares (*Table 54*). The material was in a poor, abraded condition suggesting that it had been the subject of plough action and re-deposition. The condition of the pottery has limited the amount of diagnostic information as the surfaces have been eroded over the centuries. The average sherd weight was, however, high suggesting that perhaps only the larger sherds had been archived.

Table 54: Summary of Pottery from the Villa at Chalton

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Fine Wares	24	235	0.91	***3.68***	***1.53***	***4.05***	9.79
Coarse Wares	628	15120	21.57	***96.32***	***98.47***	***95.95***	24.08
Total	652	15355	22.48				

The fine wares consisted of a few samian sherds and New Forest beakers. New Forest beakers were produced over a long enough period for distinctive and datable form progression to be identified (Fulford, M. G, 1975a, 50); however, the fragmentary nature of the sherds meant no profiles were sufficiently well preserved or re-constructible to enable any identification past the basic vessel class. The low proportion of fines wares (4.05% by EVEs) would seem to suggest that this was a low status farmstead. There were only two small sherds of a *mortarium*, again, implying that perhaps there was only limited acceptance of the Roman cultural and dietary habits into this farming community.

Table 55: Summary of the Coarse Wares from the Villa at Chalton

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Rowland's Castle	295	9506	15.44	***46.97***	***62.87***	***71.58***	32.22
Alice Holt	12	130	0.54	***1.91***	***0.86***	***2.50***	10.83
BB1	8	145	0.31	***1.27***	***0.96***	***1.44***	18.13
Miscellaneous	313	5339	5.28	***49.84***	***35.31***	***24.48***	17.06
Total	628	15120	21.57				

Rowland's Castle products account for more than 71.58% by EVEs of the coarse ware assemblage but because of the poor quality of the sherds 24.48% by EVEs were not classified most of which may well be Rowland's Castle (*Table 55*). The major forms present were cooking and storage jars. The kilns at Rowland's Castle were situated only six kilometres to the south of the site suggesting that access to these products would have been straightforward.

4.8.2 Holt Down

The villa at *Holt Down* was excavated between 1925 and 1927 (Taylor and Collingwood, 1927) but only 409 sherds were archived in Portsmouth City Museum (*Table 56*). The majority of the pottery sherds were abraded, some worse than others suggesting that the material and had been the subject of re-disposition and possible plough damage.

The assemblage consisted of seventy fine ware sherds weighing 825 grams and 339 coarse ware sherds weighing 8,525 grams with an average sherd weight of 22.86. This average sherd weight is comparatively high again suggesting that there may have been a selective nature to the curation and archive policy.

Table 56: Summary of the Pottery from the Villa at Holt Down

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Fine Wares	70	825	1.07	***17.11***	***8.82***	***5.86***	11.79
Coarse Wares	339	8525	17.18	***82.89***	***91.18***	***94.14***	25.15
	409	9350	18.25				22.86

The fine wares constituted 5.86% by EVEs and comprised both second to early third century AD samian and mid-third to late-fourth century AD New Forest vessels. There was a body sherd from an imported Cologne white colour-coated beaker with a barbotine hunting scene. This would seem to indicate that the villa was active from the mid-second century until at least the mid-fourth century AD. There were two sherds of an Oxfordshire white ware *mortarium* indicating some influence of Roman culinary habits.

Table 57: Summary of the Coarse Wares from the Villa at Holt Down

	Number	Weight	Eves	% number	% weight	% EVEs	Av. Wt
Rowland's Castle	150	5445	13.31	***44.25***	***63.87***	***77.47***	36.30
Alice Holt	20	565	1.54	***5.90***	***6.63***	***8.96***	28.25
BB1	12	410	0.93	***3.54***	***4.81***	***5.41***	34.17
Miscellaneous	157	2105	1.40	***46.31***	***24.69***	***8.15***	13.41
	339	8525	17.18				

The abraded nature of the pottery limited the amount of sherds that could be assigned to specific ware groups (*Table 57*). The coarse wares were dominated by vessels from the kilns at Rowland's Castle, which was situated only seven kilometres to the south of the villa site. The vessels were all simple utilitarian cooking jars, dishes and bowls. There were, however, several cooking jars with 'batch marks' under the rim and large finger impressed storage jars. These distinctive vessels were found on many of the villa sites within the study area.

4.8.3 Crookhorn

The aisled building at *Crookhorn* was excavated in 1977 but only recovered 762 sherds of Roman pottery. The sherds were in good condition with an average sherd weight of 19.27 grams, which was comparatively high (*Table 58*). There was a limited amount of abrasion to the sherds, suggesting that perhaps there had been little disturbance to the site in general.

Table 58: Summary of Pottery from the Villa at Crookhorn

	Number	Weight	Eve's	% number	% weight	% EVEs	Av. Wt
Fine Wares	33	426	0.78	***4.33***	***2.90***	***4.79***	12.91
Coarse Wares	729	14258	15.50	***95.67***	***97.10***	***95.21***	19.56
	762	14684	16.28				19.27

Fine wares, however, only comprised 4.79% by EVEs but contained both Gaulish samian and New Forest colour-coated products suggesting an occupation period covering the mid-second century until at least the late third century AD. There was only one small sherd (four grams) of a New Forest colour-coated *mortarium*. Unfortunately there was no stratigraphical data to be able to assign the pottery to different phases of the building.

The coarse wares were dominated by storage and cooking jars, and dishes from the kilns at Rowland's Castle (*Table 59*), which were only five kilometres to the north east of the site. The occurrence of Dorset Black Burnished ware in the pottery (8.13% by EVEs) may reflect the fact that the site was near to a major Roman road that gave access to the nearby coast.

Table 59: Summary of the Coarse Wares from the Villa at Crookhorn

	Number	Weight	Eve's	% number	% weight	% EVEs	Av. Wt
Rowland's Castle	596	12154	12.35	***81.76***	***85.24***	***79.68***	20.39
Alice Holt	20	280	0.41	***2.74***	***1.96***	***2.65***	14.00
BB1	58	1051	1.26	***7.96***	***7.37***	***8.13***	18.12
Miscellaneous	55	773	1.48	***7.54***	***5.42***	***9.55***	14.05
	729	14258	15.50				

The insignificant number of fine wares and the limited variety of coarse wares would seem to suggest that there was a minimal conversion to Romanised cultural values even though the tilery was producing a Romanised product. This may indicate that there was a negligible amount of disposable income to be spent on any luxury lifestyle items.

4.8.4 Purbrook

The significance of stratification was not appreciated in several of the villas that were excavated many years ago. The villa at *Purbrook* was excavated in 1925 and none

of the archived pottery has any stratification. The limited amount of pottery and the high average sherds weight of 30.31 grams and a brokenness of just over twenty-six sherds per vessel would also seem to indicate that not all the materials were either recovered or retained. Boxes of pottery surviving in museums from such excavations can, however, give an indication of the time-span of the occupation of the site and social and cultural information.

The pottery from the villa at *Purbrook* consisted of 12.35% by EVEs (*Table 60*) which would seem to be relatively high compared with the insignificant amount of fine wares from the aisled villa at *Crookhorn* just 500 metres to the west.

Table 60: Summary of the Pottery from the Villa at Purbrook

	Number	Weight	Eve's	% number	% weight	% EVEs	Av. Wt
Fine Wares	68	1466	3.27	***9.65***	***6.86***	***12.35***	21.56
Coarse Wares	637	19900	23.21	***90.35***	***93.14***	***87.65***	31.24
	705	21366	26.48				30.31

The majority (81% by EVEs) of the fine wares was samian with a broad range of forms from simple cups to hemispherical bowls with at least two different types of *mortaria*. This would suggest that the occupants in the early second to mid third-centuries could afford imported, high status pottery. Significantly there was a lack of Romano-British fine wares with only a single rim of a New Forest red colour-coated flanged bowl dating from the middle of the fourth century. This may signify a decline in the affluence of the villa occupants. The *mortaria* would seem to suggest that the occupants had accepted and converted to Roman dietary habits.

The close proximity of the pottery kilns at Rowland's Castle account for the high percentage (66.48% by EVEs) of coarse wares the majority of which were simple cooking pots (*Table 61*). Significantly there were no examples of large storage jars normally associated with the storage of dry products such as grain.

Table 61: Summary of the Coarse Wares from the Villa at Purbrook

	Number	Weight	Eve's	% number	% weight	% EVEs	Av. Wt
Rowland's Castle	447	14347	15.43	***70.17***	***72.10***	***66.48***	32.10
Alice Holt	48	1818	1.71	***7.54***	***9.14***	***7.37***	37.88
BB1	50	1558	1.65	***7.85***	***7.83***	***7.11***	31.16
Miscellaneous	92	2177	4.42	***14.44***	***10.94***	***19.04***	23.66
	637	19900	23.21				

The presence of imported pottery and *mortaria*, both symbols of Roman material cultural values, suggests that the villa occupants had accepted and become part of the consumer economy. There were no examples of *amphorae* suggesting that, whilst the villa occupants may have embraced these Roman material cultural values and were economically self-sufficient, they perhaps could not afford imported wines, oils or fish sauces.

The close proximity and the relationship between the sites of *Purbrook* and *Crookhorn* would seem to indicate that the industrial production of tiles was the major source of wealth and not necessarily agriculture.

4.8.5 Wakeford's Copse

The villa at *Wakeford's Copse* is amongst the many excavations that have remained unpublished, although brief notes have been written giving an outline of the site history and assigning a chronology to its phases (Wilson, D. R., 1969, Wilson, D. R. , 1971). These dates have had to be accepted in the anticipation that they are accurate but can sometimes be correlated by the pottery. The pottery from the excavation at *Wakeford's Copse* cannot be assigned any stratigraphical sequences and can, therefore, only supply the general dates of occupation of the site.

The majority of the pottery sherds were in a poor condition and showed signs of abrasion consistent with having been re-deposited on several occasions. There were 5,370 sherds weighing 93,469 grams with an average weight of 17.41 grams (*Table 62*). This average weight is comparatively high considering the amount of abrasion.

Table 62: Summary of Pottery from the Villa at Wakeford's Copse

	Number	Weight	Eve's	% number	% weight	% EVEs	Av. Wt
Fine Wares	101	1865	2.50	***1.88***	***2.00***	***3.33***	18.47
Coarse Wares	5269	91604	72.50	***98.12***	***98.00***	***96.67***	17.39
	5370	93469	75.00				17.41

Fine wares were a small proportion of the assemblage and represented only 3.33% by EVEs of the pottery. The majority of the fine wares were South and East Gaulish samian platters and bowls, suggesting that the villa was occupied by the mid-second century AD (*Table 63*).

There were no samian *mortaria* (Dragendorff type 45s) present in the pottery assemblage but one Oxfordshire and two New Forest vessels would seem to indicate that there was a limited conversion to Romanised culinary habits.

Table 63: Summary of the Fine Wares from the Villa at Wakeford's Copse

	Number	Weight	Eve's	% number	% weight	% EVEs	Av. Wt
Samian	39	705	1.71	***38.61***	***37.80***	***68.40***	18.08
New Forest	49	845	0.53	***48.51***	***45.31***	***21.20***	17.24
Oxford	2	250	0.26	***1.98***	***13.40***	***10.40***	125.00
Miscellaneous	11	65		***10.89***	***3.49***		5.91
	101	1865	2.50				

The coarse wares were, again, dominated by vessels from the local Rowland's Castle kilns (*Table 64*). The abraded nature of some of the coarse sherds has restricted the number that could be assigned to specific ware groups. This has resulted in 11.57% by EVEs having to be classified as Miscellaneous but it is highly probable that the majority was also from the Rowland's Castle kilns, which were only one kilometre to the north of the villa site.

Table 64: Summary of Coarse Wares from the Villa at Wakeford's Copse

	Number	Weight	Eve's	% number	% weight	% EVEs	Av. Wt
Rowland's Castle	4121	73822	58.00	***78.21***	***80.59***	***80.00***	17.91
Alice Holt	265	4002	3.73	***5.03***	***4.37***	***5.14***	15.10
BB1	171	2798	2.38	***3.25***	***3.05***	***3.28***	16.36
Miscellaneous	712	10982	8.39	***13.51***	***11.99***	***11.57***	15.42
	5269	91604	72.50				

4.8.6 Summary of Villa on Clay Geology

The comparatively small amount of ceramic fine wares at four of the villas was in contrast to the villa at *Purbrook* (*Table 65*). This would seem to indicate that these four villas had very little disposable money to spend on non-essential items and could reflect a low social status of the occupants.

Table 65: Summary of Fine Wares from Villas on a Clay Surface Geology

Villa	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Chalton	24	235	0.91	***3.68***	***1.53***	***4.05***	9.79
Holt Down	70	825	1.07	***17.11***	***8.82***	***5.86***	11.79
Crookhorn	33	426	0.78	***4.33***	***2.90***	***4.79***	12.91
Purbrook	68	1466	3.27	***9.65***	***6.86***	***12.35***	21.56
Wakeford's Copse	101	1865	2.50	***1.88***	***2.00***	***3.33***	18.47
Total	**296**	**4817**	**8.53**				

This low status could be because of the poor agricultural land which and did not provide much more than a subsistence level of living or, as has been suggested earlier, that occupants were subservient to other villas. *Chalton* and *Holt Down* were both on poor soils which would have been difficult to use for the cultivation of arable crops but could have been farmed as pastureland.

By contrast the amount of fine wares at *Purbrook* was comparatively high (12.35%). This would seem to support the theory that the owner of the villa may well have also owned the tilery at *Crookhorn*. Those living at *Crookhorn* could well have

been employed by the *Purbrook* villa owner or may have been his slaves. The exact nature of the relationship of the inhabitants at *Crookhorn* with the *Purbrook* villa has to be conjectural for the moment but the circumstantial evidence would seem to indicate that there was a close relationship between the two sites.

Perhaps equally important to note is that the owner of the villa at *Purbrook* would seem to have had disposable income generated from industrial activities rather than agricultural. This disposable income can be seen in the acquisition of non-essential ceramic fine ware vessels.

4.9 Villas Located in the Hampshire Downs

The villas at *Binsted, Sparsholt* and *Twyford* are all located within the Hampshire Basin. *Binsted* was located on the edge of the Greensands and close to the large Romano-British pottery kilns in the Alice Holt area. Both *Sparsholt* and *Twyford* were ideally situated on the fertile chalk soils with the *civitas* market of Winchester only a short distance away.

4.9.1 Binsted

The villa at Wyck Place, *Binsted* was originally discovered in 1818 (Cole, 1988, 25-39) but there are few records from the excavation. A re-evaluation of the bath house was undertaken between 1975 and 1976 and this report is based on the archived pottery from that excavation. The pottery report in the published article of the 1975/6 excavation states that there were 608 sherds weighing 7.617 kilograms (Cole, 1988, 32) whilst the archived pottery assemblage consisted of 530 sherds weighing 6.294 kilograms (*Table 66*).

Table 66: Summary of the Pottery from the Villa at Binsted

	Number	Weight	EVEs	% number	% weight	% EVEs
Fine Wares	39	386	0.76	*7.36*	*6.13*	*11.50*
Coarse Wares	491	5908	5.85	*92.64*	*93.87*	*88.50*
Total	530	6294	6.61			

It is not possible to identify the reason for this discrepancy but this should not affect the results of any analysis of the archived material. The discrepancy accounts for less than 13% of the original pottery, the majority of which had been recovered from unstratified layers.

Fine wares represented 11.50% by EVEs. This number includes a red oxidised cup which had the foot-ring and flange removed. The cup had the graffito of ABCDE scratched on the lower half of the external surface of the vessel and had obviously been adapted for some unknown specific purpose. The original form of the cup was a copy of a samian Dragendorff 38 bowl but in a fabric from an unknown source. This red fine ware was also present in the pottery assemblage from the excavations at Neatham (Millett and Graham, 1986). It was assumed that the vessels had been produced locally as the fabric was similar to that used by the potters from the Alice Holt kilns. Petrological and Energy Dispersive X-Ray Fluorescence (EDXRF) analysis of the pottery and clays from the Alice Holt kilns by the author produced a set of results (Dicks, Unpublished-a) which indicated that there was a wide variety of chemical signatures suggesting a varied composition to the material. It could, therefore, be hypothecated that these red vessels may have been an attempt by the Alice Holt potters to produce fine wares. The restricted distribution would seem to indicate only limited success in these endeavours. Further research, however, would be necessary to validate this hypothesis.

There were examples of New Forest and Oxford fine wares as well as two small abraded sherds of a Central Gaulish samian Dragendorff 33 cup (*Table 67*).

Table 67: Summary of the Fine Wares from the Villa at Binsted

	Number	Weight	EVEs	% number	% weight	% EVEs
New Forest fine wares	2	10	0.21	*5.13*	*2.59*	*27.63*
Oxford fine wares	3	32	0.10	*7.69*	*8.29*	*13.16*
Samian	2	6		*5.13*	*1.55*	
Red oxidised	32	338	0.45	*82.05*	*87.56*	*59.21*
Total	39	386	0.76			

The coarse wares were, as expected, dominated by vessels from the nearby Alice Holt kilns and accounted for over 92% of the assemblage (*Table 68*). There was a small amount of late grog tempered ware (7.69%) and a single sherd of Dorset Black Burnished ware.

Table 68: Summary of the Coarse Wares from the Villa at Binsted

	Number	Weight	EVEs	% number	% weight	% EVEs
Late grog tempered	35	328	0.45	*7.13*	*5.55*	*7.69*
Alice Holt	419	5410	5.40	*85.34*	*91.57*	*92.31*
BB1	1	12		*0.20*	*0.20*	
Miscellaneous	36	158		*7.33*	*2.67*	
Total	491	5908	5.85			

This analysis of the pottery from the bath house at Wyck Place was undertaken some thirty-five years after the re-excavation and it was evident that some of the material was missing. The bulk of the material can be dated from the mid-third century to the late fourth century AD. There were a few examples of late second century AD material, including the samian Dragendorff 33 cup, which would seem to indicate that there were at least two phases of construction and occupational use of the bath house.

There are difficulties in using the analysis of the pottery to compare the villa at Wyck Place with other Romano-British villas as the only material recovered was from the re-excavation of the bath house. It should, however, still be possible to draw some conclusions by comparing the whole assemblage to other Romano-British villa sites.

The number of pottery sherds recovered from *Binsted*, however, was comparatively small and the low average sherd weight would seem to reflect the fact that the majority of the material was from unstratified layers.

4.9.2 Sparsholt

The pottery from the villa at *Sparsholt* has been analysed in a separate intra-site study to establish if this methodology can be applied to site specific structures.

4.9.3 Twyford

This analysis of the pottery from the Romano-British villa at *Twyford* (SU 48340 24390) was undertaken some fifty years after the original excavation by Professor Martin Biddle in 1958. The pottery had already been subject to some sorting by a succession of earlier workers and most contexts had been assigned to a specific phase. This phasing has been perpetuated in the present analysis but there were anomalies which suggest that some contexts were either allocated to the incorrect phase or that they were contaminated.

The condition of some of the pottery was poor and suggests it had possibly been subject to continual re-deposition causing abrasion. In many instances the surfaces of the sherds had been lost, which limited the potential to assign accurately certain material to a specific ware group. This has resulted in a relatively high proportion of the grey wares having to be categorised as miscellaneous. Similarly many un-featured fine ware sherds were made difficult to distinguish by the lack of any remaining surfaces. It is, therefore, possible that some material may have been inaccurately quantified. Some phases may have been contaminated from both above by ploughing action and below by continual soil movement activities over the centuries, which may have re-deposited material in a later or earlier context. This, combined with some very

small groups of material in some contexts and phases, may have seriously affected the accuracy of dating. Similarly, many of the coarse wares present have very ubiquitous fabrics and forms with broad date range which has limited the accuracy of dating.

The pottery assemblage analysed in this report consisted of 4,370 sherds weighing a total of 50,870 grams with an average sherd weight of 11.64 grams and the estimated equivant of 69.27 vessels. The numbers of sherds by phase are shown in *Table 69*.

The pottery was analysed by each phase and the results are documented in the following sections except for *Phase V,* which consisted of only four sherds and so has been disregarded for this report. The number of sherds recovered from each phase varied considerably, with *Phase VII* containing 1,926 whilst *Phase IV* only contained sixty-nine.

Phase IX has been included here for completeness but, whilst it did contain Romano-British pottery, it was described by the excavator as 'post-Roman soils' and has therefore been assumed to be unstratified material.

Table 69: Pottery Assemblage from All Phases of the Villa at Twyford

Phase	No. sherds	Weight (g)	Av Sherd Wt	Rim count	Rim EVEs
I	306	3474	11.35	44	4.58
II	833	8028	9.64	78	22.06
III	122	1043	8.55	16	0.86
IV	69	587	8.51	9	0.61
VI	191	2255	11.81	23	2.07
VII	1926	25416	13.20	265	26.24
VIII	882	9362	10.61	100	9.73
IX	41	705	17.20	39	3.12
	4370	***50870***	***11.64***	***574***	***69.27***

There were 2,202 sherds that were categorised as Miscellaneous Grey Wares, which was over 50% of the pottery assemblage, but the average sherd weight was less than 7 grams, compared with an average of over 16 grams for all the other sherds.

This apparently high proportion was the result of poor, badly abraded, small sherds which were almost impossible to categorise being assigned to miscellaneous grey wares. This should not, however, affect the accuracy of the analysis and period to which the phases have been allocated, as such material in notoriously difficult to accurately date.

Phase I produced 306 sherds of which thirty-six (6.55% EVEs) were categorised as fine wares and 270 (93.45% EVEs) as coarse wares (*Table 70*).

Table 70: Phase I Pottery Assemblage from the Villa at Twyford

	Number	Weight	EVEs	% number	% weight	% EVEs
Fine Wares	36	257	0.30	***11.76***	***7.40***	***6.55***
Coarse Wares	270	3216	4.28	***88.24***	***92.60***	***93.45***
	306	**3473**	**4.58**			
Misc. Grey Ware	125	983	1.17	***46.30***	***30.56***	***27.34***
Alice Holt	105	1453	2.86	***38.89***	***45.17***	***66.82***
Other	40	781	0.25	***14.81***	***24.28***	***5.84***
	270	**3217**	**4.28**			

The fine wares were a mixture of late first to mid-second century samian and mid-third to late fourth century New Forest wares. This apparent anomaly can only be explained by contamination as context **B II 12** contained both wares. It has, therefore, been assumed that the New Forest wares were intrusive and, for dating purposes, they have been ignored. The coarse wares are dominated by material from the Alice Holt kilns (2.68 EVEs) which accounted for over 66% of the assemblage. The majority of the Alice Holt material contained mid-first to mid-second century forms and the presence of seven Shedfield storage jar sherds supports the assumption that the New Forest fine ware material was intrusive. Based on this assumption, a tentative date range for this phase is *mid-first century to very early second century AD*.

Phase II consisted of a larger assemblage of 789 sherds of which forty-one (3.36% by EVEs) were fine wares and 784 (96.64% by EVEs) were coarse wares (*Table*

71). The phasing documentation suggests that at least one context **B III 6** has been contaminated by a much later phase and, as with *Phase I*, there was a mixture of late first to mid-second century samian and mid-third to late fourth century New Forest wares.

Table 71: Phase II Pottery Assemblage from the Villa at Twyford

	Number	Weight	EVEs	% number	% weight	% EVEs
Fine Wares	41	197	0.71	*5.20*	*2.67*	*3.36*
Coarse Wares	748	7171	20.45	*94.80*	*97.33*	*96.64*
	789	**7368**	**21.16**			
Misc. Grey Ware	562	3802	2.14	*75.13*	*53.02*	*10.46*
Alice Holt	90	1754	17.79	*12.03*	*24.46*	*86.99*
Other	96	1615	0.52	*12.83*	*22.52*	*2.54*
	748	**7171**	**20.45**			

The coarse wares, however, were still dominated by products from the Alice Holt kilns (86.99% EVEs), with several examples of first century AD bead-rimmed and simple everted-rimmed jars.

The presence of the rim of a Verulamium white ware jug which can be dated to c. AD 50 – 175 and the Alice Holt first century AD material would indicate that, as in *Phase I*, the New Forest fine wares were intrusive. Based on this assumption, a tentative date range for this phase is *late first century to mid-second century AD*.

Phase III consisted of a small assemblage of only 122 sherds, of which twenty-four (17.44% EVEs) were classified as fine wares and ninety-seven (82.56% EVEs) as coarse wares (*Table 72*). The fourteen contexts, however, assigned to this phase had an average of less than ten sherds each.

Table 72: Phase III Pottery Assemblage from the Villa at Twyford

	Number	Weight	EVEs	% number	% weight	% EVEs
Fine Wares	24	173	0.15	*19.83*	*16.70*	*17.44*
Coarse Wares	97	863	0.71	*80.17*	*83.30*	*82.56*
	121	**1036**	**0.86**			
Misc. Grey Ware	47	372	0.19	*48.45*	*43.11*	*26.76*
BB1	44	472	0.52	*45.36*	*54.69*	*73.24*
Other	6	19		*6.19*	*2.20*	
	97	**863**	**0.71**			

Again, as in the previous phases, there was a mixture of late first to mid-second century samian and mid-third to late fourth century New Forest wares. The presence of a sherd of Nene Valley ware along with three early second century samian sherds suggests that there was some contamination, as the majority of the fine wares were New Forest ware. The most significant change in this phase was the almost complete absence of Alice Holt wares and the dominance of Dorset Black Burnished ware (BB1) products (73.24% EVEs) in the coarse wares. This would seem to coincide with the decline in the Alice Holt industry which was around the middle of the second century (Lyne and Jefferies, 1979, 20) and the availability in the Winchester (*Venta Belgarum*) markets of BB1 vessels. A date range of *mid- to late second century AD* is possible for this phase.

Phase IV consisted of a very small assemblage of sixty-nine sherds, of which fourteen were fine wares (29.51% EVEs) and fifty-five coarse ware sherds (70.49% EVEs). These numbers are too small to have any statistical significance but are included for completeness (*Table 73*). The thirteen contexts assigned to this phase had an average count of only five sherds each.

Table 73: Phase IV Pottery Assemblage from the Villa at Twyford

	Number	Weight	EVEs	% number	% weight	% EVEs
Fine Wares	14	191	0.18	*20.29*	*32.54*	*29.51*
Coarse Wares	55	396	0.43	*79.71*	*67.46*	*70.49*
	69	**587**	**0.61**			
Misc. Grey Ware	34	180	0.36	*61.82*	*45.45*	*83.72*
Alice Holt	9	61	0.07	*16.36*	*15.40*	*16.28*
Other	12	155		*21.82*	*39.14*	
	55	**396**	**0.43**			

The fine wares in this phase consisted of New Forest and Oxfordshire wares with six sherds of a Colchester bag beaker. The single very small abraded sherd of South Gaulish samian has been assumed to be residual. The coarse ware material, which had an average sherd weight of only five grams, was too small and abraded to provide any meaningful data. It would be difficult to date this phase accurately based on the very limited amount of material but the fine wares would seem to indicate a *mid-third century AD* date.

Phase V had only five small abraded sherds which were insufficient to produce any meaningful data.

Phase VI was, again, a relatively small assemblage of six contexts and 191 sherds (*Table 74*). There were seventeen fine ware sherds (9.18% EVEs) and 174 coarse ware sherds (90.82% EVEs). It has been assumed that one sherd of a Central Gaulish Dragendorff 33 cup is residual and as such has been excluded. All the remaining fine wares were from the New Forest kilns including hard fired Fulford Fabric 1a indented beakers and a Fulford Type 90 bowl which Fulford dated c. AD 345 – 400.

Table 74: Phase VI Pottery Assemblage from the Villa at Twyford

	Number	Weight	EVEs	% number	% weight	% EVEs
Fine Wares	17	163	0.19	*8.90*	*7.23*	*9.18*
Coarse Wares	174	2092	1.88	*91.10*	*92.77*	*90.82*
	191	**2255**	**2.07**			
Misc. Grey Ware	83	514	0.63	*47.70*	*24.57*	*33.51*
Alice Holt	29	548	0.18	*16.67*	*26.20*	*9.57*
Late Grog Temp	58	938	0.89	*33.33*	*44.84*	*47.34*
Other	4	92	0.18	*2.30*	*4.40*	*9.57*
	174	**2092**	**1.88**			

Whilst this was a small assemblage of pottery sherds, the coarse wares would seem to show a noteworthy trend. There was little or no increase in the percentage of vessels from the Alice Holt kilns but the BB1 wares have been replaced by local grog tempered pottery. The kiln site for this material has not yet been discovered but it was common in Hampshire in the fourth century AD (Tyers, 1996, 192, Fulford, M. G, 1975b), producing black-burnished derived vessels such as flanged bowls, dishes and everted rim jars. The Alice Holt material contained sherds from a Class 1A.13 jar and a Class C5B flanged bowl, both of which have a date range of c. AD 270 – 350. This would seem to indicate that *Phase VI* could be assigned a date range of *mid-fourth century AD*.

Phase VII consisted of twenty-three contexts and 1,926 sherds of pottery weighing 25,416 grams (*Table 75*). There were 184 sherds of fine wares (18.86% EVEs) and 1,742 sherds of coarse wares (81.14% EVEs). Again, it is assumed that the single sherd of East Gaulish samian is residual and it is excluded. The 311 unmarked sherds, which were assigned to this phase, have been included.

The fine wares were dominated by vessels from either the New Forest kilns (60% EVEs) or the Oxfordshire kilns (40% EVEs).There was one small sherd (1 gram) of a 'Hunting Cup' from the Colchester kilns which may have been curated in the past and has been assumed to be residual. All the material from the New Forest and Oxfordshire kilns can be dated to the very late third century to the end of the fourth century;

however, many of the New Forest and Oxford colour-coated bowls (Fulford T72, T77 and C61) were not produced until the middle of the fourth century AD.

Table 75: Phase VII Pottery Assemblage from the Villa at Twyford

	Number	Weight	EVEs	% number	% weight	% EVEs
Fine Wares	184	2719	4.95	***9.55***	***10.70***	***18.86***
Coarse Wares	1742	22697	21.29	***90.45***	***89.30***	***81.14***
	1926	**25416**	**26.24**			
Misc. Grey Ware	802	5748	3.59	***46.04***	***25.32***	***16.86***
Alice Holt	202	2822	2.64	***11.60***	***12.43***	***12.40***
Late Grog Temp	419	7228	5.54	***24.05***	***31.85***	***26.02***
BB1	217	5099	5.72	***12.46***	***22.47***	***26.87***
New Forest	82	1190	3.29	***4.71***	***5.24***	***15.45***
Other	20	610	0.51	***1.15***	***2.69***	***2.40***
	1742	**22697**	**21.29**			

There was a diverse collection of coarse wares with products from the Alice Holt kilns, the continuing presence of Late Grog Tempered vessels, and the re-emergence of Dorset BB1 products. There were, for the first time, several (15.45% EVEs) grey wares from the New Forest kilns, a number of which have a date range concluding in the mid-fourth century AD. Similarly, many of the white slipped Alice Holt vessels also have a date range concluding c. AD 350.

The fine wares and the coarse wares both seem to indicate *a mid-fourth century AD* date range for *Phase VII*.

Phase VIII consisted of thirty-six contexts and a total of 882 sherds of pottery weighing 9,362 grams (*Table 76*). Only six of the contexts contained significant amounts of pottery.

The fine wares were dominated by products from the New Forest kilns which can be dated to the fourth century AD but a Fulford T97.3 jar, a T67 bowl and a T50.1 beaker all go out of use before the end of the fourth century.

Table 76: Phase VIII Pottery Assemblage from the Villa at Twyford

	Number	Weight	EVEs	% number	% weight	% EVEs
Fine Wares	66	627	2.15	*7.48*	*6.70*	*22.10*
Coarse Wares	816	8735	7.58	*92.52*	*93.30*	*77.90*
	882	**9362**	**9.73**			
Misc. Grey Ware	549	4086	1.00	*67.28*	*46.78*	*13.19*
Alice Holt	64	1160	2.24	*7.84*	*13.28*	*29.55*
Late Grog Temp	135	1698	2.22	*16.54*	*19.44*	*29.29*
BB1	29	417	0.31	*3.55*	*4.77*	*4.09*
New Forest	20	285	0.78	*2.45*	*3.26*	*10.29*
Other	19	1089	1.03	*2.33*	*12.47*	*13.59*
	816	**8735**	**7.58**			

The mixed variety of vessels from the coarse ware suppliers does not seem a significant change from *Phase VII*. There was some decline in the amount of Dorset BB1 but an increase in the amount of Alice Holt vessels. There were six sherds of Severn Valley Ware vessels and four sherds of a Rowland's Castle storage jar, suggesting that there may have been a choice of material from different suppliers available at the local markets. The presence of fourth century New Forest ware and late Alice Holt products, some of which go out of use before the end of the fourth century, suggests a date range of *middle to late fourth century AD* for *Phase VIII*.

4.9.4 Summary of Villas Located in the Hampshire Downs

The analysis of the pottery from the *Twyford* villa has demonstrated that this methodology and the technique of measuring the comparative amount of ceramic fine wares can be applied to the structural development of the villa over time. This empirical methodology can be used to understand and potentially predict the temporal changes of the villa which have taken place over the centuries. It does, however, very much depend on the principle that the pottery assemblages can be clearly assigned to specific temporal phases (*Table 77*).

Pottery from excavations such as that from *Twyford* can be utilised to provide a dated sequence to the various phases but by analysing the relative amount of fine wares it has been possible to demonstrate the development and growth of the villa.

Table 77: Summary of Fine Wares for All Phases

	Number	Weight	EVEs	% number	% weight	% EVEs
Phase I	36	257	0.30	***11.76***	***7.40***	***6.55***
Phase II	41	197	0.71	***5.20***	***2.67***	***3.36***
Phase III	24	173	0.15	***19.83***	***16.70***	***17.44***
Phase IV	14	191	0.18	***20.29***	***32.54***	***29.51***
Phase VI	17	163	0.19	***8.90***	***7.23***	***9.18***
Phase VII	184	2719	4.95	***9.55***	***10.70***	***18.86***
Phase VIII	66	627	2.15	***7.48***	***6.70***	***22.10***
	382	***4327***	***8.63***	***8.92***	***8.74***	***13.23***

Phases I and II, which have been dated from the mid-first century to the mid-second century AD, would seem to have been an era of restricted wealth as there were limited amounts of fine wares. *Phases VII* and *VIII*, which are dated to the fourth century AD, would seem to have been a period of improved wealth as the amount of fine wares have increased significantly. This type of analysis should be able to provide a framework into which the social and economic situation of rural villas and their owners can be compared both temporally and empirically. Unfortunately the majority of excavations that were undertaken in the past did not apply rigid standards to relating contexts and the associated pottery to specific stratigraphical phases.

4.10 Summary of Pottery from the Villas in the Study

The structural plans of villas form a large body of archaeological evidence which can be classified to identify trends in social and economical status of rural Roman

Britain. Plans of villas, however, are not the only determinant in establishing the wealth of the owners. Pottery can be seen as an expression of the material wealth of the owners and the fundamental premise of this study was that the more affluent villa owners acquired a greater proportion of fine wares.

The ceramic pottery vessel material from the sixteen villa sites that formed the basis of this analysis have been listed in descending order by the amount of fine wares as a percentage of Estimated Vessel Equivalents (%EVEs) (*Table 78*). This demonstrates that there is indeed a significant variation in the amount of fine wares present at different rural villas. It is the hypothesis of this study that the wealthier villa owners could afford to purchase a greater amount of non-essential ceramic fine wares and this can be seen to be reflected at the villas at *Chilgrove 1*, *Chilgrove 2*, *Pitlands Farm* and *Twyford*. By contrast the villas at *Holt Down, Crookhorn, Chalton, Elsted, and Wakeford's Copse* all have restricted numbers of ceramic fine wares, suggesting that their owners may have had constrained amounts of disposable income to spend on luxury items of table ware.

The statistical analysis of the percentage EVEs would suggest that villas where the fines wares accounted for more than 13% EVEs and in the upper quartile could be potentially defined as '*high status*'. Conversely villas where the fine wares accounted for less than 5% EVEs and in the lower quartile could be classified as '*lower status*'.

Table 78: Summary of the Fine Wares from All Villas

Villa	Number	Weight	EVEs	% number	% weight	% EVEs
Chilgrove 1	509	9392	15.81	***29.66***	***18.39***	***17.15***
Pitlands Farm	113	1017	2.69	***12.50***	***7.99***	***16.38***
Chilgrove 2	787	11806	22.21	***20.53***	***11.97***	***14.83***
Twyford	382	4327	8.63	***8.92***	***8.74***	***13.23***
Purbrook	68	1466	3.27	***9.65***	***6.86***	***12.35***
Binsted	39	386	0.76	***7.36***	***6.13***	***11.50***
Sidlesham	149	2842	3.06	***16.82***	***12.17***	***11.08***
Liss	379	4792	8.35	***5.72***	***6.53***	***11.08***
Batten Hanger	636	7120	12.85	***6.77***	***4.73***	***10.14***
Watergate Hanger	352	4293	8.20	***5.26***	***4.86***	***9.64***
Langstone	204	3434	6.31	***4.67***	***5.19***	***8.70***
Holt Down	70	825	1.07	***17.11***	***8.82***	***5.86***
Crookhorn	33	426	0.78	***4.33***	***2.90***	***4.79***
Chalton	24	235	0.91	***3.68***	***1.53***	***4.05***
Elsted	129	349	0.86	***1.40***	***0.68***	***3.78***
Wakeford's Copse	101	1865	2.50	***1.88***	***2.00***	***3.33***
	3975	***54575***	***98.26***			

This model, based on pottery as a material culture, has been developed to predict the social and economic status of the indigenous Romano-British landowning rural population. Future studies may be able to measure other material cultures to add to this model and further enhance the ability of archaeologists to envisage the lifestyles and community that existed during the Roman occupation of Britain.

5 Sparsholt: a Case Study

5.1 Introduction

The villa at *Sparsholt* (SU 415 301) was excavated over several seasons from 1965 until 1972 (Johnston, 1972). The villa consisted of a walled courtyard with a stone built house (Site D), an aisled building (Sites A and F) and a barn (Site C) (*Figure 26*). Within the courtyard was a well (Site I) and just outside the courtyard was another building or hall (Site G).

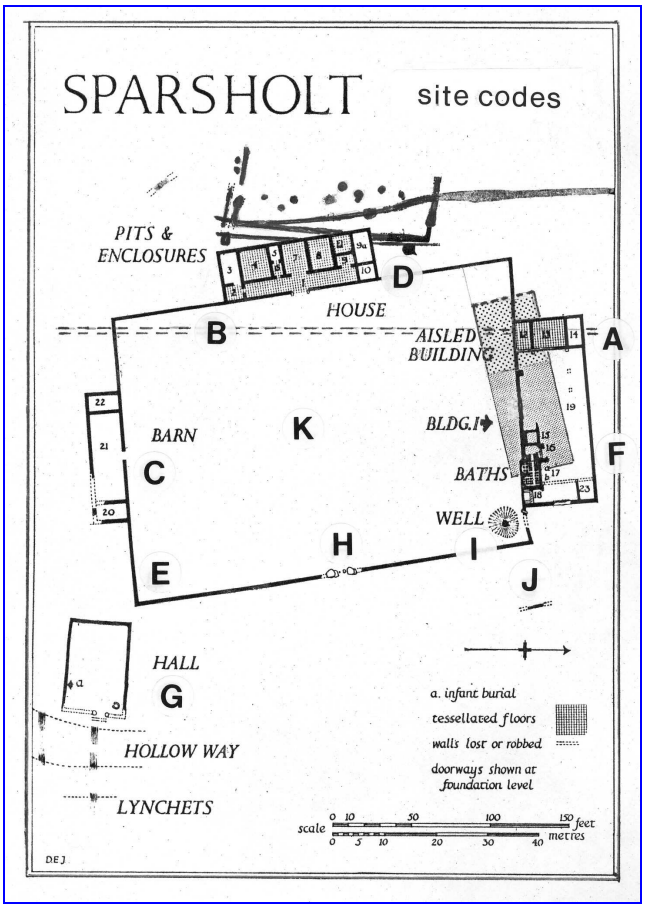

Figure 26: Layout of the Villa at Sparsholt (Johnston, 1972)

This analysis has been based on the *Site Note Books* kindly made available by the excavator, David Johnston, and the archived pottery stored at Winchester City Museum.

The detailed description of the various buildings within the *Site Note Books* and the amount of pottery associated with each building has provided a unique opportunity to analyse and compare every structure separately. This offers the possibility of testing and developing the methodology further by applying the principles to the spatial arrangements of the villa site as opposed to single buildings alone. It also offers the prospect of being able to synthesise the pottery data recovered from within the rooms of the different buildings. The use of this method of analysing Romano-British ceramic pottery assemblages could thus be demonstrated to be applicable to other intra-site rural villa comparisons. The buying power of a villa resident determined what and how many ceramic vessels the individual purchased.

5.2 Local Geography and Geology

The villa was strategically situated within easy reach of the *civitas* capital of Winchester (*Venta Belgarum),* six kilometres to the east. The Roman roads from Winchester to Mildenhall and Cirencester (*Corinium Dobunnorum*) to the north-east and from Winchester (*Venta Belgarum*) to Bitterne (*Clausentum?),* five kilometres to the south-east, would have given the villa owners access to the major markets at Winchester both to sell their agricultural products and to acquire supplies. The New Forest pottery kilns were only twenty kilometres to the south-west of the villa and would probably have used Winchester as a marketing outlet for their products.

The villa was situated at approximately 100 metres OD on a small spur of land overlooking a dry river valley. The local geology was Upper Chalk of the Hampshire Basin with an outcrop of Clay-with-Flint to the north-west of the villa (Chatwin, 1948). The chalk produces rendzinas and brown calcareous soils which dominate the landscape. The calcareous soils normally have a neutral or alkaline reaction throughout their soil horizon profiles and were ideal for both arable (corn) and pastoral (sheep) agricultural production (Wade Martins, 2004).

5.3 The House (Site D)

The house (Site D) at Sparsholt was excavated over the seasons of 1966, 1967, 1969 and 1972. The majority of the house was excavated in the 1966 season with subsequent excavation targeted at clarifying the relationship of the walls and structures. The house consisted of a series of rooms fronted by a veranda (*Figure 27*).

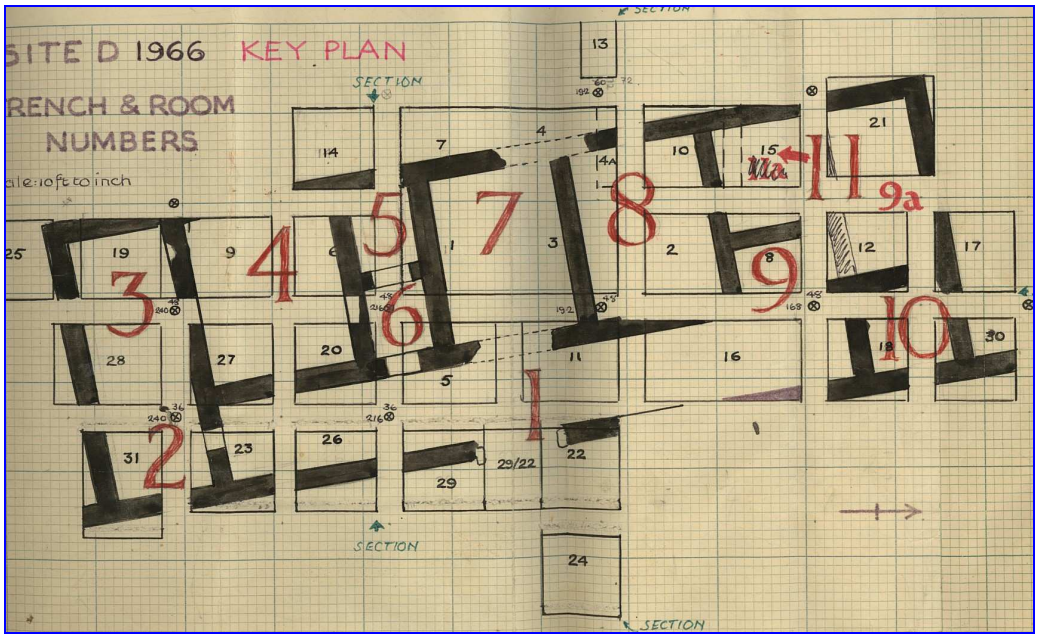

Figure 27: The 1966 Plan of the House at Sparsholt (Site Note Book)

The extent of the house was discovered during the 1965 excavation when a trial trench was opened over Room 7. The nature of the 1966 excavation was a series of rectangular trenches separated by baulks over and around the house. This method of excavation has several disadvantages as many of the trenches covered more than one feature and different trenches cut the same feature. This complicates the assignment of artefacts to the correct features and does not allow clear stratigraphic relationships.

The subsequent excavations in 1967, 1969 and 1972 concentrated on specific areas of the building to try to identify the sequence of construction of the house. There were re-examinations in 1967 of rooms 9, 9A, 10 and 11 (containing a hypocaust),

and in 1969 of rooms 2, 3, 4, 5, 6, and 7, the latter containing a decorated mosaic (*Figure 28*). In 1972 the relationship of the veranda to rooms 2, 9, 9A and 10 was re-examined.

Figure 28: The Mosaic from Room 7, Sparsholt (Johnston, 1972)

The main structure of the original building consisted of Rooms 4, 5, 6, 7, 8, 9 and 11 with a veranda (Room 1). The *Site Note Books* (*III* and *VII*) suggest that Rooms 2 and 3 and Rooms 9A and 10 may have been added at a later stage. The walls were constructed of dressed flints set in rammed chalk foundations. The internal walls of the house were constructed of chalk blocks covered in painted plaster. The original main structure was tiled with limestone tiles but the later additions were tiled in ceramic *imbrex* and *tegula* (*Table 79*).

Table 79: Romanised Architectural Features of the 'House' at Sparsholt

House D	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaic	Hypocaust	Baths
Late3rd to late 4th century AD	✓	✓	✓	✓	✓	-

The finds were collected by site in bags which would seem to be related to the date of excavation rather than by context. The method of excavation using a grid system and the procedure for collecting artefacts has limited the capability to categorically assign pottery to specific contexts. The *Bag Lists* and the *Site Note Books* have been used to try to assign the pottery to its correct context but, as explained above, there may be discrepancies and errors.

5.3.1 Analysis of Pottery Recovered from the House

Table 80: Summary of the Pottery from the House at Sparsholt

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Fine Wares	239	5174	7.52	***11.61***	***14.03***	***17.74***	21.65
Coarse Wares	1820	31714	34.87	***88.39***	***85.97***	***82.26***	17.43
Total	2059	36888	42.39				17.92

A total of 2,059 sherds of pottery were recovered from the site of the house with an average weight of 17.92 grams (*Table 80*). This average weight is comparatively high and would suggest that much of the pottery has been subject to limited disturbance but some of the sherds showed signs of heavy abrasion normally associated with re-deposited material.

5.3.2 Room 1: The Veranda

The veranda, situated on the east side of the house, gave access to the majority of the rooms and was part of the original construction of the building. It was

approximately 20 metres long by 3 metres wide; and the walls, which were plastered, were constructed of faced flints set in mortar on rammed chalk foundations. The veranda had a simple red and grey patterned tessellated floor overlying an earlier floor of limestone tiles.

There were 191 sherds recovered in or around the veranda weighing 2,131 grams with an average weight of just over 11 grams (*Table 81*).

Table 81: Summary of the Pottery from the Veranda of the House at Sparsholt

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Fine Wares	15	231	0.12	***7.85***	***10.84***	***6.94***	15.40
Coarse Wares	176	1900	1.61	***92.15***	***89.16***	***93.06***	10.80
Total	191	2131	1.73				11.16

The majority of the sherds were abraded and recovered from the topsoil or possibly the demolition layers. Fine wares were represented by only fifteen sherds or 6.94% by EVEs and all were from the New Forest kilns except one much abraded sherd from the Oxford kilns. The New Forest fine wares contained a Type 87 lid in parchment ware fabric which has been dated to c. AD 320 – 40 (Fulford, M. G, 1975a, 70).

Table 82: Summary of the Coarse Wares from the Veranda

	Number	Weight	EVEs	% number	% weight	% EVEs
New Forest	45	506	0.81	***25.57***	***26.63***	***50.31***
Late grog tempered	38	528	0.40	***21.59***	***27.79***	***24.84***
Alice Holt	30	226	0.18	***17.05***	***11.89***	***11.18***
BB1	11	166	0.22	***6.25***	***8.74***	***13.66***
Miscellaneous	52	474		***29.55***	***24.95***	
Total	176	1900	1.61			

The coarse wares were also dominated by vessels from the New Forest kilns (*Table 82*), and included G30 type jars and a G19 type dish. All these vessels had a long chronology starting in c. AD 270 and lasting until c. AD 400. The unstratified and abraded nature of the material limits the ability to accurately assign a date for the construction of the veranda but the date range of the pottery would suggest that the

occupation was from the late third century until the destruction, possibly in the late fourth century AD.

5.3.3 Rooms 2 and 3: South Wing

Rooms 2 and 3 were divided by a partition. They were approximately 3 metres by 9 metres and were probably later additions to the row house. Room 2 had a chequered tessellated floor whilst Room 3 had a rammed chalk floor covered with a brick and mortar surface. The walls were constructed from mortared flints covered with yellow and red painted plaster. The amount of pottery recovered from Rooms 2 and 3 was only 103 sherds and too small to produce any meaningful statistics (*Table 83 and Table 84*). The pottery was dominated by both fine and coarse ware vessels from the New Forest kilns.

Table 83: Summary of the Pottery from Room 2 of the House

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Fine Wares	8	111		***15.09***	***14.18***		13.88
Coarse Wares	45	672	1.02	***84.91***	***85.82***	***100.00***	14.93
Total	53	783	1.02				14.77

Table 84: Summary of the Pottery from Room 3 of the House

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Fine Wares	5	150	0.10	***10.00***	***11.65***	***6.37***	30.00
Coarse Wares	45	1138	1.47	***90.00***	***88.35***	***93.63***	25.29
Total	50	1288	1.57				25.76

5.3.4 Room 4

This was a large room approximately 5.5 metres by 5 metres and was covered by a simple red tessellated floor overlaying an earlier crushed red brick floor. The internal

wall between Room 4 and Rooms 5 and 6 was constructed from chalk blocks covered with painted wall plaster.

The amount of pottery retrieved from Room 4 was again very limited and statistically insufficient to provide any meaningful information (*Table 85*). The material was recovered from either the topsoil or the demolition rubble and none had been assigned to securely stratified contexts. The only pottery of note was part of a handle from an *amphora* and all the other material was late third to fourth century fabric.

Table 85: Summary of the Pottery from Room 4 of the House

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Fine Wares	5	50	0.24	***10.20***	***10.78***	***47.06***	10.00
Coarse Wares	44	414	0.27	***89.80***	***89.22***	***52.94***	9.41
Total	49	464	0.51				9.47

5.3.5 Rooms 5 and 6

Rooms 5 and 6 were less than 2 metres wide and were more suggestive of a corridor than rooms. Room 5, which was only accessed from Room 6, had a simple crushed chalk and mortared flooring; whilst Room 6 had a red and grey tessellated floor overlaying an earlier floor of crushed red brick. Room 5 was divided from Room 6 by a chalk blocked wall faced with plaster. Room 5 contained an infant burial in a pit covered by tiles. Access to Room 6 was from the veranda.

Room 5 produced twenty-seven sherds of pottery and there were no sherds recorded for Room 6 (*Table 86*). Again, the quantities are too small to produce meaningful statistical information. The pottery was all late third to late fourth century but none was in a securely stratified context.

Table 86: Summary of the Pottery from Room 5 of the House

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Fine Wares	1	4		*3.70*	*1.85*		4.00
Coarse Wares	26	212	0.51	*96.30*	*98.15*	*100.00*	8.15
Total	27	216	0.51				8.00

5.3.6 Room 7

Access to Room 7 was gained from the veranda and contained a mosaic floor (*Figure 28*). This overlaid an earlier simple red tessellated floor. The walls were covered in painted plaster and there were signs that the room had been redecorated. The room was approximately 5.50 metres by 4.25 metres.

There were only sixteen pottery sherds recovered from Room 7 with an average sherd weight of only seven grams. None of the sherds can be dated more closely than to the fourth century AD.

5.3.7 Room 8

Room 8 was accessed from Room 11 through a partition wall of chalk blocks covered in painted plaster. The room had a simple red tessellated floor and was another large room approximately 5.50 metres by 5.00 metres.

There was no pottery recorded to Room 8.

5.3.8 Room 9

Room 9 was accessed from the veranda and had a red and grey tessellated floor measuring approximately 3.65 metres by 1.80 metres. Only one burnt and abraded body sherd was recovered from the topsoil above Room 9.

5.3.9 Room 9a

This room was 3.5 metres by 5.5 metres and would seem to have been the stokehole for the hypocaust. A limited amount of pottery was recovered from Room 9a (*Table 87*) which was statistically insignificant. There was, however, a New Forest Type 35 beaker and a Type 26 jug which were recovered from an ashy layer at the entrance of the hypocaust under Room 11. These two vessels can be dated to c. AD 320 - 50 (Fulford, M. G, 1975a) and suggest that the hypocaust may have gone out of use by the mid-fourth century AD.

Table 87: Summary of the Pottery from Room 9A of the 'House'

	Number	Weight	EVEs	% number	% weight	% EVEs
Fine Wares	16	292	0.44	*11.68*	*14.41*	*44.00*
Coarse Wares	121	1735	0.56	*88.32*	*85.59*	*56.00*
Total	137	2027	1.00			

5.3.10 Room 10

Room 10 would seem to have been created by dividing the end of the veranda to create a separate room 3 metres square with a floor of beaten chalk. There was insufficient pottery recovered from Room 10 to derive any conclusions (*Table 88*). There were only fifteen fine ware sherds of pottery which were much abraded and all the material was either found in the topsoil or in what was possibly a demolition layer. The pottery was all late third to fourth century in date.

Table 88: Summary of the Pottery from Room 10 of the House

	Number	Weight	EVEs	% number	% weight	% EVEs
Fine Wares	15	85		*25.86*	*16.13*	
Coarse Wares	43	442	0.52	*74.14*	*83.87*	*100.00*
Total	58	527	0.52			

5.3.11 Room 11

This room, which measured approximately 3.5 metres square, was heated by an under-floor hypocaust and had a simple red and white tessellated floor. There were 748 sherds recovered from Room 11 which was by far the most of all the rooms in the villa (*Table 89*). This could be because the majority was found in the collapsed hypocaust which was at a much lower level than the floor levels of other rooms and as such may well have been spared the potential disturbance that the other rooms suffered. This is supported by the relatively high average sherd weight of over 21 grams and a brokenness of only 0.17 compared with the assemblages from the other rooms. None of the pottery assigned to Room 11 had been recovered from the topsoil and, whilst some of the upper contexts may have been contaminated by either residual or intrusive material, the lower layers should be relatively undisturbed.

Table 89: Summary of the Pottery from Room 11 of the House

	Number	Weight	EVEs	% number	% weight	% EVEs
Fine Wares	88	2306	1.84	*11.76*	*14.36*	*12.06*
Coarse Wares	660	13756	13.42	***88.24***	***85.64***	***87.94***
Total	748	16062	15.26			

The fine wares, which accounted for 12.06% by EVEs, were dominated by vessels from the New Forest kilns, with only a small percentage from the Oxfordshire kilns. The vessels consisted of *mortaria*, indented beakers and flagons. There were two large sherds of a rare New Forest churn in a white ware fabric and Type 87 lid (Fulford, M. G, 1975a, 70). There were also six sherds of a Type 22 jug which can be dated to c. AD 340 – 400. Another vessel recovered from the collapsed hypocaust, which is currently on display in the Winchester City Museum, was a New Forest grey ware Type 17 two-handled bowl with a pedestal base (Figure 29). It has been suggested that this vessel may have been placed in the hypocaust during the construction phase of this part of the building as perhaps some sort of symbolic offering. This hypothesis would indicate

the construction of the hypocaust was during the first half of the fourth century AD, as this distinctive type of vessel has been dated to c. AD 300 – 350 (Fulford, M. G, 1975a, 96).

Figure 29: A Fulford Type 17 Bowl currently in Winchester City Museum *(Author)*

New Forest vessels similarly dominated the grey wares but there was also a representative mixture of products from both the Dorset BB1 and the Alice Holt kilns (*Table 90*).

Table 90: Summary of the Pottery from Room 12 of the House

	Number	Weight	EVEs	% number	% weight	% EVEs
New Forest	266	5408	6.41	***40.30***	***39.31***	***47.76***
Late grog tempered	144	3912	0.40	***21.82***	***28.44***	***2.98***
BB1	28	1254	2.01	***4.24***	***9.12***	***14.98***
Alice Holt	99	1742	3.69	***15.00***	***12.66***	***27.50***
Miscellaneous	123	1440	0.91	***18.64***	***10.47***	***6.78***
Total	660	13756	13.42			

5.3.12 The Midden

There was a midden to the south of the house outside the courtyard. This was probably a rubbish dump from the house and it produced 292 sherds of pottery

weighing 8,783 grams, of which 240 sherds (82%) weighing 7,515 grams (85.5%) were recovered from the topsoil. Much of the pottery was very abraded and burnt. A single sherd of Central Gaulish samian has been assumed to be residual.

There were three layers identified within the midden: Rubble Layer II, Debris Layer III and Natural. It was not possible to separate the dating of these layers as all the pottery associated with them had long date ranges from the late third century to the late fourth century AD.

5.3.13 Summary of House (Site D)

The unstratified nature of the material recovered in and around the house does not permit close dating of the construction or the abandonment of the building. The bulk of the pottery, however, can be dated to the late third century to the late fourth century AD. It would therefore seem to be a reasonable working hypothesis to assume that the building was in use during this period. The presence of a New Forest grey ware Type 17 two-handled bowl as a possible symbolic deposit in the hypocaust may indicate that the construction of the main house was in fact at the beginning of the fourth century AD. There is some evidence to support this theory as there were also several other New Forest vessels that were only produced from the start of the fourth century AD amongst the assemblage.

Fine ware represented 17.74% by EVEs of the pottery assemblage (*Table 91*). This would indicate that the house at *Sparsholt* was similar to the villas at *Chilgrove 1*, which had 17.40% fine wares; and *Chilgrove 2* which had 15.38% as measured by EVEs (Dicks, 2007, 77). Both these villas were occupied during the late third to fourth century AD and contained mosaics but not of the same quality as the example at *Sparsholt* (Down, A, 1979). These rural villas were considered to be of high status, which would indicate that Sparsholt was a high status fourth century AD villa in the Sussex and Hampshire rural landscape.

New Forest fine wares accounted for 87.23% by EVEs of the pottery, with only 12.77% from the Oxfordshire kilns (*Table 91*). This high proportion of New Forest products reflects the close proximity of the *Sparsholt* site to the kilns.

Table 91: Summary of the Fine Wares from the House at Sparsholt

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
New Forest	203	4380	6.56	***84.94***	***84.65***	***87.23***	21.58
Oxford	30	772	0.96	***12.55***	***14.92***	***12.77***	25.73
Miscellaneous	6	22		***2.51***	***0.43***		3.67
Total	239	5174	7.52				21.65

The coarse wares were similarly dominated by New Forest vessels (42.24% by EVEs) but there was a reasonable amount of Alice Holt (21.05%) and Dorset BB1 (13.45%) products (*Table 92*). This would seem to indicate that during the fourth century AD there was an active market, probably centred on Winchester (*Venta Belgarum*), which was providing the local villa owners with a choice of ceramic vessels.

Table 92: Summary of the Coarse Wares from the House at Sparsholt

	Number	Weight	EVEs	% number	% weight	% EVEs
New Forest	444	9662	14.73	***24.40***	***30.47***	***42.24***
Late grog tempered	427	9612	4.56	***23.46***	***30.31***	***13.08***
Alice Holt	241	3971	7.34	***13.24***	***12.52***	***21.05***
BB1	124	3165	4.69	***6.81***	***9.98***	***13.45***
Miscellaneous	584	5304	3.55	***32.09***	***16.72***	***10.18***
Total	1820	31714	34.87			

5.4 The Barn (Site C)

The barn (Site C) was discovered when the original trial trenches were dug in 1965 but the main excavation was undertaken in the 1968 and 1969 seasons. The excavation uncovered the outline of a barn approximately twenty-six metres long and

six metres wide containing three rooms (Rooms 20, 21 and 22). The southern wall of the barn would seem to have utilised the already existing perimeter wall of the courtyard whilst the other walls were constructed to produce the barn. Access to the barn was through the perimeter wall into the main room (*Figure 30*).

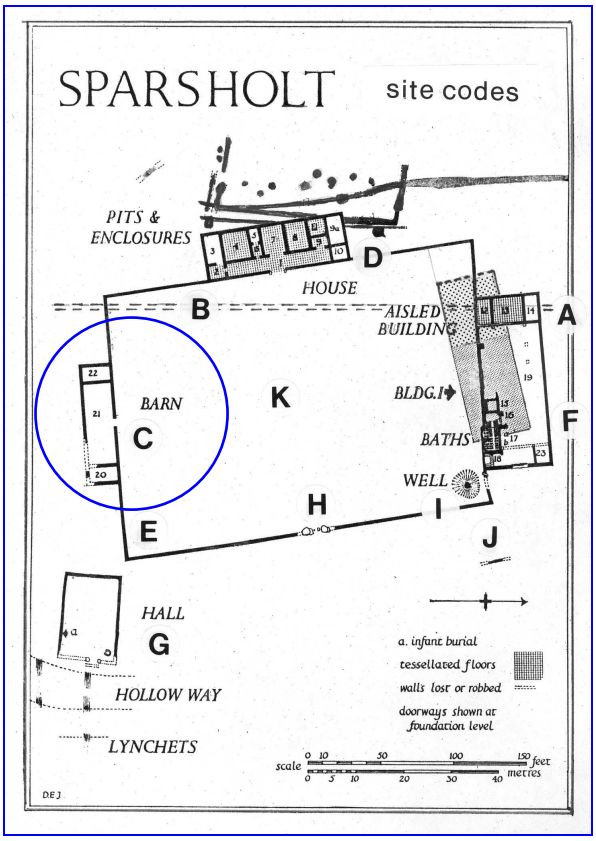

Figure 30: Location of the Barn at Sparsholt (Johnston, 1972)

There were two rooms at either end of the barn (Rooms 20 and 22) which were approximately three metres wide. The walls of the barn, which were approximately half a metre thick, were constructed of coarse flint masonry with the occasional use of red bricks and *tegulae*. The walls of the two end rooms showed signs of mortar rendering and Room 20 may have had a red tiled floor. The building probably had a stone roof judging by the amount of stone slate tiles recovered from inside and around the building. The floors of Rooms 21 and 22 were made of beaten clay and flints (*Table 93*).

Table 93: Romanised Architectural Features of the Barn at Sparsholt

Barn C	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Late3rd to late 4th century AD	✓	–	✓?	–	–	–

5.4.1 Analysis of the Pottery Recovered from the Barn

The 1968 and 1969 excavations recovered 220 sherds of pottery weighing 3,927 grams with an Estimated Vessel Equivalent (EVE) of 4.21 vessels (*Table 94*). The majority of the sherds showed signs of heavy abrasion normally associated with material that has been subject to continual re-deposition and movement over the centuries. In many instances the surfaces of the sherds had been lost, which limited the potential to assign accurately certain material to specific ware groups. This has resulted in a relatively high proportion of the grey wares having to be categorised as miscellaneous. The average sherd weight of nearly eighteen grams was, nevertheless, comparatively high.

Table 94: Summary of the Pottery from the Barn at Sparsholt

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Fine Wares	42	751	1.17	***19.09***	***19.12***	***27.79***	17.88
Coarse Wares	178	3176	3.04	***80.91***	***80.88***	***72.21***	17.84
Total	220	3927	4.21				17.85

The assemblage of only 220 sherds was small but the statistical analysis has been included for completeness. The bulk of the material, however, was found outside the perimeter wall or in the courtyard and only sixty-one sherds were recovered from within the building (*Table 95*).

Table 95: Distribution of Pottery across the Rooms of the Barn

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Room 20	11	343	0.22	*5.00*	*8.73*	*5.23*	*31.18*
Room 21	9	180	0.26	*4.09*	*4.58*	*6.18*	*20.00*
Room 22	41	818	0.99	*18.64*	*20.83*	*23.52*	*19.95*
Outside building	137	2258	2.54	*62.27*	*57.50*	*60.33*	*16.48*
Courtyard	22	328	0.20	*10.00*	*8.35*	*4.75*	*14.91*
Total	220	3927	4.21				

5.4.2 Room 20: The East Room

Only eleven sherds of pottery can be attributed to Room 20, the majority of which were late third to late fourth century AD. There was a single sherd from an imported Trier black-slipped beaker with the characteristic rouletted design which was found under the mortared floor of the room (Bag SPCJW). This can be dated to c. AD 180 – 250 suggesting the floor in Room 20 may have been laid in the mid- to late third century AD.

5.4.3 Room 21: The Main Barn Room

Only nine sherds were recovered from the main room of the barn and none in a stratified context. All were late third to late fourth century AD in date. The lack of pottery in this area may indicate that this large room was used for agricultural purposes and not domestic.

5.4.4 Room 22: The West Room

Forty-one sherds can be attributed to Room 22 (*Table 96*). A single sherd of an Alice Holt Class 6A dish (Bag SPCJP), which has a date range of c. AD 270-400, was

recovered from the wall of the room, suggesting that construction of the wall and perhaps the barn was after the third quarter of the third century AD. A single coin of *Tetricus* (AD 271-3) was also found either in or on top of the beaten chalk floor. The relatively high number of sherds recovered from what may have been occupational deposits suggests that this room may have been used for domestic purposes.

Table 96: Summary of Pottery from Room 22 of the Barn

	Number	Weight	EVEs	% number	% weight	% EVEs
New Forest	10	282	0.51	***24.39***	***34.47***	***51.52***
Late grog tempered	19	314	0.13	***46.34***	***38.39***	***13.13***
Miscellaneous	12	222	0.35	***29.27***	***27.14***	***35.35***
Total	41	818	0.99			

The major supplier of pottery during this period would seem to have been the New Forest kilns (51.52% by EVEs) with both New Forest fine wares and grey wares present in the assemblage. There were sherds of a BB1 jar from Wareham/Dorset and a sieve from the kilns at Alice Holt. A single sherd of a South Gaulish samian Dragendorff 27 cup has been assumed to be residual.

5.4.5 Summary of Barn (Site C)

The unstratified nature of the pottery limits the possibility of assigning accurate dates for the occupation of the barn but a possible date range could be from the late third century to the late fourth century AD. This is based on the date ranges of the pottery recovered (*Table 97*). All can be assigned to the late third century until late fourth century AD. The products of the New Forest kilns, which were in production from c. AD 270 to 400, dominate the assemblage. There are, however, several mid-fourth century bowls (Fulford T73 and T77 types) which can be closely dated to the mid-fourth century AD (Fulford, M. G, 1975a, 68).

It has been assumed that the small quantity of samian sherds was probably residual and have not been considered as important as far as dating is concerned.

Table 97: Summary of the pottery from the Barn by Source

	Number	Weight	EVEs	% number	% weight	% EVEs
New Forest	51	922	1.32	*28.65*	*29.03*	*43.42*
Late grog tempered	66	1138	0.58	*37.08*	*35.83*	*19.08*
Alice Holt	4	122	0.20	*2.25*	*3.84*	*6.58*
BB1	11	284	0.36	*6.18*	*8.94*	*11.84*
Miscellaneous	46	710	0.58	*25.84*	*22.36*	*19.08*
Total	178	3176	3.04			
	Number	Weight	EVEs	% number	% weight	% EVEs
New Forest fine wares	22	443	0.57	*52.38*	*58.99*	*48.72*
New Forest white wares	12	280	0.41	*28.57*	*37.28*	*35.04*
Miscellaneous	8	28	0.19	*19.05*	*3.73*	*16.24*
Total	42	751	1.17			

There were several examples of Late Grog tempered vessels (also known as Hampshire Grog tempered ware) of which there are no known kiln sources. These vessels were heavily influenced by black burnished wares and the most common forms were flanged bowls, dishes and everted rimmed jars. These vessels can be dated to the fourth century AD (Tyers, 1996, 191).

The pottery would seem to suggest that the barn was constructed in the fourth quarter of the third century AD and was occupied until at least the third quarter of the fourth century AD and possibly as late as the end of the fourth century.

5.5 The Aisled Hall: Western End (Site A)

The western end of the aisled hall (Site A) was excavated in 1965, 1966 and again in 1971 (*Site Note Books II, XI, XII,* and *XIII*). The 1965 excavation was a series of exploratory test pits which located the western end of the building whilst the 1966

excavation took the form of a grid of sixteen trenches (*Figure 31*). The 1971 excavation was effectively a re-excavation of the 1966 trenches to clarify several unexplained anomalies, not least the existence of an earlier building below the aisled hall on the same site.

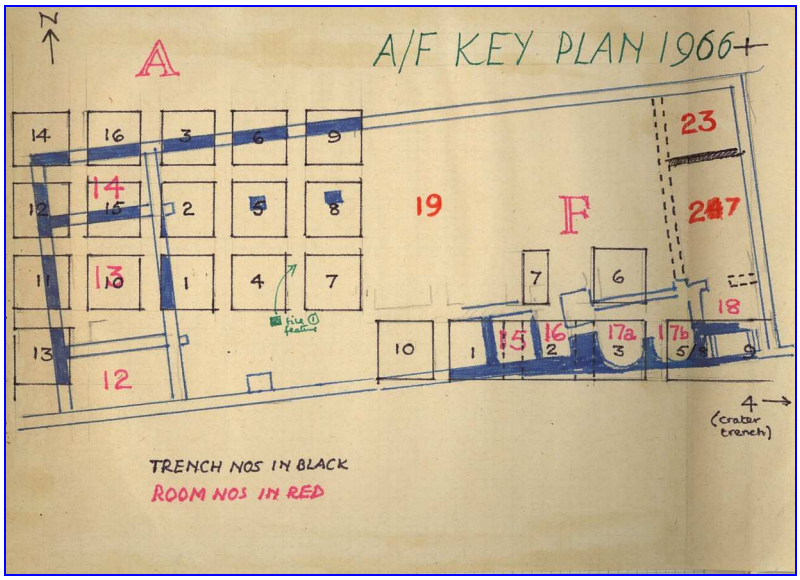

Figure 31: Plan of the Aisled Barn at Sparsholt (Site Note Book)

The main building, which was an aisled hall with rooms at either end, was preceded by an earlier building of similar style. It has been assumed that the reason for the limited amount of wall fabric from the original building was that it was robbed for the later building. The aisled hall was approximately 30 metres long and 13.5 metres wide. The rooms at the western end of the building may have been added at a later stage. The roof of the hall was supported in the centre by two rows of wooden columns on large stone blocks spaced at approximately 3.5 metres apart. The presence of limestone tiles in the demolition debris suggests the side aisles had a tiled roof but the main roof was probably thatched.

The walls of the aisled hall were approximately 75 centimetres thick and constructed of flints and chalk blocks set in a mortared foundation trench. These walls probably supported a wooden superstructure. The western partition wall, which

created Rooms 12, 13 and 14, was probably a later addition as it abuts the main east-west walls and was constructed of chalk blocks with no foundation trench.

The floor at the western end of the aisled hall had at least two different layers of chalk and mortar flooring, in contrast to the cobbled floor at the eastern end of the building. This cobbled floor was on top of an earlier beaten earth floor.

The western end of the aisled hall consisted of three separate rooms (Rooms 12, 13 and 14).

5.5.1 Room 12

Room 12 was approximately 4.5 metres by 2.5 metres and the inner walls were constructed of chalk blocks, suggesting that the room was created at a later stage within the aisled hall. The floor was covered in red brick and grey chalk tessellation surrounding a simple mosaic, discovered during the 1966 excavation.

5.5.2 Room 13

Room 13 was 4.5 metres by 5.5 metres and had a red, white and black tessellated floor. There were two further floor layers below this tessellated level, the lower of which ran under the internal wall into the main aisled hall. This would confirm that the rooms were added to the aisled hall at a later stage. There were signs of painted plaster on the walls.

5.5.3 Room 14

Room 14 was approximately 4.5 metres by 2.5 metres, with a simple beaten chalk floor but possibly with painted wall plaster. A summary of the Romanised architectural features is shown in *Table 98*.

Table 98: Romanised Architectural Features of the Western End of the Aisled Hall

Aisled Hall East	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Late3rd to late 4th century AD	✓	✓	✓	✓?	-	

5.5.4 Analysis of Pottery from the Western End of the Aisled Hall

A total of 579 sherds of pottery were recovered from the 1966 and 1971 excavations (*Table 99*); all but 175 came from either the topsoil or the backfill from 1966.

Table 99: Summary of the Pottery from the Western End of the Aisled Hall

	Number	Weight	EVEs	% number	% weight	% EVEs
Fine Wares	40	262	0.57	*6.91*	*3.73*	*7.94*
Coarse Wares	539	6758	6.61	*93.09*	*96.27*	*92.06*
Total	579	7020	7.18			

The fine wares were dominated by mid-third to late fourth century AD New Forest products but these only represented 0.57 EVEs (*Table 100*). The non-New Forest fine wares consisted of three small sherds from a Colchester colour-coated beaker dated to c. AD 120 - 250, two small abraded second century Central Gaulish samian sherds, and two sherds of Trier black-slipped ware, dated c. AD 180 - 250, all of which were probably residual. A single sherd of fourth century Argonne ware could be contemporary with the New Forest wares.

The only stratified New Forest fine ware sherds were six very abraded sherds of a colour-coated vessel in the mortar layer below the red tessellated floor in Room 14; two abraded colour-coated sherds associated with a thick clay layer in the aisled hall; and a sherd of a white ware vessel recovered from the chalk floor, again in the aisled hall.

A single sherd of New Forest white ware *mortarium* was found in the rubble layer within the aisled hall. This was the only evidence that *mortaria* may have been used in or around the aisled hall.

Table 100: Summary of the Fine Wares from the Western End of the Aisled Hall

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
New Forest	32	246	0.57	***80.00***	***93.89***	***100.00***	7.69
Other	8	16	–	***20.00***	***6.11***	–	2.00
Total	40	262	0.57				6.55

The coarse wares were dominated by vessels from the nearby New Forest kilns and late grog tempered wares (*Table 101*). There was a relatively high number of sherds classified as miscellaneous because of the abraded nature of their surfaces and size (an average sherd weight of just over 5 grams), which precluded their assignment to specific ware groups.

Table 101: Summary of Coarse Wares from the Western End of the Aisled Hall

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
New Forest	57	696	2.65	***10.58***	***10.30***	***40.09***	12.21
Late grog tempered	243	4266	2.43	***45.08***	***63.13***	***36.76***	17.56
Alice Holt	67	832	0.72	***12.43***	***12.31***	***10.89***	12.42
BB1	22	168	0.22	***4.08***	***2.49***	***3.33***	7.64
Miscellaneous	150	796	0.59	***27.83***	***11.78***	***8.93***	5.31
Total	539	6758	6.61				12.54

5.5.5 Room 12

There was no pottery that could be assigned to stratified layers associated with Room 12.

5.5.6 Room 13

Twenty-one sherds of late grog tempered pottery were recovered from a layer described as mortar and chalk blocks, rubble or tumble. This was probably a demolition layer as it was on top of the red tessellated floor. A single sherd of late grog tempered pottery was found in layer 3c below the tessellated floor. Late grog tempered pottery was a reappearance of late Iron Age fabrics but heavily influenced by black-burnished wares. The vessels were predominantly hand formed with burnished or wiped surface and sometimes decorated with lattice or line designs. The vessel types consisted of everted rimmed jars, flanged bowl and dishes. There is no known single source of production: it has been suggested that there were multiple small production centres. These vessels date from the late third century until the end of the Roman occupation.

5.5.7 Room 14

There was only one context (SPAAG) associated with Room 14 which can be assigned to a stratigraphic layer. Layer 10 (SPAAG) is described as a 'mortary layer' but its actual stratigraphic relationship to the tessellated floor is unclear. This layer contained six sherds of a New Forest colour-coated vessel which can be dated to the fourth century AD. As with Room 13, the majority of the pottery was recovered from the rubble. This contained sherds of late grog tempered pottery but with a New Forest Type 44 bag beaker, dated to c. AD 300 – 350, and two sherds of a BB1 flanged bowl, dated to c. AD 250 – 400.

5.5.8 Room 19: The Hall, Western End

The pottery from the western end of the large hall has been analysed in this section. There were several layers to which a stratigraphic relationship could be assigned but the pottery associated with these layers was either too abraded or too

small to be assigned specific dates other than mid-third to late fourth century. There were two layers with limited stratigraphic relations. Layer 6 (SPAAY and SPABY) is described as a 'heavily trodden chalk floor' and was possibly a late occupation layer. This layer contained twenty-seven sherds of a lattice decorated and white painted Alice Holt jar, dated c. AD 220 – 400, and a single sherd of a New Forest white ware lid, dated c. AD 320 - 40. Layer 4 (SPAAN) was a clay floor layer which contained two abraded sherds of a New Forest colour-coated vessel, dated to c. AD 270 - 350.

5.6 Summary of the Aisled Hall: Western End (Site A)

There was insufficient stratified pottery to provide clear dating evidence for the construction of the aisled hall but the circumstantial evidence would seem to point to a period during the late third century; and the building would seem to have gone out of use by the end of the fourth century AD. The presence of so much pottery from New Forest kilns, which started producing vessels in the second half of the third century, would seem to indicate that the building of the aisled hall coincided with this time period. The lack of any substantial amounts of pottery from earlier periods would support this hypothesis.

The 1971 *Site Note Book* implies that the earlier excavations of the aisled building would seem to have paid little heed to stratigraphy and that many of the trenches had destroyed the original floor layers. This has limited the amount of diagnostic information that can be extracted from the pottery but it is possible to draw some conclusions by comparison with the pottery from other Romano-British villa sites.

The presence of relatively large quantities of late grog tempered pottery is quite unusual and may suggest that the hall was used for more than simple agricultural activities. Many of the grog tempered vessels were large, very coarse storage jars with a very simple everted rim. There were several examples of hand-made oxidised vessels which were very poorly fired, suggesting that they may have been produced on site.

5.7 The Aisled Hall: Eastern End (Site F)

The eastern end of the aisled hall (Site F) was excavated over seven seasons from 1965 to 1972 (*Site Note Books I, II, IV* and *X*) and proved to have the most complex stratigraphy and to be predominantly the most difficult to comprehend. One of the 1965 test pits located the plunge pool of the building (the step trench). This area was further investigated in 1966 when an additional ten trenches were excavated along the southern wall of the aisled hall locating the five rooms of the bath house suite. The main hall of the eastern end of the building was investigated during 1967, 1968 and 1970 with an additional fourteen trenches when many of the original trenches were amalgamated. During this phase of the excavation it was realised that there was an earlier building underneath the aisled hall. The 1971 and 1972 excavations were aimed at investigating the relationship between these two buildings (*Figure 32*).

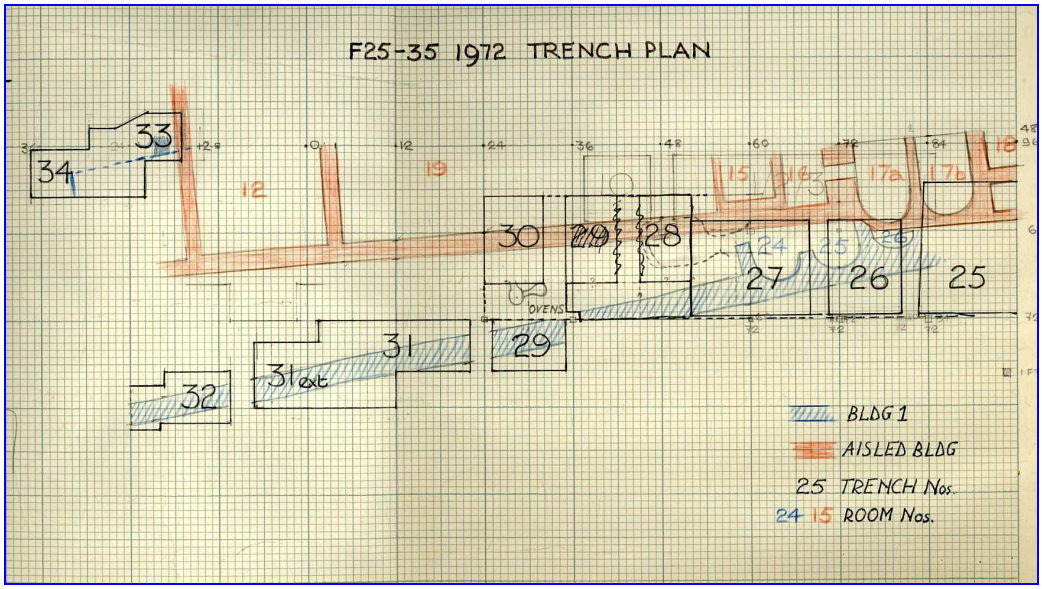

Figure 32: The 1971/2 Excavation of the Bath Houses at Sparsholt (Site Note Book)

The eastern end of the aisled hall contained a bath suite which consisted of five rooms. Room 15 would seem to have contained a hypocaust whilst Room 16 may have been the stokehole providing heat to both the water cistern and the baths. The two

apsidal rooms (17a and 17b) were heated by a hypocaust and a further room (Room 18) would seem to have been a plunge pool.

There were possibly two further rooms at the eastern end of the building (Rooms 23 and 27) but there was no clear evidence of the position of the internal walls. This may have been because they were of wooden construction which would have left little evidence in the archaeological record.

The remains of the earlier building (Building 1) and its bath suite, which consisted of two apsidal rooms and a bath, were located beneath the aisled hall (*Figure 32*). These bath and apsidal rooms contained demolition rubble from Building 1.

There were several features discovered to the south of the aisled hall within the courtyard. These features contained pottery and evidence of burning which may have been associated with the bath houses but also possibly agricultural industrial processes.

The excavation and re-excavation of the area surrounding the bath suites and the complex nature of the stratigraphy has made it difficult to assign the pottery to specific contexts. The area, however, produced a large assemblage of pottery.

5.7.1 Room 19: The Hall, Eastern End

The main area of the building consisted of this large hall, which was approximately 30 metres long and 13.5 metres wide, with a roof supported by a series of wooden beams resting on stone post pads. This created two aisles to the north and south of the building. The walls were constructed from chalk blocks with a facing of flint and the eastern end of the hall had a simple beaten chalk floor. A coin of *Tetricus* (AD 270-71) was found in the foundation trench of the aisled hall's southern wall. The bath suite was constructed in the south-eastern corner of the building and would seem to have utilised the perimeter wall as its southern wall.

5.7.2 Room 15

This room, which was approximately two metres square and constructed of chalk blocks, would seem to have had several functions over time. The T-shaped hypocaust, heated from a stokehole (Room 16), could have been a corn drier. The more elaborate corn driers were built to treat grain prior to transportation (Morris, 1979, 21). There was evidence of several layers of burnt material including carbonised grain which would support this theory. The spread of driers in the fourth century AD was possibly an aspect of rural prosperity which corresponded with the demand for large quantities of grain.

There were several large pots and charcoal beneath the walls suggesting that they were associated with an earlier structure, possibly Building 1.

5.7.3 Room 16: Furnace and Stokehole

Room 16 was probably the furnace and stokehole for heating a water cistern and providing heat for the hypocaust below Rooms 17a and 17b. The stokehole was connected through to the bath suite by a linking vault (*Figure 33*). A brick structure in the north-east corner of the room was probably the remains of a cold water cistern.

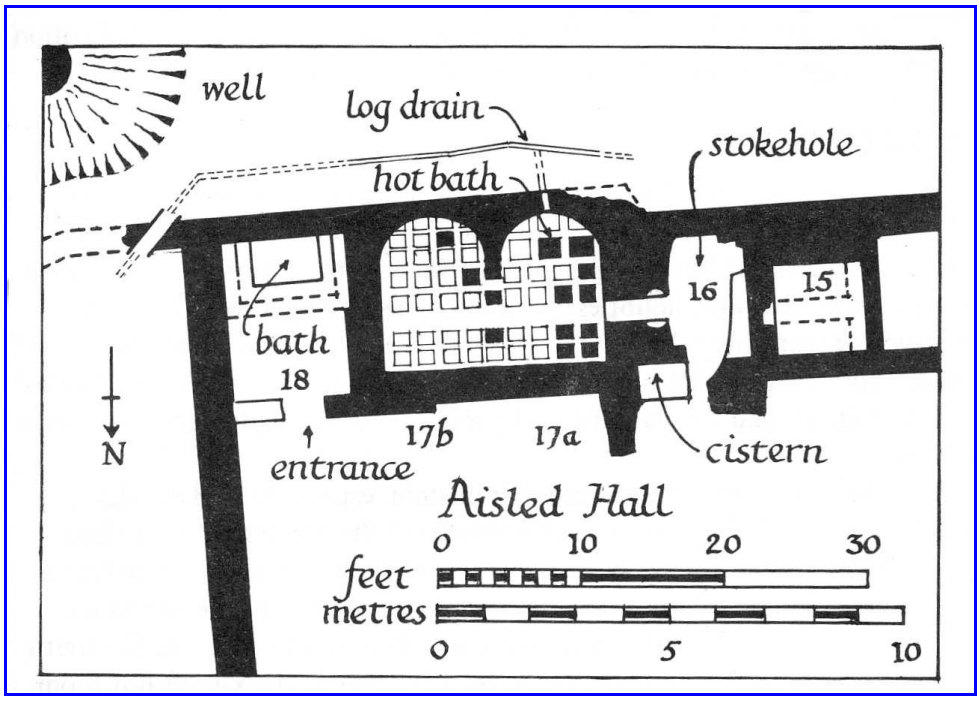

Figure 33: Detailed Plan of the Bath House at Sparsholt (Johnston, 1972)

5.7.4 Rooms 17a and 17b: Apsidal Heated Rooms

These two apsidal-shaped rooms, which were both approximately two metres by three metres in size, were probably the *caldarium* (hot bath) and the *tepidarium* (warm bath). They were almost certainly heated as the excavation revealed the presence of a series of *pilae* beneath the floor levels. *Pilae* were stacks of square thin tiles, that were used as an element of the under floor heating system and part of a *hypocaust*. The concept of the *pilae* stacks was that the floor was constructed at an elevated position, allowing air to circulate freely underneath and up, through the hollow bricks, into the structure walls. A coin of *Victorinus* (AD 268-70) was recovered from between *pilae*.

5.7.5 Room 18: The Plunge Pool

The excavator suggests that Room 18 was a plunge pool, the *frigidarium* (cold bath), which would have been associated with the bath suite. The walls were constructed of chalk block and were decorated with multicoloured painted wall plaster.

The floor was tiled and had an *opus signinum* fillet at the junction between the walls and floor. It would seem that there were steps leading down into the plunge pool.

5.7.6 Rooms 23 and 27

These two rooms were situated at the eastern end of the aisled hall. The construction of the internal walls was unclear which may indicate that they were made from wood which would have left very little evidence in the archaeological record. Room 23, however, had a brick hearth built against an outer wall.

5.7.7 Building 1

Below the aisled hall was an earlier structure on a slightly different alignment. This may well also have been an aisled building with a bath suite situated in the south-east quarter of the structure. The bath suite consisted of at least two apsidal-shaped rooms (Rooms 24 and 25) which were probably heated, the *caldarium* (hot bath) and the *tepidarium* (warm bath) and another semicircular-shaped room (Room 26) which the excavator suggests was a plunge pool, the *frigidarium* (*Figure 34*). A coin of *Lucius Aurelius Verus* (AD 161-69) was recovered from the apse fill of Room 26.

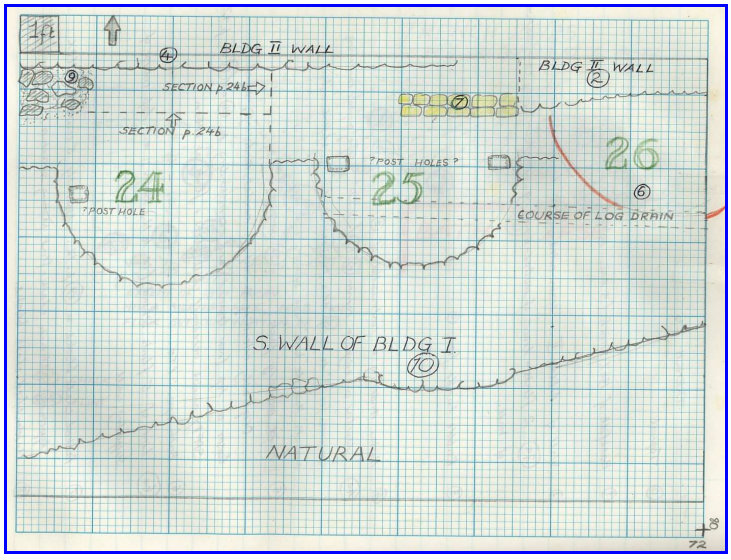

Figure 34: Plan of the Original Bath House at Sparsholt (Site Note Book)

5.7.8 The Courtyard

The southern wall of the aisled hall formed a part of the perimeter wall which enclosed the courtyard. The area within the courtyard adjacent to the bath suite contained several features potentially associated with either industrial agricultural activities or domestic food preparation. Several large storage pots were discovered set into the ground as well as the remains of an oven. The water outflow from the bath drained through this area into a possible sump. There would have been an entrance into the aisled hall from the courtyard but the excavator was unable to establish its exact location.

5.7.9 Analysis of Pottery from the Eastern End of the Aisled Hall

A total of 4,485 sherds were recovered from the eastern end (Site F) of the aisled hall (*Table 102*). 1,635 of the sherds of unstratified pottery were found in the topsoil which represented 46.60% by EVEs of all the sherds.

Table 102: Summary of the Pottery from the Eastern End of the Aisled Hall

	Number	Weight	EVEs	% number	% weight	% EVEs
Fine Wares	446	4328	8.23	***9.94***	***7.27***	***28.54***
Coarse Wares	4040	55237	20.61	***90.06***	***92.73***	***71.46***
Total	4486	59565	28.84			

Fine wares represented 28.54% by EVEs which was surprisingly dissimilar from the western side of the aisled building which only contained 7.94% by EVEs. The fine wares were dominated by products from the New Forest which accounted for 83.11% by EVEs of the fine ware assemblage (*Table 103*). The range and variety of New Forest vessels included several rare examples and some not included in Fulford's corpus of pottery types (Fulford, M. G, 1975a).

Table 103: Summary of the Fine Wares from the Eastern End of the Aisled Hall

	Number	Weight	EVEs	% number	% weight	% EVEs
New Forest	323	3605	6.84	*72.42*	*83.29*	*83.11*
Oxford	10	376	0.41	*2.24*	*8.69*	*4.98*
Samian	16	107	0.05	*3.59*	*2.47*	*0.61*
Imported	30	106	0.32	*6.73*	*2.45*	*3.89*
Other	67	134	0.61	*15.02*	*3.10*	*7.41*
Total	446	4328	8.23			

There were several examples of *mortaria* in a white ware fabric (parchment ware) as well as several forms of Type 27 indented beakers in Fulford's fabric 1a and Type 42 beakers which can be dated to the fourth century AD. There were red-slipped Type 53 and Type 59 bowls and white ware Type 86, 89 and 90 bowls which again can be attributed to the fourth century AD. The jars included a Type 98 white ware 'unguent' jar and a Type 30 storage jar normally produced in grey ware.

There were several flagons in fabric 1a including examples of both Type 8 and Types 11/12. The range and variety of vessel forms suggest that this assemblage was associated with culinary activities and possibly associated with eating and dining within this part of the building. Alternatively it may be that they were related to food preparation and that the consumption of the food was within another building, possible the house (Site D).

There were fourteen sherds of at least five different *mortaria*, which was in contrast to a single sherd of a New Forest *mortarium* recovered from the western end of the aisled hall (Site A). There were several white ware *mortaria* from the Oxfordshire kilns supporting the hypothesis that this material represented food preparation debris. The date range for this assemblage would seem to be from the early to the late fourth century AD.

The abraded nature of many coarse ware sherds resulted in the largest number having to be assigned to the category of miscellaneous (*Table 104)*. The average sherd weight, however, of all 2,191 sherds was only just over four grams. The coarse wares

were dominated by vessels from the New Forest kilns (46.82% by EVEs), which was consistent with evidence from the analysis of the fine wares.

Table 104: Summary of the Coarse Wares from the Eastern End of the Aisled Hall

	Number	Weight	EVEs	% number	% weight	% EVEs
New Forest	386	5435	9.65	*9.55*	*9.84*	*46.82*
Late grog tempered	1345	37623	5.30	*33.29*	*68.11*	*25.72*
Alice Holt	27	590	1.85	*0.67*	*1.07*	*8.98*
BB1	79	917	1.49	*1.96*	*1.66*	*7.23*
Other	12	330	0.19	*0.30*	*0.60*	*0.92*
Miscellaneous	2191	10342	2.13	*54.23*	*18.72*	*10.33*
Total	4040	55237	20.61			

The New Forest assemblage consisted of 9.65 EVEs containing Fulford G1 type beakers, G15 type bowls, G6 type flanged bowls and G19 type dishes (Fulford, M. G, 1975a). The majority of the vessels, however, were G20 type jugs and G30 type jars. There was one sherd from a G7 type sieve and a G8 type bowl in a white ware fabric 2a. All these vessels were associated with food preparation and would seem to support the hypothesis that the majority of the material was connected with culinary activities.

There was a large number of very low fired hand-made grog tempered sherds (25.72% by EVEs). These sherds may not have been cooking vessels but associated with ovens and cooking kilns. Several contexts in the *Site Note Books* referred to *ash trays* which were probably the remains of the ovens or kiln as they could have been constructed with grog tempered clay.

5.7.10 Room 15

This room had two stratified layers to which pottery could be assigned. Layer 2 consisted of material recovered from the flue area and *Bag SPFUV* contained pottery associated with the fill of the water cistern. The flue area contained sherds of New

Forest vessels, both fine and coarse wares, and Dorset black-burnished wares. All this material can be dated from the late third to the late fourth centuries AD. There were, also, several sherds of a low fired grog tempered material which may have come from an oven or corn drying kiln, supporting the hypothesis that the area was used for food preparation. The pottery recovered from the fill of the water cistern was much abraded and was probably demolition rubble.

5.7.11 Room 16: Furnace and Stokehole

A total of 370 sherds of pottery was recovered from the furnace and stokehole area. All but four sherds were low fired grog tempered material similar to that recovered from the water cistern. No rims were present amongst the material, which again suggests that it had come from the same oven or kiln found in Room 15. The four other sherds were from a Fulford New Forest Type 27 indented beaker which can be dated from c. AD 270 to 380.

5.7.12 Rooms 17a and 17b: Apsidal Heated Rooms

Rooms 17a and 17b only produced twenty-two and five sherds respectively from the hypocaust flues, including a much abraded Fulford Type 27 indented beaker and a burnt New Forest grey ware G8 flanged bowl. This material can be dated from the late third to late fourth century AD. The pottery and the coin of *Victorinus* (AD 268 – 70) that was recovered from between *pilae* suggest a possible *terminus post quem* for the construction of the hypocaust for the bath suite which could not have been earlier than AD 270.

5.7.13 Room 18: The Plunge Pool

Sixty-five sherds were recovered from stratified layers within the plunge pool. The fill of the pool produced thirteen sherds of various New Forest vessels which can

be dated from the late third to late fourth century AD. This would seem to indicate that the bath suite had been abandoned and gone out of use by the end of the fourth century AD at the latest.

Eight sherds of various New Forest vessels were recovered from underneath the floor of the plunge pool. Again these can be dated from the late third to late fourth century AD. This suggests that the bath could not have been built before the late third century AD and may even have been the start of the fourth century AD. The pottery would seem to indicate a possible *terminus post quem* for construction of the plunge pool which would be in the date range of c. AD 275 to 300.

5.7.14 Rooms 23 and 27

Room 27 lay between Rooms 18 and 23 but no western wall or partition was ever clearly delineated. Any material from this area was not recorded separately but grouped with the pottery recovered from the main aisled hall (Room 19).

Over 200 sherds of pottery were recovered from Room 23. All can be dated from the late third century to the late fourth century AD except for one small abraded body sherd of an East Gaulish samian vessel which was found amongst the rubble. The majority of the vessels were cooking pots, storage vessels, bowls and jugs suggesting that this area may have been used for culinary activities. This hypothesis is supported by the fact that there was a brick hearth built against one of the walls.

5.7.15 Building 1

During the excavation an earlier building was discovered beneath the aisled hall. Whilst the bulk of the building was destroyed during the construction of the aisled hall, the remains of the foundations of a bath suite survived. The demolition and the infilling of the bath suite during the construction of the aisled hall resulted in most of the original stratified layers being destroyed. There were in excess of 800 sherds of

pottery recovered from the fill of the apsidal-shaped rooms, the hypocaust and the stokehole flues, the majority being late third to late fourth century New Forest wares. This would seem to indicate that the destruction of the bath suite of Building 1 must have occurred during the late third century AD.

There were, however, amongst the assemblage several examples of pottery that can be dated to the late second to mid-third centuries AD. There were several sherds of a Trier rouletted beaker (c. AD 180 – 250), a Colchester colour-coated rouletted beaker (c. AD 120 – 250) and sherds from a Central Gaulish Dragendorff 45 *mortarium* (c. AD 170 – 90). The coin of *Lucius Aurelius Verus* (AD 161 – 9) was also recovered from the apse fill of Room 26.

In total, sixteen sherds of samian pottery were recovered which was low, being 0.61 % by EVEs (*Table 103*), but by comparison with the rest of the site there was a significant difference (*Table 105*). Most of the sherds were found in the topsoil but it could be postulated that the material was associated with the earlier building.

Table 105: Summary of Samian Sherds by Location at Sparsholt

	Number	Weight	EVE's	% Number	% weight	% EVEs
Barn C	6	11	0.15	*12.50*	*4.10*	*17.44*
House D	2	13		*4.17*	*4.85*	
Aisled hall A	2	5		*4.17*	*1.87*	
Aisled hall F	16	107	0.05	*33.33*	*39.93*	*5.81*
Hall G	11	66	0.16	*22.92*	*24.63*	*18.60*
Pit LXX	11	66	0.50	*22.92*	*24.63*	*58.14*
	48	*268*	*0.86*			

The samian was either Central Gaulish or East Gaulish with a date range of mid-second century to mid-third century AD. The different types of vessels represented were Dragendorff 33 cups, Dragendorff 18/31 platters, Dragendorff 36 cups and a Dragendorff 45 *mortarium*. On the basis that this material was associated with the earlier Building 1, this would give a date range for occupation of the building from the late second until the mid-third century AD. The pottery and the coin evidence would

seem to imply a *terminus ante quem* for the destruction of the build to be prior to c. AD 250.

This theory is potentially supported by the relatively large amount of samian recovered from Pit LXX (Layers 6, 7 and 8) which, the excavator has postulated, contained refuse and rubble from Building 1. It would, however, require much more evidence than a few abraded sherds of samian to support this hypothesis.

5.7.16 The Courtyard

There were several significant features in the area south of the aisled hall within the courtyard. A tile feature which was made up of several layers could have been a hearth. The function of this hearth was unclear but could have been associated with domestic food preparation or industrial agricultural processes. The presence of late third and fourth century New Forest pottery within its construction suggest that, whatever its function, it was associated with the aisled barn. One small fragment of a sherd of Central Gaulish samian Dragendorff 33 cup in the makeup layer (Layer 5) was probably residual. All the other material could be dated from late third century to late fourth century AD.

Trench 30 revealed an oven constructed of low fired grog tempered clay within which were sherds of a New Forest white ware *mortarium*. The presence of hearths, ovens and *mortaria* in an area adjacent to the aisled hall would seem to indicate that this area was being used for food preparation. Whilst there may have been a kitchen in Room 23, it is possible that activities requiring a great deal of heat may have been performed in an open area to reduce the risk of fires.

It is not inconsequent that the well was also located in this area and would have provided any water required by these activities. It is not possible to define the exact nature of the function of these features without more information.

5.7.17 Summary of the Aisled Hall: Eastern End (Site F)

The pottery assemblage recovered from the eastern end of the aisled hall (Site F) was dominated by fine and coarse wares from the New Forest kilns which can be dated from the late third to late fourth century AD (Fulford, M. G, 1975a). It would seem, therefore, that this date range was the occupation period for the aisled hall. A coin of *Tetricus* (AD 270 - 3) was found in the foundation trench of the aisled hall's southern wall which would indicate a *terminus post quem* for its construction of c. AD 275. This date is supported by the *terminus post quem* for the construction of the bath suite.

The Oxfordshire kilns were the main supplier of white ware *mortaria* in preference to the New Forest kilns, indicating that the occupants of the villa at *Sparsholt* were able to express a preference for specific products. The *civitas* capital of *Venta Belgarum* (Winchester) would have been the main market for pottery and undoubtedly was the supply point for the *mortaria* and for the small amount of Nene Valley rouletted beakers recovered from the villa site.

The presence of very limited amounts of both imported samian and a Trier colour-coated beaker, which can be dated from the mid-second to the mid-third century AD, could be associated with the earlier Building 1. The amount was very small and more evidence would be necessary to validate this hypothesis.

The amount of pottery recovered from the eastern end of the aisled hall was in total contrast to the amount found in the western end of the building. Whilst 28.84 EVEs of pottery (4,486 sherds) came from the eastern end, only 7.18 EVEs (579 sherds) were recovered from the western end of the building (*Table 106*). This disparity in the spatial distribution of pottery could be explained by the possible fact that the two ends of the building were used for different functional and occupational activities.

Table 106: Comparison of Pottery from the Two Ends of the Aisled Hall

		Number	Weight	EVEs
East	Fine Wares	446	4328	8.23
	Coarse Wares	4040	55237	20.61
	Total	4486	59565	28.84
West	Fine Wares	40	262	0.57
	Coarse Wares	539	6758	6.61
	Total	579	7020	7.18

The spatial distribution of fine wares was also significantly different: only 7.94% by EVEs at the western end of the building and 28.54% by EVEs at the eastern end. A possible explanation for this difference is that the western end of the building may have been a more formal area whilst the eastern end, which contained the bath suite, was used for domestic activities. Analysing the functional areas within a building based on the spatial distribution of the pottery, however, would need further investigations of other villa sites before any empirical conclusions could be hypothecated.

Table 107: Combined Total of Pottery from the Aisled Hall at Sparsholt

	Number	Weight	EVEs	% EVEs
Fine Wares	486	4590	8.80	24.43
Coarse Wares	4579	61995	27.22	75.57
Total	5065	66585	36.02	

5.8 Architectural Features of the Aisled Hall (East and West)

The excavation of the aisled hall was conducted in two halves (east and west) but they should be considered for comparison and analytical purposes as one structure. The combined Romanised architectural features of the aisled hall could be used in any comparative analysis of other aisled halls on other villa sites (*Table 107* and *Table 108*). Aisled halls in East Hampshire and West Sussex are not uncommon and a process by which they could be comparatively analysed would potentially increase our

understanding of these buildings. The construction of an aisled hall was evidence of expenditure not production; and the more Romanised architectural features there are present, the higher the individual owner's status within the community.

The relationship of the pottery recovered from the various areas and parts of the building would also seem help to clarify the functions of the different rooms.

Table 108: Romanised Architectural Features of the Aisled Hall at Sparsholt

Aisled Hall West	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Late3rd to late 4th century AD	✓	✓	✓	✓?	-	✓

A major conclusion of this analysis of the architectural features and a comparison of the quantity and quality of ceramic fine wares evident at *Sparsholt* would seem to demonstrate that there is a direct correlation between these two indicators. This conclusion would support the hypothesis that the number of Romanised architectural features and evidence of high quality ceramic fine wares present at *Sparsholt* indicate the status of the villa owners within the local society. Furthermore, occupation of this villa can be defined as being during the late third to late fourth century AD in southern England, with its construction providing evidence of expenditure by the villa owners. This may be an empirical model that can be used and tested on other villa sites but would seem to have some merit in characterising rural settlement patterns based on an agricultural economy. The spatial relationship and the characterisation of the buildings on the villa site could be further synthesised to potentially indicate the agricultural function of the various structures.

6 A Comparative Analysis of Villas outside the Study Area

The Romanised architectural features and the pottery assemblages from twenty villas in Hampshire and West Sussex were analysed to establish if there was a connection between the relative percentages of fine and coarse wares in relation to the potential status of the villas. This investigation into the relationship would seem to indicate that there was a correlation between the pottery and the status of the villas and this comparative analysis is aimed at trying to establish if this association exists outside the study area. The villas at *Frocester* and *Childswickham* were selected as they are within the boundary of southern England in the Cotswolds but well outside the potential social influences that may have prevailed in Hampshire or West Sussex. The villa at *Sedgebrook* was also included as it was situated on the Chalk Downs of Kent and was potentially representative of the south-east of England offering a wider area of comparative analysis to test the methodology.

If an association between pottery and villa status does exist then it could present a methodology of comparative assessment whereby pottery assemblages could be ranked in a sequence which reflects the relative socio-economic status of villa sites. The fundamental premise is that the pottery assemblage of 'higher status' villas will have a higher proportion of fine wares than groups from 'lower status' sites. Fine wares are seen as representing non-essential vessel types and relate to the matter of choice which is determined by affordability and hence economic status and by the desire to express a level of sophistication and social status.

Villas were not unique to the Romano-British countryside and probably took their inspiration from urban villas in the towns (*civitates*). From the beginning of the second century AD most urban villas had well-appointed reception facilities (Perring, 2002, 40). The political and social structure of Roman society relied on patronage, which was

conducted at the supper tables and in the baths of the elite. These social requirements were reflected in the Romanised architecture of the urban villas. These architectural standards were also transferred and reflected in the rural villas of Romano-British southern England.

The villas at *Frocester* and *Childswickham* in the Cotswolds were selected as both excavations are well documented including a full pottery analysis to modern standards. Free access to the relevant documented data obviated the need for expensive travel.

6.1 Frocester

The villa at *Frocester Court* (SO 785032) was situated on an alluvial terrace facing north-west towards the River Severn, not far from the Roman c*olonia* of Gloucester (*Glevum*), which was 15 kilometres to the north, and Cirencester (*Corinium*) 23 kilometres to the east. The Roman road from the Severn crossing at Newham to the Fosse Way at Easton Grey passed within 200 metres of the villa and would have given easy assess to both of these major marketing centres. The opulent villa at Woodchester was only seven kilometres to the east.

The underlying geology is Lower Lias Clay overlaid by solifluction deposits of coarse unsorted gravels and fine sands. This has produced an easily worked, fertile, slightly acidic, brown earth topsoil (Price, E. G. , 2000, 4).

The villa has been the centre of an archaeological investigation for more than thirty years and this analysis of the pottery is based on the reports published in 2000 (Price, E. G. , 2000) and the earlier report covering the excavation of Building A (Gracie, 1970). Since the advent of a uniform recording system for Roman pottery in the 1990s came after the earlier excavation reports, the pottery reports lack any detailed quantification. Similarly the excavation method of using a grid system rather than by features has complicated the pottery recording.

The villa had been subject to systematic robbing and the majority of the building stone had been removed to a depth of four feet (Gracie, 1970, 16). The site has been ploughed from medieval times. Disturbance caused by modern ploughing, which commenced during the Second World War, has had an impact on the archaeology and particularly the pottery.

The excavation uncovered traces of early prehistoric occupation pre-dating ditched enclosures of the late Iron Age and Roman periods. Domestic and other structures demonstrated the transition from an Iron Age into a Romanised community. From the first to the third century, *Frocester Court* was an un-Romanised settlement. The villa was established in the late third century, marking the integration of the site into the Romanised framework both economically and culturally. The late third century saw the development of a stone-built, winged-corridor villa with a walled courtyard and gardens. The house burnt down (Price, E. G. , 2000, 3) following a peak of prosperity in the late fourth century and was finally abandoned in the late fifth to early seventh century (*Table 109*).

Table 109: Development of the Villa at Frocester

Phase	Date Range	Buildings and Development
2.3b	Late Iron Age	Enclosure ditches, palisades and round house
3.1	c. AD 50 – 100	Enclosure ditches, palisades and round houses
3.2	c. AD 100 – 200	Timber rectangular buildings
3.3	c. AD 200 – 275	Timber rectangular buildings with stone wall footings
3.4a	c. AD 275 – 300	Construction of Building A
3.4b	c. AD 300 – 340	Corridors and stairs (?) added to Building A
3.4c	c. AD 340 – 360	Hypocaust added to Building A
3.4d	c. AD 360 – 400	Addition of a bath house to Building A
4	5th – 7th century	Decay and partial destruction by fire

The development of the site from the Late Iron Age to the destruction of the villa in the late fourth century can be established by analysing the architectural features of the various buildings excavated on the site. It was not possible to assign specific

quantified pottery assemblages to each phase but it was possible to synthesise the type of pottery recovered from the main phases as defined by the excavator.

6.1.1 Late Iron Age: Phase 2.3b

The settlement consisted of a circular structure which the excavator has interpreted as a round house. The house was surrounded by a boundary ditch enclosing an area of nearly three-quarters of an acre (Price, E. G. , 2000, 51). The majority of the pottery assigned to this phase consisted of large quantities of late Iron Age wares, local Severn Valley coarse ware and native limestone-tempered ware.

This would seem to indicate that there was little if any Roman influence prior to the Claudian invasion in AD 43.

6.1.2 Roman AD 50 - 100: Phase 3.1

The existing wooden round buildings and structures remained in use during this phase with the addition of some new timber buildings. The excavator recorded that there were *small quantities of first century samian,* imported fine wares and a few coins (Price, E. G. , 2000, 63). Samian accounted for only 2.10% by weight of the pottery assemblage which would suggest that the occupants of the farmstead were aware of Roman cultural, social and culinary values but either could not or did not wish to embrace these new principles.

6.1.3 Roman AD 100 - 275: Phases 3.2 and 3.3

During these phases the first century circular structures were replaced by a succession of timber rectangular buildings, indicating a growing Roman influence. This included a large aisled, post-built barn, suggesting a need to store excess agricultural production. A small amount of samian was recovered, including a sherd of a decorated

Dragendorff 30 bowl. The majority of the pottery, however, continued to be local Severn Valley wares (23%), micaceous wares (30%) or BB1 products from Dorset (40%) (Timby, 2000, 140). This would seem to suggest that, whilst the farm may have been producing an agricultural excess which could have produced additional disposable income, this was not spent on items of Romanised material culture. The exception would seem to be the significant increase in the purchase of BB1 products and the presence of a Verulamium *mortarium*.

6.1.4 Roman AD 275 – 400: Phase 3.4

This phase was characterised by the construction of a stone-built house which, over the subsequent years, was developed into a winged-corridor villa. The villa had stone masonry walls, a stone tiled roof and glass windows (Price, E. G. , 2000, 122). There was evidence of *opus signinum* floors in some rooms and a tessellated pavement in Room 6. The villa had a hypocaust added in c. AD 340 and a bath house in c. AD 360. There were many *tesserae* recovered from the site of Building A, suggesting that a mosaic/tessellated pavement had adorned the villa. There was, as well, evidence of painted plaster walls.

The construction of the villa marked the integration of the site into the Roman economic framework both culturally and socially. The fine wares are dominated by products from the Oxfordshire kilns, which represented only 4.64% by EVEs, and contained several *mortaria*.

Table 110: Romanised Architectural Feature of the Villa Frocester up to c. AD 275

Frocester	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Period to c. AD 275	✓	?	–	–	–	–
Period from c. AD 275	✓	✓	✓	?	✓	✓

The development of the site at *Frocester* can be considered in two major phases. The period from the Late Iron Age up to c. AD 275 would seem to indicate that there was a limited acceptance of Roman economic and cultural values. This implies that the occupiers were operating in an agricultural environment which had little need or ability to participate in the luxury of obtaining non-essential items. A large barn was, however, constructed during Phase 3.3, suggesting that the farm was producing an agricultural surplus; but any disposable income from this surplus does not seem to have been spent on non-essential luxury items. There were limited Romanised architectural features to the buildings (*Table 110*) and *Frocester* would seem to be comparable to the villa/farmsteads at *Chalton* and *Elsted*. The majority of the small amounts of samian pottery recovered during the excavation would have come from this period (*Table 111*) and was again comparatively low at only 0.06% by EVEs.

Table 111: Romanised Architectural Features at Frocester up to c. AD 275 Compared with Study Group Villas

Villa	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Holt Down	✓	✓	–	–	–	–
Chalton	✓	–	–	–	–	–
Frocester	✓	**?**	**–**	**–**	**–**	**–**
Wakeford's	✓	✓	–	–	–	–
Elsted	✓	–	–	–	–	–

The second major phase was the period from c. AD 275 up to the decline of the villa in the late fourth or early fifth century AD. During this period the occupants fully embraced the economic and cultural values of the Roman world. The construction of a masonry, winged-corridor villa with an attached bath house suggests that there was sufficient disposable income available to afford the conversion to the cultural status of a Romanised farm house (*Table 112*).

Table 112: Romanised Architectural features at Frocester c. AD 275 compared with Study Group Villas

Villa	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Batten Hanger	✓	✓	✓	–	?	✓
Chilgrove 1	✓	✓	✓	✓	✓	✓
Watergate	✓	✓	✓	✓?	–	–
Pitlands Farm	✓	✓	✓	–	✓	✓
Chilgrove 2	✓	✓	✓	✓?	–	✓
Langstone	✓	✓	✓	–	✓?	✓
Frocester	✓	✓	✓	?	✓	✓
Purbrook	✓	–	✓	–	✓	–
Holt Down	✓	✓	–	–	–	–

The *Frocester* villa would now seem to be more comparable to the v*illa maritima* at *Langstone* and the *villa rustica* at *Chilgrove 2*. There were, however, several interesting features about the usage of many of the rooms. Room 1 was defined by the excavator as a workroom used as a smithy; Room 2, the largest room, was interpreted as a kitchen; and Room 5 contained a T-shaped corn drier, suggesting that this was very much a working farm house. This may account for the relatively low percentage of fine wares as compared with other similar villas such as *Chilgrove 2* (*Table 114*). The pottery report states that there were some imitation samian wares from the Oxfordshire kilns present, particularly colour-coated beakers, bowls, dishes and *mortaria* which represented only 4.64% by EVEs. Room 11 contained a sunken iron-bound chest or strong box and twenty-three coins were recovered from the occupational debris within the room. The excavator suggests this room was an office for financial transactions (Gracie, 1970, 23).

6.1.5 Pottery Analysis

The analysis of the pottery was based on information in the excavation report (Timby, 2000). The earlier pottery reports by Harris (Gracie, 1970,40 – 53) and Goudge (Price, E. G., 1983) do not contain any quantitative data but have been used as a

reference for qualitative information. The enormous quantity of material recovered severely restricted the amount of detail that could be recorded. Moreover the method of excavation by grids meant that complete assemblages from specific features could only be recreated from the paper records. The condition of the pottery was poor and much of the material had been the subject of continual re-deposition causing abrasion. There was also evidence of contamination of material from both above by ploughing action and below by continual soil movement. The site had been the subject of both medieval and modern ploughing which had severely truncated many of the features. There was, however, sufficient detail to enable the categorisation of pottery by fabric for the site (*Table 113*).

Table 113: Pottery Ware Types Recorded from the Villa at Frocester

Imported Fine Wares	No Sherds	% Sherd	Weight	% Weight	EVEs	% EVEs
Samian	531					
Other	33					
	564	**2.10**	**22351**	**9.05**	**0.20**	**0.06**
Regional Fine Wares						
Oxford etc.	771		8496		12.51	
Mortaria	123		4551		3.41	
	894	**3.33**	**13047**	**5.28**	**15.92**	**4.64**
Regional Coarse Wares						
BB1	6387		70557		93.16	
Wiltshire	1565		12715		22.16	
Misc.	37		832		0.79	
	7989	**29.74**	**84104**	**34.04**	**116.11**	**33.86**
Local Coarse Wares						
Severn Vale Ware	8039		19595		99.73	
Misc. Local Wares	182		2289		3.35	
	8221	**30.61**	**21884**	**8.86**	**103.08**	**30.06**
Misc. Coarse Wares						
Misc. Grey Wares	**9192**	**34.22**	**105715**	**42.78**	**107.62**	**31.38**
Totals	**26860**		**247101**		**342.93**	

The enormous amount of pottery recovered, which has been estimated at approximately 34,500 sherds (Timby, 2000, 125), would require a vast amount of time and resources to be accurately recorded. The method used of excavation by grids has further complicated the accurate recording of pottery by features/context. These

factors have eliminated the possibility of re-examining all the pottery as it is doubtful that the end results would justify the time and effort. There was, however, sufficient data supplied in the report to draw together some comparative data (*Table 114*).

Table 114: Comparison of Fine Wares from Frocester with other Villas

Villa	Sherds	Rims	Weight (g)	EVEs	% Fine Wares
Chilgrove 1	1,840	915	52,713	91.70	17.15
Pitlands Farm	882	241	12,280	16.10	16.38
Chilgrove 2	3,723	1,415	99,009	144.89	14.83
Purbrook	705	217	21,060	26.48	12.35
Batten Hanger	9,294	1,420	152,359	142.12	10.14
Watergate Hanger	6,768	1,074	85,092	85.65	9.64
Langstone	4,387	822	66,624	73.35	8.70
Holt Down	409	213	9,680	16.44	5.86
Frocester	**26,860**	**-**	**247,101**	**342.96**	**4.70**
Chalton	652	370	15,360	22.48	4.05
Elsted	9,195	426	52,094	22.76	3.78
Wakeford's Copse	5,493	1,007	92,682	82.52	3.02

Frocester, in common with other rural sites in the study area, would seem to have been slow in embracing the Roman social and cultural values during the first and second centuries AD. This was, perhaps, particularly surprising at *Frocester*, considering the proximity of the major Roman towns of Gloucester and Cirencester. The farmers at *Frocester* must have been aware of both these market and administrative centres but seem not to have been influenced by their social and cultural values, preferring to retain many of their hereditary standards. The establishment of firm central authority and peaceful conditions in southern Britain in the late first century encouraged a period of rapid growth and prosperity. This prosperity continued into the second century with a rise in architectural standards. Again this increase in prosperity would seem to have bypassed *Frocester*, which still maintained its rural farm status. The construction of a large, aisled barn in the third century suggests that the farm was producing sufficient agricultural excess to warrant the building of additional storage capacity. This potential wealth, however, does not seem to have been converted into any form of lifestyle change until the construction of

the stone-built villa at the end of the third century AD. The working nature of the villa building and the apparent lack of fine wares, however, suggest that this was a limited conversion, perhaps out of financial constraint rather than desire.

The presence of a high status villa at *Woodchester* only seven kilometres to the east, however, may have had some bearing on the development of the villa at *Frocester*. The Woodchester villa had two large courtyards surrounded by buildings with 65 rooms, including a main residence, a farm, a sun terrace, and a spa and bath complex. A large hall contained a mosaic of 2,209 square feet, which contained one and a half million *tesserae*, made around AD 325. *Frocester* by comparison was very simple, having only nineteen rooms.

Little is known about land ownership in southern Britain during the Roman occupation. A villa and its immediate lands may have formed part of a much larger estate. Each separate villa unit may have been devoted to various agricultural activities and as such contributed to the productivity and wealth of the estate (Todd, 1989, 16). The ownership of land in Roman Britain is complex and there has been much debate about the occupants of the villa at Woodchester; but one common theme is that the villa must have been owned by a wealthy and influential family. It is possible that the villa at *Frocester* was part of the Woodchester estate and the *Frocester* agricultural products were marketed and sold along with other estate agricultural products. Any disposable income from these agricultural excesses would then be part of the estate. The *Frocester* villa would have been run by a bailiff or tenant farmer on behalf of the Woodchester estate. This may account for the slow development of the *Frocester* villa in the first and second centuries AD. The development of the *Frocester* villa in the late third century AD with many Romanised architectural features does not seem to be accompanied by a comparable increase in non-essential fine wares. The amount of fine wares at *Frocester* would seem to be very low at only 4.70% EVEs, compared with other similar villa sites such as *Chilgrove 2* or *Pitlands Farm* where the percentage of fine wares was 15.38% and 16.09% respectively. This may suggest that disposable income was being spent on other luxury items which have not left any evidence in the

archaeological record. An alternative suggestion is that the income from the *Frocester* villa was part of the Woodchester estate and helped fund that luxuriant villa. Far more research, however, would be necessary to prove either of these theories.

6.2 Childswickham

The Romano-British villa at *Childswickham* was discovered during the construction of a water distribution infrastructure project by Severn Trent Water Ltd. The route of the pipeline traversed north-east Gloucestershire and south-west Worcestershire and the villa was discovered during the initial topsoil stripping at Perrin's Farm, on the north side of Childswickham village (NGR SP076389). The site was excavated between August and November, 2001 and this analysis is based on the archive report (Patrick and Hurst, 2004). The focus of the excavation was on a 5 metre wide by 80 metre long elongated trench on the line of the new pipeline. Outside the excavated 5 metre-wide corridor any other features revealed by the construction of the pipeline were cleaned and planned but left unexcavated. This excavation can, therefore, be considered as a random sample of the archaeology and as such the pottery will also be a random sample. This recent excavation has used modern archaeological techniques and the detailed level of the archive report has facilitated the analysis of the significance of this Romano-British villa. The pottery had been sorted into established fabric series and the material quantified by sherd count, weight and Estimated Vessel Equivalents (EVEs).

6.2.1 Geology and Geography

The scarp formed by the Middle Jurassic limestones is the most outstanding feature of the Cotswolds and, whilst the uplands segment of the dip-slope has its own distinctive character, the presence of thick clays at the lower levels provides a varied landscape (Findlay, 1976, 5). The site of the villa at *Childswickham* lies on the junction of the Jurassic grey calcareous clays and fine grained limestone to the north and the

more naturally drained sand and gravels of the fluvio-glacial deposits to the south. This gives rise to well-drained loamy brown calcareous soils noted for their general fertility (Patrick and Hurst, 2004, 2).

The villa was located less than five kilometres from the Roman road of *Ryknild Street* to the east which was a tributary of the *Fosse Way*, which lies less than fifteen kilometres further to the east. The major Roman market town (*colonia*) of Gloucester (*Glevum*) lies thirty kilometres to the south and the Roman *civitas* of Cirencester (*Corinium*) lies thirty seven kilometres to the south-east. The existence of a major communication route and markets relatively close to the villa could have been significant in the development of the villa over the period of the Roman occupation.

6.2.2 Development by Phase

The excavation report identified six phases of occupation of the site. Only the four Romano-British phases have been considered in this study. Each phase has been considered separately and the structural evidence compared to the recovered and recorded pottery assemblage. 2225 sherds of Iron Age and Roman pottery weighing 43.4kg were recovered. The average sherd weight of 19.5g is high, indicating that the material had suffered little ongoing disturbance over the centuries.

Phase 2 was identified as Late Iron Age to early Roman (first century AD). This period was characterised by ditches which probably represented enclosures or simply drainage features associated with a domestic settlement (Patrick and Hurst, 2004, 6). Artefacts from this phase were relatively sparse but 268 sherds of pottery weighing 10.958kg. of which 172 sherds weighing 8,557 grams were classified as Late Iron Age were recovered. This presented the majority of the assemblage (58.6% by EVEs) which was Late Iron Age and pre-conquest material. All the post-conquest pottery material recovered consisted of coarse wares which were either manufactured locally (8.2%) or regional wares (33.2%) such as Severn Valley wares. The only sherd that had travelled

any distance was one small sherd of third century Dorset Black Burnished ware (BB1) which was probably intrusive. This would seem to indicate that during this phase of occupation this was a simple farmstead with a very limited amount of Romanisation.

Table 115: Pottery Assemblage from Childswickham (EVEs)

Phase	Local Coarse wares	Regional Coarse wares	Regional fine wares	Imported fine wares
2	8.2	33.2	-	-
3	6.6	69.7	1.5	2.0
4a	5.3	70.3	3.2	2.9
4b	23.9	59.7	5.9	-
Total	7.1	64.9	4.2	2.0

Phase 3 was identified as mid-Roman second to third century AD and produced 794 sherds weighing 12.393kg with an average sherd weight of 15.61grams and an estimated vessel equivalent of 11.58. Buildings A, C and D were constructed some time into this phase and although the style was generally Romanised with stone walls, plastered internal wall surfaces and possibly ceramic roof tiling, none could be considered particularly grand (Patrick and Hurst, 2004, 8). A certain amount of the pottery assemblage (19%) was typologically pre-phase 3 and has been assumed to be intrusive. The majority of the assemblage (89.7%) was dominated by regionally manufactured pottery of which the greater part (67.6%) was Severn Valley ware (*Table 115*). Dorset Black Burnished ware (BB1) represented only 2.3% suggesting limited access to other regional pottery from outside the immediate area. This is supported by the presence of only one sherd from an Oxfordshire mortarium. Imported fine wares accounted for 2% which were either South or Central Gaulish samian, including a mortarium (Patrick and Hurst, 2004, 27). Both the archaeological evidence and the pottery suggest that, at this stage, the site was predominantly involved in agricultural activities with limited conversion to Romanised culture and very few examples of non-

essential vessel types. It suggests that the farmers had little disposable income to spend on luxury items of table wares but the presence of both imported samian and *mortaria* implies that Roman culinary values were beginning to be accepted in a very limited way.

Phase 4a was dated to the late third to fourth century AD and produced 378 sherds weighing 6.168kg with an average sherd weight of 16.32g and an estimated vessel equivalent of 3.75. A much larger, multi-roomed, villa-type building was constructed during this phase consisting of at least eight rooms with a corridor and a walled courtyard (Patrick and Hurst, 2004, 11). The excavation report states that there was evidence of faced limestone walls bonded with mortar and painted plaster walls. The depth of the foundations of Rooms III and IV indicate that there may have been an upper storey and the presence of ceramic building material indicates that the roof may have been tiled.

There was significant difference in the pottery assemblage between phase 3 and phase 4a. The majority of the assemblage was Severn Valley Ware (42.4%) with regional coarse ware dominating the pottery. There was an increase in the amount of Dorset Black Burnished Ware (BB1). The regional and imported fine ware accounted for just over 6% of the assemblage. The presence of samian in the late third to fourth century context suggests that this material had been curated and preserved as heirlooms. The majority of the regional fine ware was from the Oxfordshire kilns with at least two *mortaria* present.

Again the archaeological evidence and the pottery suggest that the owners living at the site had not significantly increased their wealth and disposable income. Whilst there is evidence of the acquisition of Oxfordshire fine wares and Black Burnished wares, these trends are not significantly different from the mid-second to third century AD. The continuing presence of *mortaria* and a Dressel 20 *amphora* implies that Romanised culinary habits established in earlier times had continued into this phase.

Phase 4b was related to the general demolition of the villa and occurred after the mid-fourth century with the robbing of the main building and the courtyard walls (Patrick and Hurst, 2004, 14). Phase 4b produced 191 sherds weighing 3.469kg. with an average sherd weight of 18.2 grams and an estimated vessel equivalent of 2.40. There is a higher content of local coarse ware than previous phases and a reduction in regional coarse ware but this is not significant. It may reflect more about the availability of the local wares or a reduction in availability of the regional wares than wider economic treads affecting the villa owners. The major regional supplier of fine wares was still the Oxfordshire kilns. There was one sherd of a Nene Valley colour-coated ware but the two small sherds of samian are probably residual. Again, as in the previous phases, there is continuing evidence of Romanised culinary habits with an Oxfordshire *mortarium*.

6.2.3 Romanised Architectural Features

The villa at *Childswickham* had a limited amount of Romanised architectural features. There was abundant use of both stone and ceramic tiles from the mid-second century with some of the rooms having plastered and painted walls. There were no *tesserae* or mosaics although later damage by cultivation had removed most of the upper floors surfaces (Patrick and Hurst, 2004, 71) (*Table 116*). This shows that in relationship to villas found in East Hampshire and West Sussex, the villa at *Childswickham* would seem to be comparable to the villas at *Chalton* and *Holt Down*.

Table 116: Romanised Architectural Features of the Villa at Childswickham Compared with Study Villas

Villa	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Holt Down	✓	✓	–	–	–	–
Childswickham	✓	✓	**?**	**–**	**–**	**–**
Chalton	✓	–	–	–	–	–

This is reflected in the pottery. The *Childswickham* villa would also seem to be comparable to the villas at *Charlton* and *Holt Down* in Hampshire where the pottery assemblage had a similar pattern of coarse (kitchen) wares and fine wares (*Table 117*). All three villa/farmsteads had a continuity of occupation from the late Iron Age through to at least the mid-fourth century AD.

Table 117: Comparison of Fine Wares from Childswickham with Study Villas

Villa	Sherds	Rims	Weight (g)	Eve's	% fine wares
Holt Down	409	213	9,680	16.44	5.86
Childswickham	**2077**	**-**	**41,792**	**31.11**	**5.90**
Chalton	652	370	15,360	22.48	4.05

The more successful villa owners would have the choice of how to spend their surplus income on luxury household goods. The hypothesis of this paper, therefore, is that the more affluent villa owners acquired a greater proportion of fine wares, which can be readily assessed by examining the surviving pottery assemblages.

Analysis of the villa at *Childswickham* both in terms of architecture and pottery consumption compared with villas in East Hampshire and West Sussex would seem to support the hypothesis that there is a relationship between the status of the villa and the amount of fine wares present. Rural sites such as *Childswickham* and *Holt Down* are significant to the understanding of the development of cultural practices during the Romano-British era and provide an image of the depth of integration into the Roman cultural values outside the urban environment.

The hypothesis that the more successful villa owners spent some of their surplus disposable income on fine wares may provide a quantitative approach to comparative studies of differing villa complexes by analysing the pottery assemblages from different rural sites in southern England. This field of study may help in understanding the status of villas within their surrounding landscape along with the change in cultural practices during the Roman occupation of Britain.

6.3 Sedgebrook

The Romano-British villa at *Sedgebrook* was excavated by the Kent Archaeology Society with support from the Plaxtol Local History Society between 1986 and 1989. This analysis is based on the unpublished site note books and data kindly made available by Mr. Ted Connell of The Plaxton Local History Society. The villa was situated on a slight promontory above the upper course of the River Bourne, a tributary of the Medway. The villa was close to a spring line which occurs at the junction of the Wealden Clays and the Greensand Beds.

The villa consisted of what would seem to have been a simple row house sixteen metres long by five and half metres wide with a veranda on the eastern side of the building. At some later stage additional rooms were added at both the northern and southern ends of the building creating 'wings' (*Figure 35*).

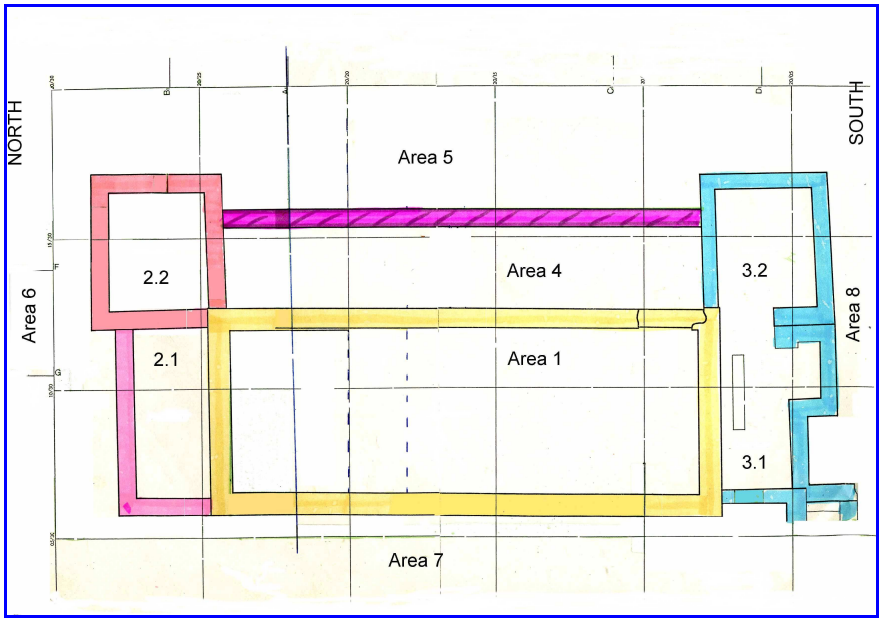

Figure 35: Plan of the Villa at Sedgebrook (Site Records)

Room 2.1 would seem to have been some sort of cellar which contained much burnt material, whilst *pilae*, tile and *tessarae* recovered from Rooms 3.1 and 3.2 suggest that there may have been a hypocaust and heated rooms. The walls of the villa

were constructed from white ragstone set in yellow mortar and the presence of both *tegulae* and *imbrices* suggests that the building had a tiled roof (*Table 118*).

Table 118: Romanised Architectural Features of the Villa at Sedgebrook

Villa	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Sedgebrook	✓	✓	✓	–	✓	–

6.3.1 Pottery

The analysis of the pottery is based on the material recovered during the 1986 excavation and as such is a sample of the total material recovered from the site. All pottery recovered from any excavation can only be a sample of the original material culture that was used and discarded by the villa occupants. The sample of pottery analysed in this report should be large enough to be representative of the total pottery assemblage and yield reliable information. Analysis of the assemblage should provide some chronology of occupation of the villa and the socio-economic status of the villa owners. A total of 1,584 sherds were analysed, weighing 13,551 grams and the estimated equivant (EVEs) of 14.17 vessels (*Table 119*). The abraded nature of the sherds and the comparatively low average sherd weight of 8.55 grams suggest that most of the material has been subjected to re-deposition.

Fine wares accounted for 9.03% of the assemblage by EVEs but again the average weight per sherd of only 9.15 grams was low. This low average sherd weight was supported by the amount of brokenness of the fine wares which was 63 sherds per vessel.

Table 119: Summary of Pottery from the Villa at Sedgebrook

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Fine Wares	81	741	1.28	***5.11***	***5.47***	***9.03***	9.15
Coarse Wares	1503	12810	12.89	***94.89***	***94.53***	***90.97***	8.52
Total	1584	13551	14.17				8.55

The fine wares were dominated by samian (48.44% by EVEs) and Nene Valley colour-coated wares (38.28%) (*Table 120*). The samian was imported from either South or Central Gaul and dated from the mid-first to the mid-second century AD, whilst the indigenous Nene Valley wares can be dated from the mid-second to the late fourth century AD, suggesting a long period of occupation of the villa. The samian vessel types were Dragendorff 27 and 33 cups, Dragendorff 18/31 dishes, a Dragendorff 38 plain bowl and a decorated Dragendorff 30 bowl.

Table 120: Summary of Fine Wares from the Villa at Sedgebrook

	Number	Weight	EVEs	% number	% weight	% EVEs	Av. Wt
Samian	43	481	0.62	***53.09***	***64.91***	***48.44***	**11.19**
Oxford	10	178	0.17	***12.35***	***24.02***	***13.28***	**17.80**
Nene Valley CC	15	35	0.49	***18.52***	***4.72***	***38.28***	**2.33**
Imported	13	47		***16.05***	***6.34***		**3.62**
Total	81	741	1.28				**9.15**

The predominance of fine wares from the mid-first century until the late second century could indicate that this was also the period of peak affluence and wealth of the villa owners and that after this time the villa went into a possible decline in financial fortunes. The lack of imported fine wares from the third and fourth centuries would seem to support this hypothesis.

Table 121: Summary of Coarse Wares from the Villa at Sedgebrook

	Number	Weight	EVEs	% number	% weight	% EVEs
Patchgrove ware	541	5329	3.15	***35.99***	***41.60***	***24.44***
Grogged ware	294	2398	2.21	***19.56***	***18.72***	***17.15***
Higham Marsh	161	1195	3.13	***10.71***	***9.33***	***24.28***
Misc. Sandy Ware	279	2398	2.21	***18.56***	***18.72***	***17.15***
Upchurch/Slayhills	80	252	0.37	***5.32***	***1.97***	***2.87***
Alice Holt	35	316	0.56	***2.33***	***2.47***	***4.34***
HOO	21	116		***1.40***	***0.91***	
Miscellaneous	92	806	1.26	***6.12***	***6.29***	***9.78***
Total	1503	12810	12.89			

The coarse wares were, as expected, dominated by local indigenous pottery vessels from Patchgrove and Higham Marsh (65.87% by EVEs) but, as with the fine wares, the abraded nature of the sherds and high rate of brokenness of over one hundred sherds per vessel suggest the material had been the subject of re-deposition (*Table 121*). Patchgrove and Higham Marsh kilns were in production from the mid-first to early fourth century AD (Pollard, 1988) which would also confirm that the peak occupation period of the villa was probably from the mid-first century until the early fourth century at the latest. The small number of vessels from the Alice Holt kilns, which were more abundant in the mid-third century to the late fourth century, would support the hypothesis.

Upchurch/Slayhills wares were also present (22.42% by EVEs) and for this analysis have been included within the grey wares. The Upchurch pottery industry probably started around AD 75 but went into decline and was unlikely to have outlived the second century AD (Pollard, 1988, 176).

There were only six small sherds of Late Iron Age origin and these can be disregarded as probably either intrusive or at least residual.

The villa at *Sedgebrook* was similar in construction to the villas at Watergate Hanger and Langstone with stone-mortared wall and ceramic roof tiles. They all had similar Romanised architectural features such as at least one tessellated floor and possibly a hypocaust and heated rooms. The villa at Langstone had a bath house which did not seem to be the case at *Sedgebrook*. The lack of mosaics suggests that these villas were owned by people who had accepted and embraced Roman cultural values but did not have sufficient disposable income to afford such luxuries. This would, therefore, seem to indicate that owners of the villa at *Sedgebrook* were of a modest financial status and possibly of modest social status within the local landowning aristocracy.

It is possible to compare the percentage of fine wares in the pottery assemblage at *Sedgebrook* with other Romano-British villas as a means of establishing their relationship and forming a basis for comparison of socio-economic status. The fine wares represented 9.03% by EVEs of the pottery assemblage, which was similar to the villas at *Watergate Hanger* and *Langstone* (*Table 122*). There were only eighty-one fine ware sherds from *Sedgebrook*, which was a relatively small number compared to the majority of the other villas. The quantity of fine ware sherds was similar to the villas at *Holt Down* and *Elsted* which could indicate that there may be a statistical bias with such small a number of sherds from *Sedgebrook*.

Table 122: Comparison of Fine Wares from Sedgebrook and Villas in the Study Area

Villa	Number	Weight	EVEs	% number	% weight	% EVEs
Chilgrove 1	509	9392	15.81	***29.66***	***18.39***	***17.15***
Pitlands Farm	113	1017	2.69	***12.50***	***7.99***	***16.38***
Chilgrove 2	787	11806	22.21	***20.53***	***11.97***	***14.83***
Twyford	382	4327	8.63	***8.92***	***8.74***	***13.23***
Purbrook	68	1466	3.27	***9.65***	***6.86***	***12.35***
Sidlesham	149	2842	3.06	***16.82***	***12.17***	***11.08***
Liss	379	4792	8.35	***5.72***	***6.53***	***11.08***
Batten Hanger	636	7120	12.85	***6.77***	***4.73***	***10.14***
Watergate Hanger	352	4293	8.20	***5.26***	***4.86***	***9.64***
Sedgebrook	***81***	***741***	***1.28***	***5.11***	***5.47***	***9.03***
Langstone	204	3434	6.31	***4.67***	***5.19***	***8.70***
Holt Down	70	825	1.07	***17.11***	***8.82***	***5.86***
Crookhorn	33	426	0.78	***4.33***	***2.90***	***4.79***
Chalton	24	235	0.91	***3.68***	***1.53***	***4.05***
Elsted	129	349	0.86	***1.40***	***0.68***	***3.78***
Wakeford's Copse	101	1865	2.50	***1.88***	***2.00***	***3.33***

The median value of the % EVEs of all the villas is 9.89 and the average is 9.71. The hypothesis of this study is that status of a villa owner can be judged by the amount of fine wares within a sample of the pottery assemblage. This would suggest that the owner of the villa at *Sedgebrook* was slightly below the average status.

The Romanised architectural features of the villa at *Sedgebrook* compared with the study area villas would seem to support this theory as, whilst it may have had a small hypocaust, there would seem to have been no bath suite or mosaics (*Table 123*).

Table 123: Comparison of Romanised Architectural Features of the Villa at Sedgebrook Compared with Villas in the Study Area

Villa	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Batten Hanger	✓	✓	✓	–	?	✓
Chilgrove 1	✓	✓	✓	✓	✓	✓
Watergate	✓	✓	✓	✓?	–	–
Pitlands Farm	✓	✓	✓	–	✓	✓
Chilgrove 2	✓	✓	✓	✓?	–	✓
Langstone	✓	✓	✓	–	✓?	✓
Sedgebrook	✓	✓	✓	–	✓	–
Purbrook	✓	✓	✓	–	✓	–
Holt Down	✓	✓	–	–	–	–

The measurement of architectural features employed in this study has been binary and does not take into account the variation in their size or sophistication. The sophistication of the hypocausts at the *Pitlands Farm* and at *Chilgrove 2* would have been far superior to the hypocaust at *Sedgebrook.* These differences have not been included in these results but the findings would still seem to reflect the relative status of the owners of the villas.

6.4 Results of Comparative Study

The comparative analysis of the Romanised architectural features and the pottery assemblages of the villas at *Frocester*, *Childswickham* in the Cotswolds and *Sedgebrook* in Kent, with villas in Hampshire and West Sussex has established that there was a high degree of correlation between Romano-British villas in southern England. This comparative analysis further supports the hypothesis that there is a

direct relationship between the social status of a villa owner, the expression of that wealth in the villa style and the amount of ceramic fine wares. This theory thus allows rural villas to be compared and contrasted in an objective, empirical way. Applying this methodology to more comparative studies of other Romano-British villas in England would provide further valuable data to populating, enhancing and calibrating this model.

Pottery is only one way of measuring material culture. Perhaps by using other measurements to supplement these results, it may be possible to further refine our understanding of the social status of the landowning, indigenous population of southern Britain during the Roman occupation.

7 Summary

The Roman occupation of Britain would have had a significant impact on the social, economic and cultural development of the rural population of the South Downs and coastal plains. The transformation of an indigenous pre-Roman society into a Romanised community would have been a process with infinite variety and the period in which Roman rule became effective and its cultural values became accepted would also have influenced the culinary habits adopted by the people. This impact can be seen in the adoption of and the acceptance of new culinary habits which can be seen to be reflected in their ceramic pottery vessels. The more successful and wealthy farmers embraced a greater conversion to these influences particularly during the third and fourth centuries.

It is the premise of this study that the use of pottery in the domestic environment was a feature common to all rural villa/farmsteads. It has also been assumed that rural villas represented a socio-economic stratum of Romano-British society and that the pottery assemblages associated with these sites would have contained a similar range of fine wares (table) and coarse wares (kitchen). The fundamental hypothesis is that the more affluent villa owners acquired a greater proportion of fine wares.

7.1 Ceramic Culinary Vessels

One of the research objectives of this study of rural Romano-British villa sites was to address the following research question:

- Pottery is found on every rural villa site but is there a relationship between the amounts of fine (table) and coarse (kitchen) wares which represents a measurement of the social status of the owners?

Detailed analysis of seventeen rural villas in Hampshire and Sussex would seem to indicate that there is a marked difference in the proportions of fine wares between different sites (*Table 124*).

Table 124: Summary of Fine Wares from Villas in the Study Area

Villa	Number	Weight	EVEs	% number	% weight	% EVEs
Sparsholt	767	10515	17.39	***10.44***	***9.79***	***21.07***
Chilgrove 1	509	9392	15.81	***29.66***	***18.39***	***17.15***
Pitlands Farm	113	1017	2.69	***12.50***	***7.99***	***16.38***
Chilgrove 2	787	11806	22.21	***20.53***	***11.97***	***14.83***
Twyford	382	4327	8.63	***8.92***	***8.74***	***13.23***
Purbrook	68	1466	3.27	***9.65***	***6.86***	***12.35***
Binsted	39	386	0.76	***7.36***	***6.13***	***11.50***
Sidlesham	149	2842	3.06	***16.82***	***12.17***	***11.08***
Liss	379	4792	8.35	***5.72***	***6.53***	***11.08***
Batten Hanger	636	7120	12.85	***6.77***	***4.73***	***10.14***
Watergate Hanger	352	4293	8.20	***5.26***	***4.86***	***9.64***
Langstone	204	3434	6.31	***4.67***	***5.19***	***8.70***
Holt Down	70	825	1.07	***17.11***	***8.82***	***5.86***
Crookhorn	33	426	0.78	***4.33***	***2.90***	***4.79***
Chalton	24	235	0.91	***3.68***	***1.53***	***4.05***
Elsted	129	349	0.86	***1.40***	***0.68***	***3.78***
Wakeford's Copse	101	1865	2.50	***1.88***	***2.00***	***3.33***
Total	***4742***	***65090***	***115.65***			

The ceramic pottery vessel material from the seventeen villa sites that formed the basis of this analysis has been listed in descending order by the amount of fine wares as a percentage of Estimated Vessel Equivalents (%EVEs) (*Table 124*) from *Sparsholt* with 21.07% to *Wakeford's Copse* with only 3.33%. This wide variation would seem to demonstrate that there is indeed a significant disparity in the amount of fine wares present at different rural villas. It is the hypothesis of this study that the wealthier villa owners could afford to purchase a greater amount of non-essential ceramic fine wares and this can be seen to be reflected at the villas at *Sparsholt*, *Chilgrove 1*, *Chilgrove 2*, *Pitlands Farm* and *Twyford*. By contrast the villas at *Holt Down, Crookhorn, Chalton, Elsted, and Wakeford's Copse* all have restricted numbers of ceramic fine wares,

suggesting that their owners may have had constrained amounts of disposable income to spend on luxury items of fine table wares.

7.2 Romanised Villa Architecture

To understand the ways in which Romano-British society responded to the rule of Rome and to answer the following research question, a functional analysis of rural villas was undertaken:

- Is it possible to quantify the status of rural villa owners by measuring the number of Romanised architectural features incorporated into their villas? This quantification may be a reflection of their conversion to Roman cultural and social values.

The design and construction of Romano-British villas within the study area would have developed their own versions based on local conditions and materials. Villas in the study area used flint, local sandstones and limestones producing distinctive vernacular buildings. Whilst the villas may have been built of different materials, many contained classical Romanised architectural features. By the analysis and comparisons of the Romanised architectural features present in each villa it is possible to develop a very simple method of ranking. This analysis of the Romanised architectural features of the twenty villas in the study is summarised in *Table 125*.

Table 125: *Summary of the Romanised Architectural Features of All Villas*

Villa	Masonry Walls	Painted Wall Plaster	Tessellated Floors	Mosaics	Hypocaust	Baths
Angmering	✓	✓	✓	✓	✓	✓
Bignor	✓	✓	✓	✓	✓	✓
Chilgrove 1	✓	✓	✓	✓	✓	✓
Sparsholt	✓	✓	✓	✓	✓	✓
Twyford	✓	✓	✓	✓?	✓?	✓
Stroud	✓	✓	✓	–	✓	✓
Chilgrove 2	✓	✓	✓	✓?	–	✓
Pitlands Farm	✓	✓	✓	–	✓	✓
Langstone	✓	✓	✓	–	✓?	✓
Sidlesham	✓	✓	✓	–	✓?	✓
Binsted	✓	✓	✓	–	?	✓
Batten Hanger	✓	✓	✓	–	?	✓
Watergate Hanger	✓	✓	✓	✓?	–	–
Purbrook	✓	✓	✓	–	✓	–
Liss	✓	✓	–	–	✓	✓
Holt Down	✓	✓	–	–	–	–
Wakeford's Copse	✓	✓	–	–	–	–
Chalton	✓	–	–	–	–	–
Crookhorn	✓	–	–	–	–	–
Elsted	✓	–	–	–	–	–

The analysis of the architectural features of the twenty villas in West Sussex and Hampshire would seem to indicate that the process of Romanisation produced a large variety of buildings from simple one-room halls and row houses to large, courtyard villas with separate bath suites. The various factors which would have influenced the choice of villa form would have been cost, social circumstances and the aspirations of the villa owner.

The decision to introduce painted walls, tessellated floors, mosaics, and bath houses into their farm houses was a way of literally buying into the Roman system. This was not simple imitation but participation in the Roman social and cultural system. The adoption of Roman material and cultural architectural practices into the rural villas became part of the Romano-British cultural identity. The amount of buying

into the Roman way of life was controlled more by affordability and prosperity than a systematic and deliberate imposition of Roman values and their material culture. The villa owners in the Chalk Downlands were evidently more capable of affording these luxuries suggesting that these areas were agriculturally more productive.

An enhancement to the development of this binary empirical model, which aims to predict the social and economic status of the owners of Romano-British villas, could be the ranking and rating of Romanised architectural features such as bath suites. This could be based on size or complexity of the features and would be a measurement of the economic success of the villa owner. For example the larger and more detailed mosaics would have been more expensive and a demonstration of the wealth of the villa owner. Time has precluded pursuing this particular direction of investigation within the body of this study but it could well be of value in any future such evaluations of Romano-British cultural studies.

7.3 The Relationship between Fine Wares and Architectural Features

The methods and processes employed to study Romano-British villas and their archaeological locations (Rivet, 1969, Percival, 1976, Smith, J.T., 1997, Perring, 2002) have been developed separately from any study of the material culture of the artefacts associated with the sites. This study brings together the two strands by integrating a large but variant group of architectural data from several Romano-British villas and their associated pottery assemblages in order to answer the following research question:

- Is there a relationship between the quantity of fine ceramic vessels and the Romanised architectural features which could provide a method of quantifying the social status of the villa owners?

The villas which exhibited the most Romanised architectural features and could be considered as the most opulent would seem to have higher proportions of fine wares. By contrast the least Romanised villas had considerably fewer fine wares. This would seem to indicate that the development of a method of comparative assessment, whereby pottery assemblages can be ranked in a sequence, provides a reflection of the relative socio-economic status of the villas. The approach has been to differentiate on the basis of the proportion of fine wares between each pottery assemblage. These fine wares represented non-essential vessel types acquired as a matter of choice. This choice has been interpreted as expressing a representation of socio-economic status.

Villas located on more fertile and productive land would seem to have been able to produce surplus agricultural products that were sold in exchange for money at the local markets. The more successful villa owners would then have had the choice of spending their surplus income on luxury household goods.

These procedures and processes use empirical data to produce a methodology and a model of the social and cultural status of the villas which can be continually refined by the inclusion of additional data and new evidence.

7.4 Comparative Method for Relating Social Status of Romano-British Villas

This study has demonstrated that there is a relationship between the socio-economic status of a villa and the percentage of fine wares in the associated pottery assemblage. This relationship can be used to answer the following research question:

- Could a methodology be developed based on these parameters which would allow comparative assessments to be made between different villas?

The data has been used to establish an approximate baseline for the representation of fine wares for the villas in the study area. Villas that were perceived as high status had a pottery assemblage that contained at least 12% or more of ceramic fine wares and were in the upper quartile (*Table 126*).

Table 126: Villas Perceived as High Status

Villa	% fine wares	Architectural Features
Sparsholt	21.07	6
Chilgrove 1	17.15	6
Pitlands Farm	16.38	5
Chilgrove 2	14.83	5
Twyford	13.23	5

This compares with 5% or less of ceramic fine wares at low status villas which were in the lower quartile (*Table 127*).

Table 127: Villas Perceived as Low Status

Villa	% fine wares	Architectural Features
Holt Down	5.86	2
Crookhorn	4.79	1
Chalton	4.05	1
Elsted	3.78	1
Wakeford's Copse	3.33	2

Pottery is only one measurement of Romano-British material culture; however this research has successfully demonstrated that it can be utilised as a predictor of the social status of villa owners. It may be possible to further enhance this predictive model by adapting and applying this methodology to other material cultures. This

would have the benefit of adding more granularity to the model and potentially providing an even better predictive model of social status.

7.5 Regional Comparative Analysis of Romano-British Villas

This study has also investigated rural villas in the Cotswolds and Kent in order to answer the following research question:

- Are there local and more particularly regional differences in the proportion of fine wares present at different rural villa sites?

The comparative analysis of the Romanised architectural features and the pottery assemblages established that there was a high degree of correlation between Romano-British villas in southern England (*Table 128*).

Table 128: Summary Comparison of All Villas

Villa	*% Fine Wares*	*Architectural Features*
Sparsholt	21.07	6
Chilgrove 1	17.15	6
Pitlands Farm	16.38	5
Chilgrove 2	14.83	5
Twyford	13.23	5
Purbrook	12.35	4
Binsted	11.50	4
Sydlesham	11.08	4
Liss	11.08	4
Batten Hanger	10.14	4
Watergate Hanger	9.64	4
Sedgebrook	9.03	4
Langstone	8.70	4
Childswickham	5.90	2
Holt Down	5.86	2
Frocester 1	4.70	2
Crookhorn	4.79	1
Chalton	4.05	1
Elsted	3.78	1
Wakeford's Copse	3.33	2

This comparative analysis further supports the hypothesis that there is a direct relationship between the social status of a villa owner, the expression of that wealth in the villa style and the amount of ceramic fine wares. This theory thus allows rural villas to be compared and contrasted in an objective, empirical way. Applying this methodology to more comparative studies of other Romano-British villas in England would provide further valuable data to populating, enhancing and calibrating this model.

7.6 Concluding Remarks

A major conclusion of this research has been that the methodology of analysing Romano-British pottery assemblages can be applied to all Romano-British rural villa sites in southern England. The buying power of a villa resident determined what and how many fine ceramic vessels the individual could purchase. Significantly the ability of the indigenous population to purchase fashionably Roman-style pottery reflected their ideals of imperial Roman fashions. The development of the Late Iron Age round house into the Romanised rectilinear villa along with the pattern of urbanisation was a complex sequence of socio-economic factors which are difficult to fully comprehend. The development of the villa depended upon the financial resources of the landowner and the economic growth in the surrounding area.

It is hoped that the hypothesis postulated in this study and the resulting models of rural villa society during the first to fourth centuries AD in southern England will be of assistance to future researchers, facilitating the comparison of pottery assemblages from different sites. The basic model has established the 'normal patterns' of occurrence of fine wares and coarse wares against which other individual site assemblages may be compared. This comparison should provide an indication of the social status and affluence of the owners/occupiers of the Romano-British villas.

Any model will have limitations. New evidence from other Romano-British villa sites may produce different results and conclusions. If, however, a pragmatic approach were taken to the quantification of the attributes of domestic Romano-British ceramic assemblages then it is suggested that this methodology would provide a reliable indicator of the social status of villa owners. By the empirical synthesis of Romano-British ceramic assemblages this research has demonstrated the hypothesis that the display of wealth and hence power is reflected in the material culture. It would also seem to demonstrate that the ceramic material culture reflects the aspirations of the less wealthy to acquire status.

The modern excavation techniques allow a better appreciation of how development of the villa site progressed over time and the sequence in which the structures and buildings were constructed. The understanding of the importance of stratigraphy, also, allows the relevant material culture to be assigned to each period of growth or decline as the villa site changed. This makes it possible to explore the temporal relationship of the buildings with their material culture and to understand better the social and cultural development of the villa owners.

The analysis of the spatial relations of the various Romanised architectural styles at *Sparsholt* has, also, demonstrated that this methodology can be applied to multi-building sites. Analysis of the Romanised architectural features of the buildings and the associated discarded pottery may be evidence of how space was allocated in a domestic environment between public, private and agricultural activities.

It has been the hypothesis of this study that the transformation of the indigenous pre-Roman society into one which had adapted to the cultural and social values of Rome can be measured. The underlying principle of this hypothesis has been that the social status of country landowners was reflected in the opulence of their rural villas. This opulence could be measured by the number of Romanised architectural features incorporated into the buildings. The more Romanised architectural features incorporated into the villa, the higher the social status of the landowners. It has been further postulated that this status can also be measured by the quantity of ceramic fine wares discarded by the villa owner. The more fine wares, the higher the social status of the villa owner. A model has been created based on this hypothesis which tries to define this relationship. It is hoped that this methodology and the associated model will help archaeologists in the future to compare and contrast Romano-British villas in an empirical way.

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